

Gulf of Mexico News



NOAA Ocean Service, Office of Ocean & Coastal Resource Management

October 2007

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NOAA Gulf of Mexico News

NOAA Announces Environmental Literacy Grant Recipients for 2007

October 3, 2007

The National Oceanic and Atmospheric Administration announced today the 2007 recipients of the NOAA Environmental Literacy Grants. These awards were created to support formal and informal education projects aimed at building environmental literacy among the American public.

Five institutions were chosen based on the organizations' proposed activity related to ongoing environmental NOAA education activities, as well as the NOAA Education Plan, and other criteria. Recipients, corresponding winning projects and grant amounts are:

- **National Mississippi River Museum and Aquarium:**
"Ocean Interpretive Stations: A Pilot Program for Coastal America Coastal Ecosystem Learning Centers" - \$379,955
- Lawrence Hall of Science, University of California:
"Ocean Sciences Curriculum sequence for Grades 3-5" - \$709,992
- Eastern Michigan University:
"Sailing Teachers Towards Ocean Literacy Using Familiar Water Resources" - \$461,534
- Maine Mathematics and Science Alliance:
"Earth as a System is Essential – Seasons and the Seas" - \$566,467
- The Ocean Project:
"Building Environmental Literacy: How the Ocean Community can Connect More Effectively With the American Public" - \$375,100

"These grant recipients are among the top institutions involved in the environmental literacy movement and their projects represent some of the most strategic investments for environmental education," said retired Navy Vice Adm. Conrad C. Lautenbacher, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "Through the America COMPETES Act, NOAA has been given the task to serve both science and education communities nationally. These grants catalyze NOAA's efforts to raise the level of environmental literacy of the public, to help them understand our natural resources and their role in working with them."

From a pool of more than 180 pre-proposals, 60 applicants were authorized to submit full proposals. Eligible full proposals were reviewed by a panel of 22, composed of educators, former Environmental Literacy Grant recipients and professionals in the environmental science community. Eligible applicants include institutes of higher education, nonprofits, and state, local and tribal governments.

"We are excited about the potential of each of these projects, their effect on environmental literacy in the nation, and their ability to interpret scientific topics important to NOAA's mission," said Louisa Koch, NOAA director of education. "The projects funded through these grants will touch an amazing breadth of learners, from teachers in Michigan and students in Maine to museum visitors in Iowa and Chicago. We look forward to seeing the goals of each of these project fully realized."

Project selection was based on the importance, relevance and applicability of stated goals; technical and scientific merit; overall qualification of the proposing applicants; feasibility of the project to meet time and cost goals; and whether the project provides a focused and effective education and outreach strategy related to NOAA's mission to protect the nation's natural resources.

NOAA Initiates Three-Year \$781,000 Project to Unravel Gulf Deadzone Mysteries

October 19, 2007

NOAA has awarded first-year funding of \$284,000 to researchers at the University of Texas at Austin Marine Science Institute (UTMSI) as part of a three-year \$781,000 project to develop a better understanding of how nutrient pollution from the Mississippi River affects the large area of low oxygen water called the “dead zone” in the Gulf of Mexico. The project will also look at how the dead zone affects commercially and recreationally important fish and shellfish. Funds were awarded through NOAA’s [Northern Gulf of Mexico Hypoxia and Ecosystems Research Program](#).

“A better understanding of the underlying causes of the dead zone is essential for predicting its effect on the Gulf fisheries and the region,” said retired Navy Vice Adm. [Conrad C. Lautenbacher](#), Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. “The goal of this research is to help develop a range of options that coastal and upriver resource managers can use to prevent and reduce nutrient pollution that contributes to the dead zone.”

This project will provide data to verify water quality models and help resource managers determine the quantitative relationships between nutrient pollution and development, magnitude, longevity, and distribution of the dead zone. Findings will also support the development of more accurate predictive models of hypoxia development on the Louisiana continental shelf.

The dead zone is an area in the Gulf of Mexico where seasonal oxygen levels drop too low to support most life in bottom and near-bottom waters. It is caused by a seasonal change where algal growth, stimulated by input of nutrients such as nitrogen and phosphorus from the Mississippi and Atchafalaya rivers, settles and decays in the bottom waters. The decaying algae consume oxygen faster than it can be replenished from the surface, leading to decreased levels of dissolved oxygen.

This past summer off the coast of Louisiana and Texas, an area of deep water covering 7,900 square miles was declared hypoxic. It is the third largest Gulf of Mexico dead zone on record since measurements began in 1985, and represents an area approximately the size of the state of New Jersey. Also, it is more than one and a half times the average annual dead zone area measured since 1990, 4,800 square miles. The largest dead zone ever recorded covered 8,494 square miles in 2002.

The research program, managed by NOAA’s [Center for Sponsored Coastal Ocean Research](#), seeks to provide resource managers with new tools, techniques, and information to make informed decisions, and assess alternative management strategies regarding hypoxia. Supported projects are leading to the development of a fundamental understanding of the northern Gulf of Mexico ecosystem, with a focus on the causes and effects of the hypoxic zone, and the prediction of its future extent and impacts on ecologically and commercially important living resources.

In fiscal year 2007, the [NOAA National Ocean Service](#), through the center, provided approximately \$10 million in competitive grants to institutions of higher education, state, local and tribal governments, and other non-profit research institutions to assist NOAA in fulfilling its mission to study our coastal oceans.

NCCOS Scientists Inform Coastal Managers of a Toxic Algal Bloom Along Texas Coast to Support Management Decisions

National Centers for Coastal Ocean Science (NCCOS) researchers have notified the Texas Parks and Wildlife Department of a toxic algal bloom in coastal waters near Port O'Connor, Texas. Volunteers with the Texas Master Naturalist group, participating in the Southeast Phytoplankton Monitoring Network (SEPMN), observed an unusual abundance of *Pseudo-nitzschia* at their Port O'Connor site. Samples were sent to NCCOS laboratories, and the presence of *Pseudo-nitzschia pungens* as well as the toxin domoic acid was confirmed. The SEPMN is a NOAA-sponsored community program that serves to increase the awareness of constituent groups about issues related to harmful algae and directly involves volunteers in coastal stewardship, helping to alert regional managers and inform the research community of harmful algal bloom events. For more information, contact Steve.Morton@noaa.gov.

NOAA HAB Forecast System Serves as a Model for Similar Capabilities in Mexico

National Centers for Coastal Ocean Science's Center for Coastal Monitoring and Assessment presented NOAA's HAB Forecasting System at the 2nd Bi-national Meeting of the U.S. and Mexico in Campeche, Mexico on October 18-19 and discussed mechanisms for establishing a similar capability in Mexico. Scientists engaged in oral presentations and additional discussions to further the collaboration between the U.S. and Mexico for development of the sampling and modeling tools necessary to establish a HAB forecast system. Other meeting participants included NOAA's National Data Buoy Center, the Environmental Protection Agency, the National Aeronautics and Space Administration, the Naval Research Laboratory, Florida Fish and Wildlife Research Institute, and several Mexican state, academic, and government institutions, including the Mexican Navy and the Federal Commission for the Protection Against Sanitary Risk (COFEPRIS). For more information contact Michelle.Tomlinson@noaa.gov.

Steering Committee Plans Framework for New Sea Level Rise Program in the Florida/Alabama Panhandle

Scientists from academia and state resource agencies participated in a steering committee meeting to advise the National Centers for Coastal Ocean Science (NCCOS) Center for Sponsored Coastal Ocean Research (CSCOR) on technical needs of a sea level rise program in the Florida/Alabama Panhandle and to plan a Sea Level Rise Workshop in Pensacola, Florida for January 2008. The steering committee meeting captured knowledge from invited experts, and created the framework for the potential of initiating a new Ecological Effects of Sea Level Rise program in the Alabama/Florida Panhandle. The group met October 10-11 and discussed the science and management needs of studying long-term sea level rise and storm surge in the Florida/Alabama Panhandle. Participants from across NOAA also took part in the meeting, including scientists from the Coastal Ocean Observing and Prediction System, Coast Survey Development Lab, Office of Ocean and Coastal Resource Management, and the National Geodetic Survey. For more information contact Caol.Auer@noaa.gov.

New Tool to Track and Map Groundwater Flow in Coastal Waters

In many coastal areas, groundwater is a major pathway for pollution transport that, until recently, has been hard to measure. With CICEET support, a research team from the University of South Florida has developed a tool to accelerate collection and analysis of groundwater location data, thereby providing a more efficient method to track and map groundwater discharge zones in coastal waters.

The Radon Seawater Analysis System uses radon as a proxy to track groundwater discharge. It works by extracting radon-enriched dry air from seawater and sending it through a series of high-sensitivity analyzers. Promising field tests conducted in the Apalachicola Bay National Estuarine Research Reserve led to a full-scale radon survey along the Bay's coastline and to the eventual refinement and commercialization of the technology through Durrige, Inc., a private company specializing in instrumentation for environmental radon measurement. The system has been used to map groundwater flows around the country by several organizations. It is also being used abroad in several countries.

Contact: dwright.trueblood@noaa.gov.

Interactions among Phytoplankton, Clouds, Solar Heating, and Nitrogen Limitation Influence Global Climate Change

Scientists from the National Centers for Coastal Ocean Science, in collaboration with scientists from the University of South Alabama, Mobile, report findings of a biologically mediated ocean-atmospheric mechanism that improves our understanding of climate regulation and climate change. Phytoplankton produce the climatically active gas dimethyl sulfide (DMS), which through chemical alterations in the atmosphere, increase the solar reflectance of clouds, and thereby decrease solar heating of the ocean and earth's surface. The scientists report that solar heating itself promotes nitrogen limitation in the surface ocean, which they found increases the production of DMS and its precursor molecule (dimethylsulfoniopropionate, DMSP) by phytoplankton. These results indicate that feedback interactions among solar heating, nitrogen-limitation, and biological DMS production represent a fundamental mechanism influencing cloud dynamics, solar heating, and climate. A conceptual model describing this biological climate feedback is presented in the work published August 13, 2007

(<http://springerlink.com/content/d080211244k223g0/>). Contact: Bill.Sunda@noaa.gov.

NCCOS Event Response Assists Investigation of Fish Kills in Weeks Bay NERR to Prevent Future Blooms

The National Centers for Coastal Ocean Science (NCCOS) Event Response program has funded the Weeks Bay National Estuarine Research Reserve (NERR) to investigate an extended algal bloom of *Karlodinium venificum*, a toxic dinoflagellate that has caused five fish kills this summer. Sampling of the phytoplankton, toxins, and nutrients in the waters will be beneficial for interpreting future conditions, discovering the cause of the bloom, and formulating a management plan to protect the resources of Weeks Bay. The bloom has reached extremely high numbers and has been more toxic than other similar blooms. Sampling will continue until cooling water temperatures end the event. For more information contact

Quay.Dortch@noaa.gov.

Sally Morehead Named Manager of Mission-Aransas Reserve

Sally Morehead, who has been assistant manager and stewardship coordinator of the Mission-Aransas National Estuarine Research Reserve in Texas for more than a year, has been named manager of the reserve. Among other experiences, Sally has worked on total maximum daily load (TMDL) programs and hypoxia in estuarine environments.

Morehead received a B.S. in marine biology from the University of Rhode Island and a M.S. in marine science from the University of Texas in 2001. Her master's project involved the assessment of anthropogenic impacts on the marine communities at McMurdo Station, Antarctica. After receiving her master's degree, Morehead worked in Bergen, Norway on analysis of *Sebastes* spp. population structures using genetic techniques. She returned to the University of Texas in 2002 and worked on securing the designation of the Mission-Aransas NERR in 2006. *Contact:* Matt.Chasse@noaa.gov, NOAA's Office of Ocean & Coastal Resource Management

Gulf of Mexico Fishery Management Council convenes its Ad Hoc Recreational Red Snapper Advisory Panel

Tampa, Florida – October 17, 2007 - The Gulf of Mexico Fishery Management Council (Council) will convene its newly formed Ad Hoc Recreational Red Snapper Advisory Panel (AP) Tuesday, November 13 and Wednesday, 14, 2007. The panel will evaluate and recommend innovative management strategies for the private and for-hire recreational red snapper fisheries of the Gulf of Mexico, and will also evaluate and recommend innovative approaches to minimizing bycatch and bycatch mortality in those fisheries. Some management strategies that may be considered include random distribution systems (such as lotteries), community-based approaches, incentive-based approaches, effort control, and any other novel approaches deemed relevant by the AP. Approaches to minimize bycatch and bycatch mortality may include methods to improve the survival of released fish, methods to avoid the capture of undersized or out-of-season fish, and methods to account for otherwise unavoidable regulatory discards.

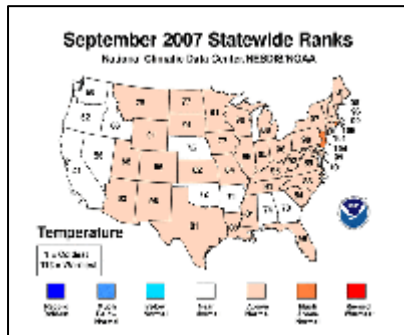
The AP may also discuss related issues, such as regional management, monitoring methods, accountability measures, goals and objectives for recreational red snapper fisheries management, or other issues associated with management of the recreational red snapper fishery. The meeting will be held at the InterContinental Hotel, 4860 W. Kennedy Boulevard in Tampa and will convene at 1:00 pm Tuesday, November 13, 2007, concluding no later than 3:00 pm Wednesday, November 14, 2007.

For a copy of the agenda please call 888-833-1844, or E-mail the Council at gulfcouncil@gulfcouncil.org. This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Tina Trezza at the Council at least five working days prior to the meeting. Although other non-emergency issues not on the agenda may come before the AP, in accordance with the M-SFCMA, those issues may not be the subject of formal action during this meeting. Panel action will be restricted to those issues specifically identified in the agenda.

Other NOAA News

September 2007 is Eighth Warmest on Record for Contiguous United States

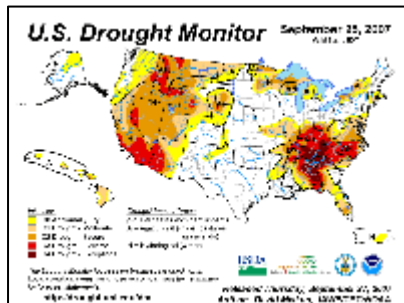
Drought Worsens Across Southeast and Tennessee Valley



September 2007 statewide temperature rankings.

+ [High Resolution](#) (Credit: NOAA)

Temperatures in September 2007 were the eighth warmest on record, hot enough to break 1,000 daily high records across the United States, according to scientists at NOAA's [National Climatic Data Center](#) in Asheville, N.C. The heat also helped spread the worsening drought to almost half of the contiguous U.S., with conditions across the Southeast, Mid-Atlantic and Tennessee Valley hardest hit. The global surface temperature was the fifth warmest on record for September, and the extent of Arctic Sea ice reached its lowest amount in September since satellite measurements began in 1979, shattering the previous record low set in 2005.



U.S. Drought Monitor - September 25, 2007.

+ [High Resolution](#) (Credit: NOAA)

U.S. Precipitation Highlights

In September, the drought expanded in the Southeast and parts of the mid-Atlantic and Ohio Valley. Drought affected 78 percent of the Southeast, with almost one-quarter of the region affected by exceptional drought conditions, the highest stage of drought, according to the federal U.S. Drought Monitor.

Read the [full press release](#) online.

Breakthrough Technology Revolutionizes Study of Fish Killing Dinoflagellates

Scientists supported through the National Centers for Coastal Ocean Science (NCCOS) Ecology and Oceanography of Harmful Algal Blooms (ECOHAB) program have developed a technique that will improve understanding of the fish killing behavior of some dinoflagellates in the Chesapeake Bay and other coastal areas, leading to better predictions and management of fish kill events. Scientists at the University of Maryland Biotechnology Institute working in partnership with Johns Hopkins University have developed a technique called digital holographic microscopy that captures three dimensional images of single-celled algae called dinoflagellates, which helps identify and quantify their swimming and hunting tactics. For this project, the team focused on two toxic dinoflagellates, *Karlorodinium veneficum* and *Pfiesteria piscicida*, both of which feed on somewhat smaller non-poisonous microbes commonly found in algal blooms. For more information contact Danielle.Meitiv@noaa.gov

NOAA Seeking Nominations for Walter B. Jones Awards

NOAA announces the Call for Nominations for the 2008 Walter B. Jones Memorial Awards for Coastal and Ocean Resource Management. Innovation, resourcefulness, and a commitment to balancing the human use of America's coastal and ocean resources with the needs of the resources themselves – these are the hallmarks of the awards.

The Coastal Zone Management Act (CZMA) of 1972 created a unique and voluntary partnership of federal and state governments to provide a balance between land and water uses in coastal zones, and to conserve fragile coastal resources. As part of the 1990 CZMA reauthorization, then-chair of the House Merchant Marine and Fisheries Committee, the late Honorable Walter B. Jones, Sr., provided NOAA authority to honor individuals and organizations whose work reflects the innovation and balance needed to maintain a healthy coast for present and future generations.

The award categories are:

- Coastal Steward of the Year
- Excellence in Local Government
- Excellence in Coastal and Marine Graduate Study
- The Susan Snow-Cotter Award for Excellence in Ocean and Coastal Resource Management
- Volunteer of the Year
- Non-governmental Organization (NGO) of the Year
- Excellence in Promoting Diversity in Coastal or Ocean Resource Management
- Excellence in Business Leadership

The program is open to individuals, organizations, state and local government agencies and their employees. Entries must adhere to the strict submission and judging criteria and must be received by November 15, 2007. Winners will be notified in early February 2008 and honored at a ceremony in Washington, DC, later in the month.

For nomination information about the awards:

Visit: <http://oceanservice.noaa.gov/programs/ocrm/jones-noaa-awards.html>

Email: jonesnoaa.awards@noaa.gov

NDBC Adds NERRS Water Quality Data

[NOAA's National Data Buoy Center](#), which started serving real-time NERRS meteorological observations via its [Website](#) in July, is now also serving the reserve system's real-time water quality data. The weather and water quality observations are made by instruments that are part of the [System-Wide Monitoring Program \(SWMP\)](#), which has provided long-term data to scientists and educators since 1995. With support from the NOAA through the Integrated Ocean Observing System program, the reserves installed telemetering equipment and began sending real-time data by satellite last year.

Weather forecasters have been using the data for about a year, and it is available on several Web sites, including the [NERRS' Centralized Data Management Office](#) and the National Weather Service's [Hydrometeorological Automated Data System](#).

The addition of reserve monitoring data to the NDBC Web site further expands the audience for SWMP data to include traditional NDBC users like mariners, first responders, and some weather forecast offices.

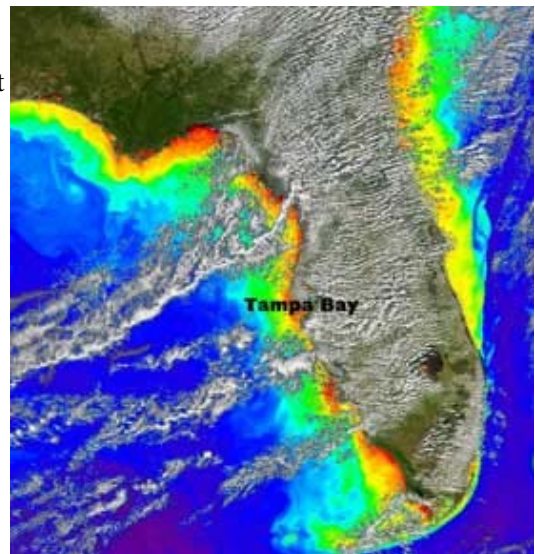
Water quality data includes water temperature, conductivity, salinity, oxygen levels, turbidity and pH levels. In addition to the most recent readings, the Web site provides a graph of each parameter showing readings over the previous five days. Similar tables and graphs also report wind direction and speed, atmospheric pressure, air temperature and dew point. *Contact:* Whitley.Saumweber@noaa.gov.

NASA Satellites Eye Coastal Water Quality

Armed with data from two NASA satellites, researchers have invented a way to map the fleeting changes in coastal water quality from space - something that has long evaded researchers and coastal managers relying only on ground-based measurements. Using data from instruments aboard NASA satellites, Zhiqiang Chen and colleagues at the University of South Florida in St. Petersburg, found that they can monitor water quality almost daily, rather than monthly. Such information has direct application for resource managers devising restoration plans for coastal water ecosystems and federal and state regulators in charge of defining water quality standards.

The team's findings will aid in the effort to tease out factors that drive changes in coastal water quality. For example, sediments entering the water as a result of coastal development or pollution can cause changes in water turbidity – a measure of the amount of particles suspended in the water. Sediments suspended from the bottom by strong winds or tides may also cause such changes. Knowing where the sediments come from is critical to managers because turbidity cuts off light to the bottom, thwarting the natural growth of plants.

Image right: High concentrations of microscopic plants called phytoplankton (red regions) along the Florida coast and in Tampa Bay are an indicator of ocean health and change as seen in this SeaWiFS image from October 2004. Researchers have successfully used data from similar images to monitor almost daily changes in coastal water quality. + [High resolution](#)
Credit: SeaWiFS Project



"If we can track the source of turbidity, we can better understand why turbidity is changing. And if the source is human related, we can try to manage that human activity," says Frank Muller-Karger, a study co-author from the University of South Florida.

Satellites previously have observed turbidity in the open ocean by monitoring how much light is reflected and absorbed by the water. The technique has not been of much success in observing turbidity along the coast, however. That's because shallow coastal waters and Earth's atmosphere serve up complicated optical properties that make it difficult for researchers to determine which colors in a satellite image are related to turbidity, which to shallow bottom waters, and which to the atmosphere. Now with advances in satellite sensors combined with developments in how the data are analyzed, Chen and colleagues show it is possible to monitor turbidity of coastal waters via satellite.

The traditional methods of monitoring coastal water quality require scientists to use boats to gather water samples, typically on a monthly basis because of the high costs of these surveys. The method is sufficient to capture episodic events affecting water quality, such as the seasonal freshwater runoff. Chen and colleagues suspected, however, that the monthly measurements were not capturing fast changes in factors that affect water quality, such as winds, tides and human influences including pollution and runoff.

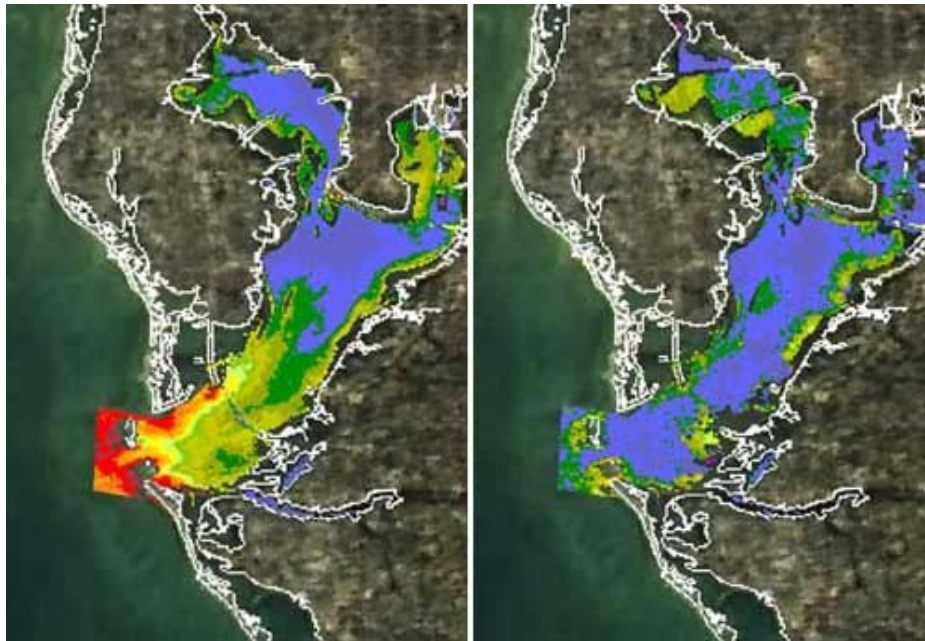


Image above: NASA satellite imagery has shown that water quality of Florida's Tampa Bay decreases in winter months compared to summer. More particles suspended in the water, a measure called turbidity, show up as yellow, orange and red in December (left image) than in July (right). Images are composites of turbidity data collected in December and July, respectively, over a span of three years using NASA's MODIS instrument. Credit: NASA/USF

- [+ Left image high resolution](#)
- [+ Right image high resolution](#)

The team set out to see if satellites could accurately measure two key indicators of water quality - turbidity and water clarity - in Tampa Bay, Fla. An analysis of turbidity takes into account water clarity, a measure of how much light can penetrate into deep water. Satellites, with their wide coverage and multiple passes per week, provided a solution to frequent looks and measuring an entire estuary within seconds.

To determine water clarity in Tampa Bay, the team looked at more than eight years of imagery from GeoEYE's Sea-viewing Wide Field-of-view Sensor (SeaWiFS) instrument, whose data is analyzed, processed, and distributed by NASA for research. The images give a measure of how much light is reflected by the water. The data were put through a two-step calculation to arrive at a measure of clarity. Similarly, data from NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) instrument onboard the Aqua satellite was compared with measurements of turbidity gathered on the ground and then applied to each whole image to make the maps.

When compared with results from independent field measurements, collected with the help from the U.S. Geological Survey, the researchers found that the satellites offered an accurate measure of water quality in the bay. The method can be applied to coastal waters worldwide with little change in methods, according to Muller-Karger.

Frequent measurements from space could resolve questions about the specific timing and nature of events

that lead to decreases in water quality. Seasonal freshwater discharge from nearby rivers and runoff into the bay can carry nutrients. If these nutrients are not controlled, they can give rise to large and harmful phytoplankton blooms, which can kill sea grass. Wind conditions, however, are the driving force for a decline in water quality in the dry season between October and June, when bottom sediments are disturbed.

Chen thinks the new tools will help people understand how coastal systems change over time, which will provide important information for managing the health of coastal waters. "It's important to look at baseline conditions and see how they change with the seasons and over the years, and whether that change is due to development, coastal erosion, the extraction and dumping of sediments, or digging a channel," Muller-Karger says.

SeaWiFS was launched aboard the OrbView-2 satellite in 1997. The sensor collects ocean color data used to determine factors affecting global change, particularly ocean ecology and chemistry. MODIS was launched aboard the Aqua satellite in 2002. The instrument, together with its counterpart instrument aboard the Terra satellite, collects measurements from the entire Earth surface every one to two days. The study was published July 30 in two papers in the journal *Remote Sensing of Environment*.

Related Links:

- + [NASA's Moderate Resolution Imaging Spectroradiometer \(MODIS\)](#)
- + [Sea-viewing Wide Field-of-view Sensor \(SeaWiFS\)](#)

Ecological Forecasting Tool Will Assist in Predicting Climate Change Impacts

National Estuarine Research Reserve managers will soon be able to assess climate change impacts in their estuaries through the use of an ecological forecasting tool developed through the research project Climate Change and Intertidal Risk Analysis, supported through the National Centers for Coastal Ocean Science Ecological Forecasting Program. The forecast tool utilizes temperature data from the NOAA National Centers for Environmental Prediction and predicts whether body temperatures of intertidal organisms will exceed lethal limits, and if managers can expect mass die-offs in their estuaries. It can also be used to predict changes in geographic distributions of intertidal animals which could change ecosystem structure. For more information, contact [Elizabeth Turner](#).

In the Gulf States

ADEM: Celebrating 25 Years of Success

The Alabama Department of Environmental Management is celebrating its 25th anniversary by highlighting the significant accomplishments that have been made in fulfilling its mission of protecting human health and the environment for all Alabamians. ADEM was created in 1982 when the Alabama Legislature consolidated the functions of various commissions, boards, and environmental programs into one Department. Since its creation, ADEM has been instrumental in creating a cleaner, healthier environment for the citizens of Alabama.

Alabama has experienced significant changes during the past 25 years. The overall population has increased to over 4 million people, technological advances have improved the quality of life, and economic development has flourished during this time. Likewise, the efforts to protect Alabama's air, land, and water resources have undergone significant changes.

The drinking water that is consumed by Alabama citizens is currently monitored at unprecedented levels and over 9,600 clean ups have been completed at underground storage tank sites. Leaking underground storage tanks are considered the number one threat to the state's groundwater resources and over 50 percent of Alabama citizens rely on groundwater to meet their drinking water needs. Also, Alabamians can take pride in the fact that ADEM has been instrumental in the designation of over 800 miles of waterways as Outstanding National Resource Waters and the designation of over 280 miles of waterways as Outstanding Alabama Waters.

Although there are more people, more miles driven, more industrial activity, and more stringent air quality standards in Alabama today, air quality is much improved. Programs implemented by ADEM have resulted in the designation of only two areas that do not meet the National Ambient Air Quality Standards as compared to 19 areas that did not meet the national standards in 1982. In addition, ADEM provides air quality forecasts to the citizens in Huntsville, Birmingham, and Mobile which allows them to alter their daily activities on certain days to actually help in the prevention of ground level ozone.

The disposal of municipal solid waste in Alabama has been consolidated into 30 landfills that operate with specific engineering controls such as impermeable liners, leachate collection/disposal systems, and groundwater monitoring wells to protect our environmental resources. This compares to approximately 120 municipal solid waste landfills that operated without impermeable liners in 1982. In addition, ADEM has facilitated the removal of over 675,000 scrap tires from 48 illegal scrap tire dumps and the clean up of 20,000 tons of scrap tire material (2 million tires) from one site.

The efforts to monitor the quality of Alabama's environmental resources have increased significantly since the establishment of ADEM in 1982. The number of sites that are monitored, the number of chemicals/pollutants that are analyzed for, the measurement techniques that are utilized, and the detection levels that are achieved are at historic levels. This data translates into better decisions by ADEM scientists/engineers and better protection of air, land, and water resources for Alabama citizens.

Furthermore, the Department's efforts to provide environmental information to Alabamians, and accept feedback from interested citizens, are at the highest level in the history of the Department. The air quality forecasts along with the monitoring of 25 coastal beaches allow citizens to make informed decisions about their outdoor activities each day. The development of public service announcements, informational

brochures, newspaper inserts, and the video coverage of the Alabama Environmental Management Commission meetings allow citizens to garner valuable information on the Department's efforts to protect our environmental resources.

According to ADEM Director Trey Glenn, "We are all very proud of the environmental improvements that have been achieved over the last 25 years. These improvements are based on the hard work and dedication of the individuals who have worked in this Department. As we look to the future, the Department will continue to take advantage of new technologies to improve its effectiveness and build upon the many achievements that have been realized. The use of aerial surveillance, tablet computers, electronic report submittals, and GPS/GIS applications will allow our staff to build upon these current successes and better serve the taxpayers of Alabama."

New Gulf State Park Pier Construction Slated for November-Will be the Only Public Pier in Alabama on the Gulf

October 19, 2007

The Alabama Department of Conservation and Natural Resources (ADCNR) announced today construction to rebuild the Gulf State Park Pier will begin in mid November. The original pier, destroyed by Hurricane Ivan on Sept. 16, 2004, was a popular fishing and recreation destination. According to ADCNR Engineer Terry Boyd, the new pier will be much improved from the old one. "We are excited to begin the rebuilding of such an important coastal asset," said Boyd. "The new pier will be wider and longer than its predecessor and will be the only public pier in Alabama on the Gulf of Mexico."

The pier project was put out for bid on Aug. 10, 2007. The project was awarded to LCI, Inc. out of Memphis, Tennessee on Oct. 2, 2007 with a base bid of \$16,380,506.00. The new pier is expected to be completed in about 15 months. The dimensions will be 20 feet wide and 1,512 feet long. (The old pier was 14 feet wide and 875 feet long). Commissioner M. Barnett Lawley said the project seems to have been slow in coming, but when completed, will be well worth the wait. "The recreational impact the new pier will provide Alabamians and visitors to our state will be enormous," said Lawley. "The construction of the new pier in Gulf State Park moves us forward to the total restoration of Gulf State Park facilities after Hurricanes Ivan and Katrina." New cabins within the park were completed and ready for occupancy in 2006. The new beach pavilion opened in 2006 and future plans include a new hotel and conference center.

The Alabama Department of Conservation and Natural Resources promotes wise stewardship, management and enjoyment of Alabama's natural resources through five divisions: Marine Police, Marine Resources, State Parks, State Lands, and Wildlife and Freshwater Fisheries. To learn more about ADCNR, visit www.outdooralabama.com.

Governor, Cabinet Approve Florida Keys Land Purchase

-Vote approves acquisition of 42 acres through Florida Forever Program-

TALLAHASSEE – Continuing a commitment to preserve environmentally-sensitive lands in the Florida Keys, Governor Charlie Crist and the Florida Cabinet today voted to acquire more than 42 acres as part of the Florida Keys Ecosystem Florida Forever project. With approximately 1,301 feet of waterfront property combined, the purchase is part of an accelerated plan to purchase and preserve almost 12,000 acres along the 106-mile chain of islands.

“By placing this land in public ownership in perpetuity, we can protect endangered wildlife and water quality as well as the Florida Keys’ sensitive coral reefs,” said Florida Department of Environmental Protection Deputy Secretary Bob Ballard.

The Florida Keys Ecosystem Florida Forever project stretches from South Key Largo to Boca Chica Key, encompassing parcels of West Indian plants and some of the largest remaining tracts of undeveloped hardwood hammocks. The habitats support more than 60 rare and endangered plants and animals, including the Lower Keys marsh rabbit, Key deer and white-crowned pigeon. The project also helps protect the Outstanding Florida Waters of the Keys, recreational and commercial fisheries and the coral reefs surrounding the islands. More than 5,300 acres, or 45 percent of the project, already have been acquired or are under agreement to be acquired.

The 10-year, \$3 billion Florida Forever program established by the Florida Legislature in 1999 conserves environmentally sensitive land, restores waterways and preserves important cultural and historical resources. For more information on the Florida Forever program, visit <http://www.dep.state.fl.us/lands/acquisition/FloridaForever/>.

Florida DEP Implements Protection for Panhandle Environment

--Law creating Northwest Florida environmental program to reduce flooding, safeguard waterways and habitat goes into effect today--

TALLAHASSEE – The Florida Department of Environmental Protection (DEP) today marks the implementation of expanded protection for water resources in the Florida Panhandle. The Florida Legislature passed House Bill 7163 in 2006, creating an Environmental Resource Permitting (ERP) program in Northwest Florida for the first time. DEP has worked with area stakeholders since that time to put effective rules and practices for the ERP program in place.

“This is an historic moment for the people, the environment and the economy of Northwest Florida,” said DEP Secretary Michael W. Sole. “Including the region in the statewide Environmental Resource Permitting program will improve stormwater management and flood control and better protect some of the most pristine rivers, estuaries and streams in the state.”

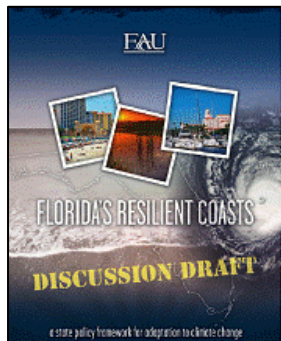
Today inaugurates the first phase of the program, updating stormwater rules and practices to protect water quality and reduce flooding. Phase Two, to be implemented after January 1, 2008, will enhance protection for wetlands connected to other surface waters as well as isolated wetlands not previously protected by state law in Northwest Florida. This program is being implemented jointly by DEP and the Northwest Florida Water Management District.

The ERP program regulates dredging of navigation channels, filling wetlands, other urban and residential development activities, highway construction, and installation of docks and seawalls. Phase One of this program requires stormwater management practices to reduce off-site flooding and protect water quality. The program includes a strong mitigation component to offset unavoidable impacts to water resources and related habitat. Rule development for Phase Two wetland regulations is underway and a public workshop is anticipated before the end of the year.

In addition to Florida’s environmental permitting programs, the State is conserving wetlands and wildlife habitat by acquiring environmentally sensitive land. More than two million acres of natural land -- including 191,000 acres in the Panhandle -- have been placed in public ownership through Florida

Forever and its predecessor program, Preservation 2000. Established by the Florida Legislature, the 10-year, \$3 billion Florida Forever program is the largest land buying initiative in the nation. For more information, visit http://www.dep.state.fl.us/water/wetlands/erp/rules/draft_nw.htm.

Florida Policy Framework for Adaptation to Climate Change



This project is collaboration between CUES and the project funder, the National Commission on Energy Policy, a bipartisan group of top energy experts from industry, government, labor, academia, and environmental and consumer groups whose work is focused on oil security, climate change, and energy infrastructure adequacy and siting. It is funded by the William and Flora Hewlett Foundation and its partners. (see www.energycommission.org)

The project was inspired in large part by very important developments in Florida's commitment to address climate change that have gathered significant momentum this year. In addition to the Governor's commitment, the Century Commission for a Sustainable Florida's 2007 report includes a recommendation that states, "Develop an initial state strategy to address climate change, which will include recommendations for priority action steps to both mitigate impacts and to plan for its potential effects, including sea level rise." Plus, the Florida Energy Commission (FEC), a nine member panel charged with recommending to the Florida Legislature the best ways to secure Florida's energy future, adopted a recommendation to create a Florida Climate and Energy Commission (to replace the FEC), among whose responsibilities would be "...to make recommendations to the Legislature and Executive Branch on...climate change adaptation strategies...."

The final report will present a comprehensive policy framework which – it is hoped – will assist Florida state government 1) to assess the likely impacts of climate change on its coastal regions and communities and then 2) develop and adopt policies and programs that will enable the state, its communities and its residents to adapt to and adaptively manage those impacts over the near- and long-term. We hope the critical questions raised in the report and the policy options presented for consideration will be useful to the Governor and Legislature, state agencies, and a broad array of interested parties – local governments and regional planning agencies; business, environmental and social justice organizations; the media and public affairs educators; and the general public. Because the report is among the first attempts across the country to develop such a comprehensive policy framework, we hope it will also be useful to other states and national authorities, particularly those with a particular interest in the impact of climate change on our nation's coastal regions and communities.

This project was led by Senior Research Fellow, Nick Bollman, before his untimely death. A discussion draft of the report, authored by Nick, is available for review and comment. If you are interested in serving as a reviewer, please contact MaryBeth Burton at mburton@fau.edu.

Northwest Florida Grasses in Classes Program

The Bay Area Resource Council (BARC) has received funding from the US Fish and Wildlife Service for the implementation for the Grasses in Classes (GIC) program. The GIC program is a hands-on, interactive education project that enables students to play a direct role in shoreline stabilization and/or restoration projects. Teachers are provided with all equipment and instructions required to grow grasses in their classrooms.

With guidance from Environmental Education Coordination Team, the educational arm of BARC and the school's Science teachers, the students will maintain and monitor the nursery throughout the school year. As part of the monitoring process, students will collect baseline data at the site prior to and several months after the restoration has taken place. In addition, the existing extensive curriculum that has been developed by Baldwin County Grasses in Classes program will be modified as needed to ensure compliance with the Florida Sunshine State Standards. By studying the ecological importance of coastal plant species and by participating in the restoration, students will gain a sense of stewardship and awareness of the sensitive and fragile community in which they live. The grasses will be used for shoreline stabilization and/or restoration projects located in Escambia, Santa Rosa, Okaloosa, Walton, and Bay counties with Gulf and Franklin counties as future projects. Production Pad construction is anticipated to begin December 2007; curriculum development will begin January 2008.

BARC will provide staff to act as Project Coordinator and as point of contact for project leaders, teachers, and students. Staff duties also include, but are not limited to the collection of timesheets associated with student teacher participation and field trips to restoration sites, and monitoring information as collected by Students, Teachers, and/or Project Leaders. The Project Coordinator will help establish a schedule for each phase of the nursery cycle as well as coordinating the transplanting, which will take place in the spring and/or fall depending on when the plants are ready and when the restoration projects are scheduled. BARC will compile monitoring information and draft a scientifically based document discussing emergent vegetation and its water quality influence. This report will be presented for scientific review and possible publication.

Louisiana Mercury Report Released

BATON ROUGE – The Louisiana Department of Environmental Quality has released an in-depth report on mercury and the role it plays in the environment. The report, “The Mercury Risk Reduction Plan,” provides detailed information on how mercury gets into the environment and the steps government, citizens and industry can take to reduce mercury emissions.

Early in Gov. Kathleen Babineaux Blanco’s administration, she said one of her environmental goals was for the state to create a mercury-reduction plan. Louisiana has always been progressive in sampling for mercury, but this plan takes sampling efforts a step further to include the reduction strategy that Blanco expressed a need for at the DEQ 20th anniversary ceremony in 2004.

Mercury is a naturally occurring element that can get into the environment through a variety of consumer products, industry processes and other common occurrences. It can become a problem, especially for pregnant women and small children, when ingested by humans. This usually happens when people eat too much fish that is contaminated with mercury.

The Mercury Risk Reduction Plan details the many pathways in which mercury gets into the environment, how it can contaminate our fish and its effects on humans. Many people know that mercury was used in old thermometers and thermostats, but the report details other sources of mercury such as car switches, pipeline gauges, rainfall and many more.

“We knew mercury was an issue back when we issued the first mercury advisory for fish consumption in Ouachita Parish back in 1992,” said Chris Piehler, DEQ scientist and author of the plan. “We have sampled more than 400 water bodies and issued 41 advisories since then. The Mercury Risk Reduction

Plan is an effort to bring all mercury-related projects and knowledge throughout the department into one text.”

Copies of the Mercury Risk Reduction Plan are available at the DEQ Web site at www.DEQ.louisiana.gov. You can request a hard copy by calling Customer Service Center 225-219-LDEQ (5337) or Toll Free 1-866-896-LDEQ (5337). You can also request a hardcopy online at: <http://www.deq.louisiana.gov/portal/tabid/2803/Default.aspx>.

“This comprehensive plan culminates a great effort by DEQ staff and stakeholders,” said DEQ Secretary Mike McDaniel. “This achieves Gov. Blanco’s goal, a very specific goal that she set in ‘04. With this plan, the state will be in a better position to reduce mercury emissions, limit public exposure and work toward minimizing the need for new mercury advisories on our waterways.”

State Advances Bayou Lafourche Barrier Project

La. Department of Natural Resources Secretary Scott Angelle announced the commencement of the Bayou Lafourche Saltwater Control Structure project in Lafourche parish on Tuesday, October 9th. At the Lafourche Parish Council meeting on Tuesday, DNR Secretary Angelle made a presentation with Parish President Charlotte Randolph marking the contractual signing that will provide the parish \$4 million for engineering, design and construction of the flood gate project. The project is funded in the state’s FY 2008 budget for coastal restoration and protection. The removable barrier in Bayou Lafourche north of the Gulf Intracoastal Waterway at LaRose is intended to prevent upstream movement of salt water during low flow periods.

Louisiana’s Coastal Restoration Progress Marked with Dedication of Six Projects

Louisiana’s Coastal Wetlands Planning, Protection and Restoration Act celebrated the progress of six coastal restoration projects in Terrebonne and St. Mary parishes on Oct. 26, at the Louisiana Universities Marine Consortium in Cocodrie.

CWPPRA, also known as the Breaux Act, is a collaborative effort to protect, preserve and restore Louisiana’s coastal wetlands. Since 1990, CWPPRA has completed or initiated 143 restoration projects in coastal Louisiana. Each year projects in various stages are celebrated through a dedication ceremony where local, state and federal leaders join the public to highlight CWPPRA’s progress, and discuss Louisiana’s coastal restoration efforts. The six projects celebrated were:

- (TE-37) New Cut Dune and Marsh Restoration
- (TE-44) North Lake Mechant Landbridge Restoration
- (TE-45) Terrebonne Bay Shore Protection Demonstration
- (TE-46) West Lake Boudreaux Shoreline Protection and Marsh Creation
- (TE-48) Raccoon Island Shoreline Protection and Marsh Creation
- (TV-15) Sediment Trapping at “The Jaws.”

“We are delighted that our state and federal partners are here to mark this occasion,” said Leslie Suazo, Terrebonne Parish’s Director of Coastal Restoration and Preservation. “The ceremony here at LUMCON is an important milestone for our restoration efforts here in Terrebonne Parish,” said Suazo, who has been active in Louisiana’s coastal restoration efforts for more than seven years.

“The Oyster Lease Acquisition Program recently implemented by the state has cleared the way for two of the projects being dedicated today,” she said. “We’re also excited about the completion of two barrier island projects that our parish really depends on as a first line of defense against storms ... and they’re great fishing spots!” The dedication also included boat tours of the New Cut, West Lake Boudreaux and Raccoon Island projects, along with a guided marsh tour of the wetlands near LUMCON. Guest speakers and other invited guests also participated in helicopter and seaplane tours of nearby projects. For additional information on Breaux Act projects, visit www.LaCoast.gov.

Ocean Commotion Celebrates 10 Years on Oct. 25 **October 15, 2007**

BATON ROUGE – More than 2,000 elementary and middle school students helped to mark a milestone when they “get their feet wet” at the 10th Annual Ocean Commotion on Thursday, Oct. 25, at LSU’s Pete Maravich Assembly Center (PMAC). The hands-on, educational fair is hosted by the Louisiana Sea Grant College Program. More than 50 exhibitors, including LSU researchers, private organizations and students from at least two area schools, had interactive displays on topics ranging from coastal and marine wildlife to the preservation of Louisiana’s wetlands.

“Ocean Commotion exposes a lot of kids to the coast – a place many of them have never been,” said Dianne Lindstedt, Louisiana Sea Grant education coordinator. “The message also reaches their teachers and chaperones. The first step in learning and caring is awareness and knowledge. Ocean Commotion gives them that initial contact so they can make more connections at home and in the classroom throughout the school year. It’s a good portal to education, science careers and stewardship.”

Ocean Commotion, co-founded by LSU University Relations, began as a local observance of the United Nations’ declaration of 1998 as the International Year of the Ocean. “For this event, I saw a nice marriage between K-8 students and researchers,” said Pam Blanchard, former LSG education coordinator and an organizer of the first Ocean Commotion. “I wanted a hands-on way to show to kids something they’re not going to see at their schools.” Ocean Commotion was so successful that Sea Grant and University Relations agreed to go forward and do it again.

Many things have changed since the first Ocean Commotion – the one-day event is now directed exclusively by LSG and receives corporate funding from Motiva Enterprises LLC, a subsidiary of Shell Oil Co. – but it remains a lively, hands-on learning opportunity. Topics extend beyond ocean-exclusive themes to subjects like coastal marshes, Louisiana geology and wildlife. Exhibitors come from area businesses and universities as well as government, public, private, non-profit and educational organizations. For more information about Ocean Commotion, visit www.lamer.lsu.edu/projects/oceancommotion/.

Since its establishment in 1968, Louisiana Sea Grant has worked to promote stewardship of the state’s coastal resources through a combination of research, education and outreach programs critical to the cultural, economic and environmental health of Louisiana’s coastal zone. Louisiana Sea Grant, based at LSU, is part of the National Sea Grant College Program, a network of 32 university-based programs in each of the U.S. coastal and Great Lakes states and Puerto Rico.

Where the Rubber Hits the Road: LRA Board Endorses Louisiana Speaks Goals for 2008

NEW ORLEANS (October 11, 2007) - The Louisiana Recovery Authority's (LRA) Board of Directors today endorsed ten Louisiana Speaks priorities for the next year at its October meeting in New Orleans, including establishing a state office of planning and funding and building transportation infrastructure critical to Louisiana's recovery. The Louisiana Speaks Regional Plan for South Louisiana, which the LRA board adopted at its May 2007 meeting, details more than 100 action items to support the plan's three broad goals of recovering sustainably, growing smarter and thinking regionally.

"We have much work before us, but this endorsement sets a clear course for our long-term planning efforts in the coming year," said Donna Fraiche, chair of the LRA's Long Term Community Planning Task Force. "Setting priorities for Louisiana Speaks is where the rubber meets the road in terms of implementation and our plans become reality. Our recovery over the next generation depends on this process moving immediately forward. We must avoid missteps by getting this right while we have the opportunity."

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 Louisiana Speaks team has already taken action on key elements of the regional vision by working to coordinate the implementation of the regional plan with the state's coastal protection and restoration plans and supporting Local Recovery Plans. In addition, many of the Louisiana Speaks priorities are already in place. The Louisiana Speaks leadership established a separate, nonprofit group to support this initiative. The Louisiana Legislature established the study group to recommend how Louisiana will create a statewide planning office consistent with the Louisiana Speaks Regional Vision.

"After months of planning, it is exciting to see recommendations of the plan taking shape," said Sean Reilly, chair of the LRA's State and Local Legislative Task Force. "Establishing a separate leadership organization and a state office of planning will ensure that the voices of thousands of citizens that formed Louisiana Speaks will continue to influence the state's future."

Critical transportation projects detailed in the Louisiana Speaks Regional Plan include regional transit projects that offer a high recovery and evacuation value while also providing economic development potential, such as a commuter rail that travels between New Orleans and Baton Rouge and the expansion of several highways. The Plan also calls for the creation of model development code that would serve as a body of zoning and development principles. The Center for Planning Excellence (CPEX) and Louisiana Economic Development (LED) are developing this free resource which will be made available in late 2008. In addition, the LRA works with the Louisiana Land Trust, formerly called the Road Home Corporation, to establish policies consistent with the Louisiana Speaks' priorities for community rebuilding and risk management to ensure the safer, stronger, smarter development of properties the Louisiana Land Trust acquires.

The Plan incorporates the 2008 priorities for the establishment of a state coastal land trust. The Louisiana Legislature directed the Department of Natural Resources (DNR) to study this issue. Private resources

exist for this coastal land trust and an additional effort to establish a separate Conservation and Mitigation Trust Fund is still needed.

The ten priorities the LRA board endorsed Thursday include:

1. Establish an Office of State Planning and an Independent Louisiana Speaks Leadership Group.
2. Fund and build recovery-critical transportation infrastructure.
3. Create a Louisiana Location Index.
4. Create model development and zoning codes.
5. Use the Louisiana Speaks Regional Plan to guide the Road Home Corporation.
6. Focus public investment into developed areas and centers and identify and clear obstacles to infill development.
7. Establish a state trust fund to revitalize communities.
8. Establish a state trust fund to acquire high-risk or environmentally sensitive land.
9. Locate and design schools and medical facilities to create better neighborhoods and spur community development.
10. Build greener.

Visit <http://www.louisianaspeaks.org/priorities2008.html> for more information about the Louisiana Speaks 2008 priorities.

LRA Takes Action to Provide Millions for Local Projects and Fisheries Infrastructure

Board Also Endorses Louisiana Speaks Priorities for 2008, Tours Recovery Progress

NEW ORLEANS (October 11, 2007)-Today the Louisiana Recovery Authority Board of Directors met and approved Long Term Community Recovery Plans for Lafayette, Lafourche, St. Tammany and Terrebonne, clearing the way for these parishes to access nearly \$9.8 million. "With today's action, the LRA has approved 98% of the funds available for this program, providing nearly \$200 million for improvement projects that parishes have identified as their top priorities," said Donna Fraiche, Chair of the LRA's Long Term Planning Task Force. "By strategically investing recovery dollars in local projects that will protect marshlands, enhance drainage capacity, improve highways and establish evacuation routes, we are not just recovering from the past, we are investing in our future."

Funding allocations and top priorities for local recovery projects in each parish include the following:

St. Tammany- \$7.65 million

- Expansion of the Mandeville Area Wastewater System
- Improvement of the Slidell/Pearl River Area Wastewater System
- Establishment of the UNO Research and Technology Park
- Improvement of Parish Drainage Capacity

Terrebonne- \$1.02 million

- Morganza to the Gulf of Mexico Hurricane Protection System
- Construction of Communications Infrastructure and Provide Responders with Equipment
- Update Parish Emergency Operations Plan
- Construction of a North South Hurricane Evacuation Route
- Expansion of Louisiana Barrier Island Maintenance Program

Lafourche- \$948,000

- LA 1 Improvements - Golden Meadow to Port Fourchon
- Coastal Restoration

Mississippi River Reintroduction
North Lafourche Levee Project
Additional Marsh Creation

Lafayette- \$150,000

I-49 Interchange Improvements
US 90 Drainage Project
United Way Multi Tenant Center
Lafayette Comprehensive Plan
US 90 Bridge Widening

At its regular meeting of the Board of Directors, the LRA also approved a resolution to reallocate funds that would provide \$19 million for the enhancement of fisheries infrastructure in coastal Louisiana. "For many South Louisiana residents, fishing is not just a hobby, it is a livelihood," said LRA Board member John T. Landry. "This program will help address some of the most pressing recovery needs of the fishing community and aid in the long-term sustainability of an industry that is vital to the economy and culture of Louisiana."

National Oceanic and Atmospheric Administration estimates that Hurricanes Katrina and Rita destroyed more than \$528 million in direct fisheries infrastructure in Louisiana. The Fisheries Infrastructure and Assistance Program will provide funding to projects that:

- Enhance and ensure continued access to the state's coastal waters for commercial and recreational fishing, eco-tourism and development of "working waterfronts;"
- Create/maintain employment in the commercial and recreational fishing industry;
- Preserve the commercial and recreational fishing culture of coastal Louisiana;
- Improve the economic efficiency of the fishing industry; and
- Create storm harbors that provide vessels with temporary refuge during future storm events.

Before taking this action, LRA staff conducted four public outreach meetings to gauge support for the action and received positive feedback from stakeholders in the fishing community. The Louisiana Shrimp Association, Louisiana Oyster Task Force, Louisiana Fishing Community Recovery Coalition, and the Louisiana Seafood Promotion & Marketing Board also submitted letters to the LRA Board of Directors expressing support.

"We commend the LRA on its ongoing support of the coastal fishing industry in the wake of Hurricanes Katrina and Rita," said Paul Coreil, LSU AgCenter vice chancellor. "This additional money will provide much-needed funding for the recovery of critical infrastructure for Louisiana's coastal fisheries."

The Louisiana Speaks Regional Plan for South Louisiana, which the LRA board adopted at its May 2007 meeting, details more than 100 action items to support the plan's three broad goals of recovering sustainably, growing smarter and thinking regionally. Major General Hunt Downer from the Louisiana National Guard also gave a presentation on the progress of construction at Jackson Barracks. "We were 100 percent destroyed by Katrina," Maj. Gen. Hunt Downer said. "But hold on, we're coming back and we're rebuilding safer, stronger and smarter."

Approximately \$200 million has been committed in state and federal dollars to restore this historic 100-acre military post which will serve as an anchor for recovery in the Lower 9th Ward in New Orleans and the community of Arabi in St. Bernard parish. Construction could be complete in as little as 18 months. Following a noon adjournment LRA Board members and staff hosted a bus tour for members of the media to survey recovery progress throughout New Orleans and St. Bernard. Board resolutions and presentations for the board meeting are available online at www.lra.louisiana.gov.

Resource Agencies Break Ground on New Research and Interpretive Facility in Moss Point

BILOXI, Miss. – Construction of the Mississippi Department of Marine Resources (DMR)/Grand Bay National Estuarine Research Reserve's (GNDNERR) "green" headquarters began Oct. 30, 2007, with the official groundbreaking ceremony, which took place within view of the two double-wide trailers currently serving as shared office space for the GNDNERR and the U.S. Fish and Wildlife Service (USFWS). The facility, to be named the "Grand Bay Coastal Resources Center," will house the operations of the GNDNERR and the Grand Bay National Wildlife Refuge.

The new building will receive Leadership in Energy and Environmental Design (LEED) Certification, which means it will adhere to the strict set of energy and water saving criteria set by the U.S. Green Building Council. Expected to be completed by the end of 2008, the 16,000-square-foot facility will comprise office space, classrooms, exhibit area, a dormitory and laboratories. "We want to lead the way in Mississippi for constructing a sustainable public facility that will demonstrate to the highest degree possible our commitment to the environment," DMR Executive Director William Walker said. "We're excited about the opportunity to work in partnership with the U.S. Fish and Wildlife Service on the coastal resources center."

The new building will house interpretive exhibits pertaining to the local ecology, which encompasses coastal bay, expansive saltwater marshes, maritime pine forest, pine savanna and pitcher plant bogs. The dormitory space will house up to 20 visiting graduate students, researchers and educators. "We want our new facility to be a state and regional demonstration of our philosophy of environmental consciousness and to show our visitors how natural building materials and sustainable design strategies and techniques can be used," Grand Bay NERR Manager David Ruple said. "We look forward to leaving our long-term temporary offices behind and utilizing the new facilities in a manner that will enhance our growing education, training, research and stewardship programs," Ruple added.

The USFWS will coordinate the enforcement, management and education activities of the 14,000+ acre Grand Bay National Wildlife Refuge from the Bayou Heron Road facilities. The facility, designed by the Atlanta architect firm of Lord, Aeck & Sargent in collaboration with Studio South Architects of Pascagoula, will be both state and federally funded. The project will include a rainwater collection and filtering system to eliminate potable water use for toilet flushing, extensive day-lighting with sun-shading overhangs to control unwanted solar gains, and an innovative chilled water storage system to minimize cooling costs, and displacement ventilation to provide a healthy indoor environment.

According to Jim Nicolow, AIA, a LEED Accredited Professional who leads Lord, Aeck & Sargent's sustainable design efforts, the use of daylight harvesting will optimize the building's thermal performance and is expected to result in energy performance that is a 40 percent improvement over Code. With the use of rainwater harvesting, no potable water will be required for sewage conveyance, resulting in an anticipated 40 percent reduction in water use.

"The Grand Bay NERR facility will be a wonderful example of appropriate coastal development," Nicolow said. "We're excited to be involved in the design of a green demonstration building that shows and teaches through its architecture what sustainable design is all about and that it's possible to develop land responsibly in sensitive areas." The goal of the architects was to design a building not only with environmentally friendly or "green" features and a minimal impact on the landscape, but also with elements inherent to coastal structures, such as low-slung roofs, deep porches and a one-story wood-framed structure elevated on pilings.

“Everything about the design of this project, including both the actual construction footprint and its operational life, was approached with a great deal of sensitivity toward its environmental impact,” said Hoppy Allred of Studio South Architects. “Every decision along the way—from the building’s orientation on the site, to the mechanical/plumbing systems selected, even down to the manufacturing processes and the transportation of the materials incorporated—was made from the Grand Bay NERR’s standpoint of us having a responsibility to protect our natural resources.”

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.

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



An artist’s rendering of the Grand Bay NERR’s new “green” headquarters, which will also house the operations of Grand Bay National Wildlife Refuge. Once completed, it will be one of the only “green” structures—constructed using environmentally friendly practices and materials—in Mississippi. (Courtesy of GNDNERR)

Public Comment Sought on Draft Environmental Assessment for the Mississippi Gulf Coast National Heritage Area Management Plan

Biloxi, Miss. – The Mississippi Gulf Coast National Heritage Area, administered by the Mississippi Department of Marine Resources' Office of Coastal Management and Planning, invites public comment on a draft Environmental Assessment (EA) for the Mississippi Gulf Coast National Heritage Area Management Plan. The management plan details methods to organize, enhance and promote the heritage, culture, natural resources and recreational opportunities within the six coastal county region encompassed by the heritage area, which includes Hancock, Harrison, Jackson, George, Stone and Pearl River counties.

The draft EA will be announced and discussed at the upcoming Comprehensive Resource Management Program (CRMP) meeting to be held October 25 at 10 a.m. at D'Iberville City Hall, 10383 Automall Parkway, D'Iberville, Miss. A public meeting is currently being planned to provide additional opportunities for comment. Written comments on the draft EA may also be sent to:

Tina Shumate, Department of Marine Resources; 1141 Bayview Ave; Biloxi, MS 39530. Comments may be e-mailed to Tina Shumate at Tina.Shumate@dmr.ms.gov. **Comments will be accepted until November 19, 2007.** The draft EA is available online at www.dmr.state.ms.us and a printed copy is available for review at the offices of the Mississippi Department of Marine Resources located in the Bolton State Office Building, 1141 Bayview Ave., Biloxi, MS 39530.

National Heritage Area Directors Meeting Kicks Off in Biloxi Oct. 9

BILOXI, Miss. – Directors and staff of the 37 national heritage areas affiliated with the National Park Service and a member of the Alliance of National Heritage Areas will spend five days on the Mississippi Gulf Coast the week of Oct. 8-12.

The Office of Coastal Management and Planning at the Department of Marine Resources in Biloxi is the coordinating entity for the Mississippi Gulf Coast National Heritage Area (NHA) and will host fellow national heritage development and tourism partners for the Heritage Development Institute, Alliance of National Heritage Areas Board of Directors and Roundtables. The historic meetings are set to take place in the Bolton State Office Building at 1141 Bayview Avenue on Back Bay of Biloxi. Representatives from Augusta Canal, Cane River, Delaware & Lehigh, Essex, Erie Canal, Yuma Crossing, Rivers of Steel, Oil Region, Lackawanna, Motor Cities, Tennessee Civil War, Wheeling, Silos and Smokestacks and South Carolina National Heritage Areas will all be traveling to the coast.

Each heritage area is provided the opportunity to carry out the membership duties by hosting a national meeting. The Mississippi Gulf Coast National Heritage Area was given the opportunity to host two years ago and remains pledged and proud of the cultural, historical, archaeological, natural and recreational resources in southern Mississippi.

Known as the Mississippi Gulf Coast National Heritage Area, the six-county area in southern Mississippi located on the Gulf of Mexico and in the Mississippi Coastal Plain has a unique history shaped by environment, culture, historical significance and recreational resources. This week directors, staff and commissioners from 37 heritage areas in the national system will visit the distinctive Mississippi Gulf Coast and enjoy a day of touring by land and water to discover the culture, environment and history that is unique to the Mississippi Gulf Coast. For more information on the Mississippi Gulf Coast National Heritage Area program, contact Tina Shumate at (228) 523-4025.

Secretary of State Returns \$3.3 Million to Gulf Coast from Tidelands Leases and New Assessment Collections

BILOXI, Miss. – Secretary of State Eric Clark today presented a Tidelands rent check for \$2,922,305 along with a Tidelands Assessment check for \$400,000 to the Commission on Marine Resources. The Tidelands revenue was collected from tidelands leases on the Mississippi Gulf Coast in the fiscal year that ended June 30. The Tidelands Assessment revenue is a result of House Bill 44, passed in the 2005 Fifth Extraordinary Session. That bill allowed land-based casinos on the Coast and required them to pay a tidelands assessment, which is based on the casino's capital investment. This is the first year for the tidelands assessment.

“Tidelands lease collections are indispensable to rebuilding the infrastructure of the Gulf Coast,” Clark said. “I’m proud to work with the Coast delegation of the Mississippi Legislature and the Department of Marine Resources on the tidelands program. We must keep the tidelands program strong,” Clark said. “As lease holders rebuild and the new tidelands assessment begins for land-based casinos, we’ll see more tidelands projects that improve the quality of life for Coast residents and visitors,” Clark continued.

The people of Mississippi own the public trust tidelands, the land covered by water at high tide. Rent is collected by the Secretary of State’s Office from tidelands leaseholders, including casinos. As Secretary of State, Clark negotiates tidelands leases on behalf of the state. Traditionally, the Mississippi Legislature appropriates the lease revenue for specific projects. This year, the Legislature (House Bill No. 1703 - 2007 Regular Session) authorized the annual payment for the purchase of Deer Island and left expenditures on other projects to be determined by the Commission on Marine Resources.

The Tidelands Trust Fund Program consists of funds derived from the lease rentals of tidelands and submerged lands. Revenues collected by the Office of Secretary of State are appropriated by the state legislature and administered by the Commission on Marine Resources (CMR). Since 1990, the Secretary of State’s Office has collected more than \$60 million in tidelands leases.

“I’m really happy to see the Tidelands Trust Fund allocation continue to rebound after Katrina. These funds are all spent in Coastal Mississippi, and they go a long way in helping to move our recovery effort forward. On behalf of the residents of Coastal Mississippi, I’d like to genuinely thank the Mississippi Legislature for making these funds available,” said DMR Executive Director Dr. William Walker.

GIS: Examining the Little Details for Limitless Potential

Release Date: October 3, 2007

BILOXI, Miss. -- A neighbor's home catches fire and a concerned citizen dials the local 911 operator. The operator immediately dispatches the call, but instead of arriving in 10 minutes, the crew runs into traffic at the Pops Ferry/Cedar Lake intersection and is delayed 15 minutes. The neighborhood watches in horror as the family's belongings continue to burn. What if a few technological updates could have allowed the fire crew to reach their call faster? Gulf Coast communities consider implications like these as they rebuild infrastructure for families returning home after Hurricane Katrina and for families looking to make new homes in new counties.

"Communities are changing, people are relocating," said Bob Haywood, long term community recovery (LTCR) specialist for the Federal Emergency Management Agency (FEMA). "The secondary impacts for other counties are just as critical as the lower three counties addressing direct impacts from the storm."

The LTCR program is about helping communities identify projects they deem critical to long term recovery and quality rebuilding, while re-establishing and even enhancing the quality of life for coastal Mississippi residents. "LTCR, Geographic Information Systems (GIS), FEMA's Hazard Mitigation Grant Program, the Mississippi Emergency Management Agency (MEMA), and the Mississippi Department of Environmental Quality - we're working together to create a net, a system to help communities rebuild," said Haywood. "The Mississippi Department of Environmental Quality is required to work with the local governments. They in turn, give information to the state. The state comes to us and we bring everyone together to devise the best solutions tailored to the needs of the specific community."

GIS offers communities a method to identify trends, collect data and evaluate the potential impact of future projects. "GIS is an important tool for managing growth, a phenomenon most areas in South Mississippi are facing," said Anita Mitchell, FEMA GIS specialist. When Harrison County planners begin looking at locations for a new fire department, they can use GIS to map incidents of fires in their county and identify major intersections that could make travel difficult for emergency vehicles. Haywood says it is long range planning done in extreme detail but he feels the end results for local communities are limitless.

"Katrina exposed how vulnerable and inadequate our drainage systems are. We didn't know about interior floodplain management, drainage, flooding, and flood prevention," said Jeff Taylor, planner for the City of D'Iberville. The city has utilized GIS for several projects. "One of our biggest priorities as we rebuild is to minimize the everyday flooding and practice everyday floodplain management, using GIS to support." FEMA GIS staff provided Harrison County partial data maintenance and organized specific training for county employees, resulting in the county saving space for some GIS staff in the county's geodatabase course. "All of those people down there in GIS have bent over backwards and helped us a whole heck of a lot with things related to flooding and drainage," said Taylor. "We needed a little guidance so we could use flood money and economic development money or any other funds available where we needed them most. We had to have a good game plan and the GIS guys and LTCR just fit in with that."

GIS also offers a chance for uniformity among communities that have the same GIS software and hardware. Local planners can communicate with each other and exchange valuable data. They can forecast issues and review a variety of solutions to address their particular needs and developments. Communities can thoroughly evaluate the location of the next water treatment plant, new housing development or disposal site.

"GIS is about managing growth and changes occurring at the local community level," said Mitchell. "The upper counties are seeing rapid development and they want to rebuild in a way that's practical, functional and sustainable." GIS imagery and technology can help communities flesh out their long range plans and sometimes help them consider certain details that may have been previously overlooked. Stone County has watched its population skyrocket in the past two years, highlighting a need for a rapidly expandable infrastructure to support a rapidly expanding population. GIS can help county officials manage their land use and zoning practices. The county received a FEMA Hazard Mitigation grant to develop a building standards and enforcement program that will house a new agency created specifically to oversee the county's GIS function.

FEMA GIS staff coordinated Stone County with the Mississippi Department of Information Technology Services (ITS) to get specialized, technical consulting help the county needed to apply for funding grants. "We are feeling the secondary impact of the storm. In certain parts of the county, we need something more for potable water supplies and in other places we have to have better road connections," said Nell Murray, grant writer and project developer consultant for Stone County. "We're trying to provide physical and service infrastructure to accommodate this growth and be better prepared for future disasters." LTCR connected the county with ITS to help build a plan for a GIS system. "The LTCR is helping us identify

long-and short-term projects to increase the county's revenue. The growth we're experiencing won't have a revenue impact for a few years," said Murray. "We've got to have some help; otherwise the county just cannot afford the needed infrastructure."

GIS staff recently coordinated with FEMA Mitigation to perform community outreach and education for the upcoming Digital Flood Insurance Rate Maps. Several city staff members attended from local communities. "We wanted to lay all the cards out and get people up to speed," said Mitchell. "It can be a difficult transition and we're here to help make the process easier. We can also provide special manipulations of flood data for various groups." The work of GIS and LTCR staff may help communities plan the fastest route for the local fire department and lay the groundwork for bigger, better futures. "What we're doing in Mississippi is setting the stage for future FEMA recovery efforts and a brand-new, long-term approach," said Haywood.

Governor Barbour to Break Ground on New Water Treatment Plant

Thursday, October 11, 2007

(MOSS POINT, Mississippi) – Governor Haley Barbour was joined by consumers, engineers and local officials here today as ground was broken for the first post-Katrina water system enhancement project in Jackson County. "This is a milestone," Governor Barbour said. "This new reverse-osmosis water treatment plant will provide a reliable supply of high quality water for citizens of Moss Point and the surrounding area. The plant will be a tremendous aid to public safety as well as to economic development and growth in this area."

Moss Point Mayor Xavier Bishop, members of the Jackson County Utility Authority, and officials of the Mississippi Department of Environmental Quality joined Governor Barbour at the groundbreaking ceremony. Several local residents also watched as the project was officially launched.

Funding for the project comes in part from the U.S. Housing and Urban Development (HUD) monies allocated by Governor Barbour for water and wastewater enhancements in the Gulf Coast Region for hurricane recovery. Moss Point is receiving \$3,948,390 for the Reverse Osmosis Treatment Plant, and this amount is anticipated to be increased to \$6,195,252 when construction of the associated Moss Point Water Transmission System is included.

The project is part of the Gulf Region Water and Wastewater Plan that provided recommendations for the use of \$641 million in disaster recovery funds to enhance water and wastewater infrastructure in Pearl River, Stone, Hancock, Harrison, and Jackson counties. Governor Barbour and Mississippi's Congressional Delegation obtained appropriations of more than \$5 billion through the U.S. Department of Housing and Urban Development to assist in hurricane recovery. The Mississippi Gulf Region Water and Wastewater Plan was prepared by the Mississippi Department of Environmental Quality for improvements intended to support existing and future growth patterns, particularly as realized through new housing construction, and to promote economic development.

Texas Awards First Competitive Wind Leases in the United States

AUSTIN — Jerry Patterson, Commissioner of the Texas General Land Office, today awarded the first four competitively bid leases for offshore wind power in the nation’s history. “The Texas Wind Rush is on, and the pioneers are staking their claims,” Patterson said. “And wherever there are pioneers, the settlers soon follow.”

The leases, awarded to Wind Energy Systems Technology (W.E.S.T., LLC), allow work to begin immediately on the construction of meteorological testing towers on each of the four tracts. Wind Energy Systems Technology is based in Louisiana. The company already holds the nation’s only offshore lease for wind power, and is collecting data for a wind farm off the coast of Galveston. Once the wind farms are operational, W.E.S.T. will pay the state’s Permanent School Fund a minimum of \$132 million over the 30-year life of the leases, discounted for the present value of the leases. The company’s actual dollar commitment to the PSF is \$258 million.

Factor in the Permanent School Fund’s minimum gross revenue from the wind farms producing at 250MW to 300MW, and that total rises to more than \$231 million, discounted for present value, or \$433 million over the 30-years the leases cover. “Wind energy is not a feel-good fad,” Patterson said. “This is real technology, real business, real energy and it’s happening right here in Texas.”

Four offshore tracts were offered for wind development as part of the regular oil and gas lease sale held today. The offshore wind energy tracts are near Jefferson, Calhoun, Brazoria and Cameron counties. The four tracts total 73,098 acres in size. The tracts range in size from 12,240.02 to 23,040 acres. The research and development stage will last approximately four years and the production term will be 30 years for each lease. W.E.S.T. will now begin to pay the state’s Permanent School Fund \$91,000 a year for the right to develop wind farms on the four tracts of land. Following the research phase of the leases, W.E.S.T. will begin to develop wind farms on each of the four tracts. If winds are favorable, W.E.S.T. plans to build wind farms that will produce a minimum of 250 MW to 300 MW per lease.

W.E.S.T. will then begin paying the state’s Permanent School Fund a percentage of the electricity produced on the leases. For the first eight years of each lease, W.E.S.T. will pay the Permanent School Fund from 3.5 to 6.5 percent of all electricity produced from the four tracts of land. Generally, that royalty will start at 3.5 percent of all electricity produced for the first eight years of the lease. That percentage will grow to 4.5 to 4.75 percent of total production for years nine through 16, and 5.5 to 6.5 percent of total production for years 17 through 30 of the 30-year lease. “This was the first, but won’t be the last,” Patterson said. “The future of offshore wind power in the U.S. is right here in Texas, and the Land Office is open for business.”

Patterson Announces Biggest Beach Project in Texas History

AUSTIN — Commissioner of the Texas General Land Office Jerry Patterson and Senator Mike Jackson (District 11) today announced a historic project to restore at least three miles of eroded Galveston beaches west of the Seawall. The \$13.5 million project will create a 200-foot wide beach from the end of the Galveston Seawall to Spanish Grant subdivision. This project is the biggest in Texas history, and may even get bigger. “This is the beginning of a new era for Galveston beaches,” Patterson said. “In the fight against coastal erosion, this project is a knockout punch. This will be the biggest effort to preserve the Texas coast since the Galveston Seawall, and it might get bigger.”

“The State of Texas is incredibly fortunate to have Commissioner Patterson in the General Land Office and Galveston should be particularly proud,” Jackson said. “Coastal erosion has had a significant impact on our Galveston beaches and it has been with his leadership that we have been able to craft legislation that brings all levels of government together to accomplish this task. It is a model of what can be done when all parties work together.” Funding for the \$13.5 million project will consist of \$5 million in state Coastal Erosion Planning and Response Act (CEPRA) funding, \$6 million in proposed state Coastal Impact Assistance Program funding, \$1.25 million in county Coastal Impact Assistance Program funding, and \$1.25 million in local funds.

Patterson and Jackson said the project could grow larger with the addition of more local funding. Patterson urged Galveston voters to support Proposition 2 on the upcoming November ballot, which if passed, could allow the city to provide the additional funding needed to renourish the remainder of Galveston Island, possibly all the way to San Luis Pass. “The more sand we use, the cheaper it becomes,” Patterson said. “I am going to continue to work with Senator Jackson, the Galveston delegation and local officials to grow this project in the next several weeks. Stay tuned.”

Patterson also announced three other large-scale projects to be funded through the CEPRA program:

- South Padre Island: A \$2.8 million renourishment of more than a mile of beach on South Padre Island with an offshore sand source. CEPRA grants will pay for \$2.1 million of the total project cost.
- Village of Surfside: A \$5.7 million shoreline stabilization project that will include offshore breakwaters for the Village of Surfside. CEPRA grants will pay for \$1.1 million of the total project.
- Sylvan Beach : A \$2.5 million shoreline stabilization and beach renourishment project will replace rip-rap and alleviate erosion from Houston Ship Channel traffic with a revetment and pocket parks. CEPRA grants will pay for \$1.4 million of the project’s total cost.

The announcement is a major success for Patterson’s Coastal Texas 2020 initiative, which seeks to unify efforts to leverage local, state and federal money for large-scale beach renourishment efforts. “When we pull together, we can win the fight against coastal erosion,” Patterson said. “Big projects like this don’t happen without every level of government working together.”

The massive Galveston renourishment project became a reality after the General Land Office led a joint effort to discover a large quantity of beach-quality sand off the coast near Apffel Park. Jackson noted that every dollar of state money spent on CEPRA projects sees a return both in real economic gain for local communities and additional federal funding to fight erosion. For example, the \$17.3 million in CEPRA funding announced today will be leveraged with local and federal funds to build more than \$50 million worth of projects. “That’s not a bad return for Texas taxpayers,” Jackson said. Money spent in the battle against erosion also has a real return for local communities. A report by the University of Texas at Austin concludes that the return on investment from \$30 million spent on coastal protection in 1999, will be more than \$127 million over the next 20 years. “Building beaches is good for Galveston and for all of Texas,” Jackson said.

Monarchs Migrate Off the Beaten Path

AUSTIN, Texas — Observers have spotted tens of thousands of monarch butterflies migrating across the Texas coast from Louisiana to Mexico in what is being described as "the best coastal monarch viewing in the last 15 years." The majority of monarchs normally migrate through the central flyway, which extends from I-35 west to Midland, Texas, but this year the coastal flyway has been more impressive. Scientists are unsure as to what has caused this change.

"I can't really say what it is, but it's always a little bit of a mystery about where they come from and how they travel in migration," said Texas Parks and Wildlife Department Entomologist Mike Quinn. "I would say the coastal flyway is just not well understood."

Nearly all of the monarch butterflies east of the Rocky Mountains in North America travel south through Texas each fall to spend the winter in one spot in the Mexican mountains. Monarchs tend to fly in masses and migrate up to 3,000 miles from northeast North America to central Mexico and half way back the following spring. They are the only butterflies to make such a long, two-way migration every year.

The highest observation numbers are currently north of Corpus Christi and Quinn expects the butterflies to be visible along the coastline for another two weeks. "People should have plenty of opportunities to get out to the coast, parks and refuges to see this wonderful phenomenon," he said.

Monarchs have also been known to set up colonies along the Gulf coast of Texas, and Quinn encourages the public to report such sightings at mike.quinn@tpwd.state.tx.us. Adult monarch butterflies are orange with black veins and white spotted wing borders. Males have a black scent patch on a vein across the middle of the hind wing. Additional information may be found on the TPWD Web site.

On the Net:

<http://www.tpwd.state.tx.us/huntwild/wild/species/monarchbutterfly/>
http://www.tpwd.state.tx.us/learning/texas_nature_trackers/monarch/

Texas Clipper to be Sunk as Artificial Reef Nov. 15

AUSTIN, Texas — When she is finally sent to the bottom of the Gulf of Mexico Nov. 15, the USTS (United States Training Ship) *Texas Clipper* will go down in history as the artificial reef that almost wasn't. The stakes were high all along: as an artificial reef, the ship is expected to generate as much as \$30 million annually for local economies over a lifespan of at least 50 years. The complex, durable structure with its high, vertical profile will form the foundation of a vibrant community of corals and other invertebrates, as well as recreationally important "bottom" fish such as snappers and groupers, and pelagic species like cobia, king mackerel and dorado.

The 473-foot vessel was mothballed twice between periods of active sea service before retiring as the oldest ship in the United States Merchant Marine fleet in 1996. Then, on the cusp of being turned-over to the Texas Parks and Wildlife Department as that agency's most ambitious artificial reef project, the ship sank at her berth at the U.S. Maritime Administration facility near Beaumont, Texas. Even as she was raised and patched, last-minute negotiations saved the *Texas Clipper* from the scrap heap and she was towed to Brownsville, Texas, for environmental remediation and preparation as a reef.

"It would make a good movie, the twists and turns in this story," said TPWD Artificial Reef Program Coordinator J. Dale Shively. "There were times when we thought for sure the project was dead." But nearly a decade after the state first applied to MARAD for the transfer of the *Texas Clipper* as part of the artificial reef program, success is in sight. The U.S. Environmental Protection Agency certified Oct. 1 that the ship is free of hazardous materials. Nov. 14 she will be towed to a site 17 nautical miles from South Padre Island, Texas. The next morning, workers will open valves to flood the ship and allow her to settle 134 feet to the hard sand bottom. By Nov. 17 — a Saturday — the site will be open to the public for diving and fishing.

“This ship has an incredible history,” said Shively. “Of course, after three decades as a Galveston-based training vessel, she has a very strong Texas connection. But we like to say she’s already had three lives, starting in the Pacific theatre during World War II, and her role as a reef will be her fourth life and final journey.”

The *Texas Clipper*, most recently (1965-1996) a maritime training vessel for Texas A&M University-Galveston, began her life as the USS *Queens* (APA-103), a WWII transport and attack ship. As the *Queens*, she participated in the Pacific war and was the first attack troop transport to arrive at Iwo Jima. After the war she was recommissioned as the SS *Excambion*, one of the post-war "four aces" of the American Export Lines. As the *Excambion*, she carried cargo and passengers in luxurious style between New York City and Mediterranean ports.

As an artificial reef, the *Texas Clipper* will be the site of several scientific monitoring programs. The University of Texas-Brownsville will partner with TPWD to monitor biological growth on the hull of the ship from the very beginning, and Texas A&M University and the National Marine Fisheries Service will conduct an ongoing experiment to look at the pace of corrosion in Gulf waters (this will be useful for, among other things, gauging the potential environmental impact of wrecks containing fuel, oil and other ecologically harmful substances).

“The benefits — to the local fishery, to the economy of South Texas, and to ongoing science — are tremendous,” said TPWD Coastal Fisheries Division Director Larry D. McKinney, Ph.D. “The only reason we don’t have more of these complex reef communities in waters off Texas is because we lack the hard substrate that corals and other reef organisms need to get established. We can provide that with artificial reefs — whether former oil production platforms, concrete culverts or something as magnificent as this ship.”

Prepared for reefing by Resolve Marine Services, Inc. (with ESCO Marine, Inc. as subcontractor) in Brownsville, the *Texas Clipper* will go down as possibly the cleanest ship ever deliberately sunk for this purpose. Remediation, just completed in recent months, has included the removal of 1,680 cu. yards of asbestos and more than 76,000 pounds of PCB-containing materials.

EDITORS: Seats are still available for journalists on boats going out Nov. 15 to observe the sinking of the ship. TPWD has extensive photo and video documentation of the entire *USTS Texas Clipper* reefing project, including the initial move from the ship’s "mothball" mooring near Beaumont, Texas. We also have historical photos of the ship under all three names.

On the Net:

More information, including photos, of the USTS Texas Clipper:

http://www.tpwd.state.tx.us/newsmedia/releases/news_roundup/texas_clipper/

More information on the TPWD artificial reef program:

http://www.tpwd.state.tx.us/landwater/water/habitats/artificial_reef/

Other News

Gulf of Mexico Program Partnership Announces the 2007 Gulf Guardian Awards

STENNIS SPACE CENTER, Miss. – The Gulf of Mexico Program recently announced the Gulf Guardian Awards for 2007. The Gulf of Mexico Program initiated the Gulf Guardian Awards in 2000, as a way to recognize and honor the businesses, community groups, individuals, and agencies that are taking positive steps to keep the Gulf healthy, beautiful and productive. Award entries were received from the five Gulf States as well as other States, which are doing work that improves the health and productivity of the Gulf of Mexico. A first, second, and third place award are given each year in seven categories – individual, business, youth and education, nonprofit organizations, government, partnership and bi-national efforts. The awards will be presented during the 2007 Clean Gulf Conference on November 14, 2007 at the Embassy Suites Hotel, Bayside Ballroom in Tampa, Florida beginning at 6 p.m.

"I commend the Gulf Guardian award winners for their outstanding achievements and thank them for their efforts to protect and preserve the Gulf by emphasizing the value of improving biodiversity among coastal habitats," said Jimmy Palmer, Regional Administrator for the EPA Office in Atlanta. "The Gulf of Mexico is a priceless treasure, and it is through actions, such as those accomplished by this year's winners, that we can enrich the cultural, recreational and economic significance of this resource."

"Gulf Guardian awards showcase accomplishments from a broad spectrum of environmental leaders -- from committed individuals to dynamic corporations," EPA Regional Administrator Richard E. Greene said. "I applaud their success in preserving the vital resources of the Gulf Coast, one of our most valuable national treasures."

The Gulf of Mexico Program began in 1988 to protect, restore, and maintain the health and productivity of the Gulf of Mexico ecosystem in economically sustainable ways. The Gulf of Mexico Program is underwritten by the U.S. Environmental Protection Agency and is a non-regulatory, inclusive consortium of state and federal government agencies and representatives of the business and agricultural community, fishing industry, scientists, environmentalists, and community leaders from all five Gulf States. The Gulf Program seeks to improve the environmental health of the Gulf in concert with economic development.

Bryon Griffith, Director of the Gulf of Mexico Program said "This is the 8th year of the Gulf Guardian Awards Program and I am proud to say that each year the winners in all categories have represented the very best of environmental accomplishments in the Gulf of Mexico. The 2007 award winners truly exemplify the bond that enthusiastic and committed citizens, communities, governments, and businesses share in addressing complex problems to improve, protect, and sustain our regional and national treasure, the Gulf of Mexico."

For a list of all the Gulf Guardian Award winners for 2007, visit the Gulf of Mexico Program web site at <http://www.epa.gov/gmpo> and click on the Gulf Guardian Award button.

Working “Backward,” Seagrass Depth Limits Can Lead to Nutrient and TSS Loading Limits

Setting load limits for nutrients and suspended solids in order to achieve restoration goals or calculate EPA-required total maximum daily loads (TMDLs) can be very complex. These parameters are particularly important in systems where seagrass restoration is a management goal. Since nutrients and TSS impact water clarity, and water clarity impacts seagrass growth and depth limits, can this relationship be turned around such that desired seagrass depth limits are used to back-predict appropriate load limits? This approach was used for watersheds of the Indian River and Banana River Lagoons, FL. The system was divided into segments, and segment-specific regression relationships between nutrient/TSS loadings and seagrass depth limits were established using seagrass cover and water quality data from 1943, 1996, 1999, and 2001. These highly significant relationships were then turned around so that desired depth limits specified by the Florida Department of Environmental Protection could be used to determine the load limits necessary to achieve those goals. These load limits can be used to calculate load allocations, waste load allocations, and TMDLs. The authors point out that this simple approach is likely to be widely applicable in similar systems with long residence times. In order to carry out this type of calculation, though, long-term or multi-year data (or both) are needed to construct the initial regressions.

In the same journal issue, an article by Duarte et al. explored the relationship between seagrass depth limits and light attenuation in 424 published reports of this relationship. This extensive review revealed that the regression analysis presented in a previous publication by some of the same authors overestimates the depth limit of seagrasses growing in shallow, turbid conditions. Seagrasses colonizing turbid waters have higher light requirements than those growing in clearer waters, and there appears to be a shift in the relationship between seagrass depth limit and light attenuation at a K_z value of 0.27m^{-1} . The authors therefore recommend that separate equations to predict depth limits be used in waters with attenuation coefficients above and below the $K_z = 0.27\text{m}^{-1}$ threshold.

Source: Steward, J. S., and W. C. Green. 2007. Setting load limits for nutrients and suspended solids based upon seagrass depth-limit targets. *Estuaries and Coasts* 30(4): 657-670. ([View Abstract](#))

Source: Duarte, C. M., N. Marbà, D. Krause-Jensen, and M. Sánchez-Camacho. 2007. Testing the predictive power of seagrass depth limit models. *Estuaries and Coasts* 30(4): 652-656. ([View Abstract](#))

Listening for Fish in the Shallow Waters of Barataria Bay

Acoustics isn't just for concert halls: hydroacoustics has been widely used as a tool for surveying fish populations in freshwater and marine systems. A recent study in Barataria Bay, LA, used hydroacoustic techniques to examine fish biomass and size distribution in estuarine habitats, and in the process demonstrated the utility of their new approach in very shallow estuarine waters. Although there are many advantages to the use of noninvasive acoustic techniques, these methods are not always accurate, particularly in very shallow water, as the backscatter from non-fish items (e.g., entrained air bubbles) in the water column tends to interfere with the fish signals. While traditional hydroacoustic approaches use a downward looking (vertical) transducer, the LA survey demonstrated that horizontal beaming results in less interference in very shallow water (<2 m) allowing for better estimation of fish biomass and size distribution. The method used was groundtruthed by collecting fish in the surveyed areas with gill nets and trawls, and also by pointing the acoustic equipment at an empty enclosure to ensure that most of the area's scattering sources were actually fish.

The paper highlighted a study conducted in March 2003 which found higher fish biomass in low salinities than high salinities, and larger fish associated with oyster shell habitats than mud flats. Just as important, though, was the confirmation of the utility of this technique in very shallow waters. Those conducting similar surveys or monitoring may want to consider the method.

Source: Boswell, K. M., M. P. Wilson, and C. A. Wilson. 2007. Hydroacoustics as a tool for assessing fish biomass and size distribution associated with discrete shallow water estuarine habitats in Louisiana. *Estuaries and Coasts* 30(4): 607-617. ([View Abstract](#))

Seventeen Endangered Whooping Cranes Take to the Sky on Ultralight-guided Flight to Florida

October 13, 2007

Seventeen young whooping cranes this morning began their ultralight-led migration from central Wisconsin's Necedah National Wildlife Refuge (NWR). This is the seventh group of birds to take part in a landmark project led by the Whooping Crane Eastern Partnership (WCEP), an international coalition of public and private groups that is reintroducing this highly imperiled species in eastern North America, part of its historic range. There are now 52 whooping cranes in the wild in eastern North America thanks to WCEP's efforts. Four ultralight aircraft and the juvenile cranes took to the air for the first leg of the 1,250-mile journey to the birds' wintering habitat at [Chassahowitzka National Wildlife Refuge](#) along Florida's Gulf Coast.

"This will be our seventh migration along this route and although we have done it before, each season brings new challenges and the weather is always unpredictable," said Joe Duff, senior ultralight pilot and CEO of Operation Migration, the WCEP partner that leads the ultralight migration. "It has consistently taken us 22 to 23 flying days to cover the 1,250 miles from here to Florida. However, each year, it seems to take a longer period to get those 23 good weather mornings and last season we were on the road for 76 days. The team works very hard to prepare these birds for their first migration and they deserve a break. We are asking everyone to hope and pray for good weather this year and speed the birds to their new winter home."

In addition to the 17 birds being led south by ultralights, biologists from the International Crane Foundation and the U.S. Fish and Wildlife Service reared 10 whooping cranes at Necedah NWR. The birds will be released in the company of older cranes in hopes that the young whooping cranes learn the migration route, part of WCEP's "Direct Autumn Release" program, which supplements the successful ultralight migrations.

Whooping cranes that take part in the ultralight and Direct Autumn Release reintroductions are hatched at the U.S. Geological Survey's Patuxent Wildlife Research Center in Laurel, Md., and at the International Crane Foundation in Baraboo, Wis. Chicks are raised under a strict isolation protocol and to ensure the birds remain wild, handlers adhere to a no-talking rule and wear costumes designed to mask the human form.

Each year since 2001, ultralight pilots of project partner Operation Migration have conditioned and led juvenile whooping cranes to follow their aircraft on their first migration south. Each year's new class of young cranes is shipped from Patuxent Wildlife Research Center to Necedah NWR in June to begin their summer of "flight training" behind Operation Migration's ultralights in preparation for their migration south. Pilots lead the birds on gradually longer training flights over the refuge throughout the summer until the young cranes have sufficient stamina to follow the ultralights along the migration route.

Graduated classes of whooping cranes spend the summer in central Wisconsin, where they use areas on or near Necedah NWR, as well as various state and private lands. In the spring and fall, project staff from the International Crane Foundation and the U.S. Fish and Wildlife Service track and monitor the released cranes in an effort to learn as much as possible about their unassisted journeys and the habitat choices they make both along the way and on their summering ground.

WCEP asks anyone who encounters a whooping crane in the wild to please give them the respect and distance they need. Do not approach birds on foot within 200 yards; try to remain in your vehicle; and do not approach in a vehicle within 100 yards. Also, please remain concealed and do not speak loudly enough that the birds can hear you. Finally, do not trespass on private property in an attempt to view whooping cranes.

Whooping cranes were on the verge of extinction in the 1940s. Today, there are only about 350 of them in the wild. Aside from the birds reintroduced by WCEP, the only other migrating population of whooping cranes nests at the Wood Buffalo National Park in the Northwest Territories of Canada and winters at the Aransas National Wildlife Refuge on the Texas Gulf Coast. A non-migrating flock of approximately 50 birds lives year-round in the central Florida Kissimmee region.

Whooping cranes, named for their loud and penetrating unison calls, live and breed in wetland areas, where they feed on crabs, clams, frogs and aquatic plants. They are distinctive animals, standing five feet tall, with white bodies, black wing tips and red crowns on their heads.

Whooping Crane Eastern Partnership founding members are the International Crane Foundation; Operation Migration Inc.; Wisconsin Department of Natural Resources; U.S. Fish and Wildlife Service; the U.S. Geological Survey's Patuxent Wildlife Research Center and National Wildlife Health Center; the National Fish and Wildlife Foundation; the Natural Resources Foundation of Wisconsin; and the International Whooping Crane Recovery Team.

Many other flyway states, provinces, private individuals and conservation groups have joined forces with and support WCEP by donating resources, funding and personnel. More than 60 percent of the project's budget comes from private sources in the form of grants, public donations and corporate sponsors. For more information on the project, its partners and how you can help, visit the WCEP website at <http://www.bringbackthecranes.org>

For more information about the U.S. Fish and Wildlife Service, visit our home page at <http://www.fws.gov/southeast> or <http://www.fws.gov/>.

Grant Opportunities

NOAA Awards More than \$800,000 to American Rivers for Local Restoration Projects

October 12, 2007

NOAA has awarded [American Rivers](#), a national organization devoted to preserving and restoring rivers, an \$800,355 grant to renew its joint effort with NOAA to restore streams and rivers in the Northeast, Mid-Atlantic, Northwest, and California that benefit salmon, striped bass, American shad, and other species that migrate between fresh and salt water. "American Rivers has been at the forefront of creating strong community initiatives that restore coastal habitat for fish that spawn in freshwater and migrate to the ocean," said retired Navy Vice Adm. [Conrad C. Lautenbacher](#), Ph.D., NOAA administrator and under secretary of commerce for oceans and atmosphere.

The grant funds awarded to American Rivers will support stream barrier removal projects that help restore river ecosystems, enhance public safety and have clear and identifiable benefits to migratory fish populations in the four target regions. Local organizations may apply for part of this grant money by visiting <http://www.americanrivers.org/NOAAGrants>. These river restoration projects will also boost communities' natural resiliency to the effects of climate change and extreme weather events such as flooding and storms.

"Rivers are at the heart of our communities," said Rebecca R. Wodder, president of American Rivers. "Through our partnership with NOAA, we have been able to provide communities with the technical and financial assistance they need to turn rivers from afterthoughts to assets, and promote awareness and appreciation of healthy rivers as both an economic and environmental benefit."

For the past six years, the collaboration between NOAA and American Rivers has resulted in more than \$2 million being invested in almost 100 projects that create passage for migratory fish by removing dams or culverts, building rock ramps, fish ladders and other ways for fish to migrate upstream. NOAA's [Open Rivers Initiative](#) provides the funding for these projects. Through national advocacy, innovative solutions and its growing network of strategic partners, American Rivers protects and promote rivers as valuable community assets that are vital to health, safety and quality of life. Founded in 1973, American Rivers has more than 65,000 members and online supporters nationwide, with offices in Washington, DC and the Mid-Atlantic, Northeast, Midwest, Southeast, California, and Northwest regions. www.AmericanRivers.org.

Louisiana Launches Program to Rebuild Fisheries Infrastructure

BATON ROUGE, La. (October 26, 2007) - Yesterday the Louisiana Recovery Authority (LRA) and the Division of Administration's Office of Community Development (OCD) launched the Community Development Block Grant (CDBG) Fisheries Infrastructure Program. "This program is designed to support the recovery of coastal Louisiana's fisheries industry through direct investment in infrastructure projects that will improve the viability and long-term sustainability of the commercial and recreational fisheries," said John T. Landry, Chair of the LRA's Infrastructure Task Force. "I encourage all interested parties to apply."

The action plan amendment for the \$19 million Fisheries Infrastructure Program was approved yesterday by the Joint Legislative Committee on the Budget. It is estimated that Hurricanes Katrina and Rita destroyed more than \$528 million in direct fisheries infrastructure in Louisiana. The Fisheries Infrastructure Program, which was designed by the LRA with support from OCD, the Louisiana Department of Wildlife and Fisheries (LDWF), LSU Sea Grant, and Louisiana Economic Development (LED), will provide funding for projects that:

- Enhance and ensure continued access to the state's coastal waters for commercial and recreational fishing, eco-tourism and development of "working waterfronts;"
- Create/maintain employment in the commercial and recreational fishing industry;
- Preserve the commercial and recreational fishing culture of coastal Louisiana;
- Improve the economic efficiency of the fishing industry; and
- Create storm harbors that provide vessels with temporary refuge during future storm events.

"The recreational and commercial fisheries are an important part of Louisiana's economy and culture. This program will at least start the process of ensuring their long-term success." said OCD Executive Director Suzie Elkins.

The state issued a Request for Proposals from potential applicants, including local and parish governments, port commissions, park commissions, businesses, state agencies, private non-profit organizations, and others that can demonstrate a direct relationship to the fishery. Collaborative efforts and partnerships are encouraged. Proposals are due December 14, 2007. Late submissions will not be accepted. The RFP is available online at <http://lra.louisiana.gov/fisheries.html>.

The eligible parishes for this RFP are limited to: Calcasieu, Cameron, Iberia, Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Vermilion. The RFP is not designed to provide direct assistance to individual fishermen or businesses. Individuals seeking to obtain funds for a single business operation or to repair or buy a single boat, replace lost gear, or fix an individual dock should seek assistance through the Business Recovery Grant and Loan Program being implemented by LED. A second round of this program will commence in early 2008. Businesses interested in Round 2 of the BRGL program should sign up for BizWire at www.louisianafoward.com for program updates.

LDWF is also administering a \$41 million program to provide direct assistance for the fisheries industry. LDWF has held public meetings with the industry on its proposed plan and payments are currently planned for the spring of 2008. For questions or assistance to clarify which program best suits your needs, consult the Frequently Asked Questions document on the LRA website, <http://www.lra.louisiana.gov/fisheries.html>. Questions can also be e-mailed to Fisheries_Infrastructure@yahoo.com. Applicants can also call 225-342-1717 but are strongly encouraged to use the e-mail address provided.

Research Grant Program to Strengthen Wildlife Habitat Protection

The second annual Request for Proposals (RFPs) by the **Wildlife Habitat Policy Research Program** (WHPRP) will be issued on November 2, 2007 by the National Council for Science and the Environment (NCSE). The RFPs will be posted on the WHPRP website (<http://ncseonline.org/WHPRP>) and also distributed via email to the wildlife habitat conservation community (including this list). The program is supported by a four year grant by the Doris Duke Charitable Foundation (DDCF).

Application to the WHPRP is open to everyone and begins with composing Letters of Intent due to NCSE

by December 3, 2007 (see website for instructions). Three applicants for each grant will be invited to submit full proposals to be reviewed by an independent panel of experts, who will evaluate the technical quality and practical value of each submission, managed by the American Institute for Biological Sciences (AIBS).

Grants will be made only for the projects specifically defined in the RFPs and will cover a variety of research areas with the general goal of improving the basis for implementation of the statutory State Wildlife Action Plans. Reflecting the multidisciplinary nature of this conservation challenge, the program will support research in law, economics, social sciences, natural sciences, and public policy.

The RFPs research topics include:

- Analysis of the efficiency of land conservation spending for priority habitats
- Examining time sensitivity of priority habitats
- Evaluating hazard mitigation policy applied to coastal and floodplain habitats
- Developing a research framework for climate and wildlife habitat policy and management
- Investigating the impacts of bio-energy production on conservation of wildlife habitat
- Using State Wildlife Action Plan priorities to direct and shape policies as well as direct expenditures at multiple levels of government

In total, the WHPRP will offer about six RFPs ranging in size from \$100,000 to \$150,000 to be conducted over 12 or 18 month periods beginning in April of 2008. Please distribute this announcement to any colleague you feel may be interested. If you would like to be removed from the WHPRP listserv OR did not receive this announcement directly and would like to be added to the WHPRP listserv to ensure you receive our call for proposals, please contact Cheryl Horton at chorton@ncseonline.org or 202.207.0007.

Coastal Restoration and Enhancement Through Science and Technology Program (CREST) Request for Proposals

October 1, 2007

<http://www.gulfcrest.org/index.htm>

Background

The Coastal Restoration and Enhancement through Science and Technology program (CREST) was established in 2001 as an alliance of academic institutions within southern Louisiana and Mississippi. Current members of CREST are: Louisiana State University, Louisiana State University Agricultural Center, Louisiana Universities Marine Consortium, Loyola University, McNeese State University, Nicholls State University, Southeastern Louisiana University, Southern University at New Orleans, Tulane University, University of Louisiana at Lafayette, University of New Orleans, and the University of Southern Mississippi. The aim of the alliance is to create a cooperative program to help policymakers, planners and coastal resource managers use the latest science and best technologies to ensure sustainable and productive coastal habitats and communities.

Funding

Funding for the CREST program is administered by the Louisiana Universities Marine Consortium, LUMCON, using funds provided by the National Oceanic and Atmospheric Administration, Office of Response and Restoration. It is anticipated that approximately \$700,000 will be available.

Deadline for submission

The initial request is for pre-proposals only. Electronic versions of all pre-proposals submitted under this RFP must be sent to Doug Daigle, CREST Office, at dougdaigle@gmail.com so as to arrive by 1:00 pm on Monday, November 26, 2007. Hard copies are required at the end of the next week. Please note that

signatures are required on hard copies of pre-proposals. The mailing address is: Doug Daigle, CREST Office, 3153 Energy, Coast and Environment Building, Louisiana State University, Baton Rouge, LA 70803.

In addition, ten hard copies, including one full copy complete with signatures and nine anonymous copies, must be sent to the CREST Office by 5 pm on December 03, 2007.

Questions about this RFP

Specific questions concerning the program and scientific aspects of this RFP may be sent to Doug Daigle at the above address (email: dougdaigle@gmail.com; phone 225-578-0069). Details of the CREST program are available at: <http://www.gulfcrest.org>.

Training and Conferences

Workshop to Focus on Living Shorelines

The Mississippi-Alabama Sea Grant Consortium will host a Living Shorelines Workshop from 9 a.m. until 3 p.m. at the 5 Rivers Delta Resource Center in Spanish Fort, Ala., on Thursday, Nov. 29. The workshop will offer homeowners and marine contractors information about alternative structures for shoreline erosion protection. The current trend in Alabama and Mississippi is to build hard structures, such as seawalls and bulkheads, to protect coastal properties. Hard structures often are not the best options for the environment.

The workshop will include information about the concept of living shorelines, current research, permitting, funding opportunities and cost, design and maintenance of shoreline alternatives. The registration fee is \$15 and lunch is included. To register, contact Kay Bruening at (228) 818-8842 or kay.bruening@usm. For technical questions, contact Dr. Chris Boyd at the Mississippi State University Coastal Research and Extension Center at (228) 546-1025.

A charter bus will transport workshop participants from Biloxi to the workshop and back at no additional charge. The bus will depart the Mississippi Department of Marine Resources parking lot on Bayview Avenue in Biloxi at 7:15 a.m. Nov. 29. Seating is limited. To reserve a bus seat, contact Marian Dicas (228) 475-7047 or marian.dicas@dmr.ms.gov.

Geohazards Along Mustang and North Padre Islands

The Coastal Bend Bays & Estuaries Program (CBBEP), Harte Research Institute, and the Texas General Land Office have partnered on a habitat and living resources project that focuses on mapping the geohazards on Mustang and North Padre Islands as they may occur over the next 60 years. This joint effort is to identify areas that are not suited for future development and to show the changes that might occur along the barrier islands. The geohazards research project will be conducted by Dr. Jim Gibeaut from the Harte Research Institute who has done this type of research on Galveston Island.

Dr. Gibeaut will present "Geohazards Along Mustang and North Padre Islands" at a seminar on Tuesday, **November 13, 2007 at 6:00 p.m.** at the Harte Research Conference Center, Texas A&M University-

Corpus Christi. He will discuss the research process, how he will gather the data, what it will look like, and how the city and county can utilize this information in planning. or more information, contact Jace Tunnell at 361-885-6245 or jtunnell@cbbep.org

"Geohazards" are events caused by geological features and processes that present severe threats to humans, property and the natural and built environment. Hurricanes, flooding, subsidence, and sea level rise are the chief hazards facing Mustang and North Padre Islands.

Dr. Jim Gibeaut, Endowed Associate Research Professor at the Harte Research Institute will give a presentation on an upcoming research project that will develop a geohazards map of Mustang and North Padre Islands. The presentation will focus on the need to improve our basic understanding of the technical, financial and social risks posed by geohazards, and our ability to deal with them. The procedures for evaluating and constructing a map of geohazards will be presented, as well as the potential use of the geohazards map. Audience participation and feedback is encouraged.

Sea Grant to Hold Marine Research Planning Workshops

The Gulf of Mexico Sea Grant College Programs are planning a series of workshops in Gulf states to discuss priorities for a regional marine research plan. The Sea Grant programs are collaborating with federal, state, university, non-governmental and other groups to identify research priorities for the Gulf. A synthesis of more than 115 strategic plans and about 1,500 research survey responses already have contributed to the planning effort.

Workshops locations and dates include Spanish Fort, Ala., Jan. 15; Biloxi, Miss., Jan. 17; St. Petersburg, Fla., Feb. 19; Baton Rouge, La., Feb. 26; and Galveston, Texas, Feb. 28. The Mississippi-Alabama Sea Grant Consortium, Florida Sea Grant, Louisiana Sea Grant and Texas Sea Grant are leading the project.

Anyone who sponsors or conducts Gulf of Mexico coastal or marine research or uses Gulf research findings is invited to attend a workshop. Early registration is required. There is no registration fee. For more information or to register for a workshop, go to <http://masgc.org/gmrp/workshop.htm> or contact Steve Sempier at stephen.sempier@usm.edu.

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

