



GULF OF MEXICO NEWS

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May 2009



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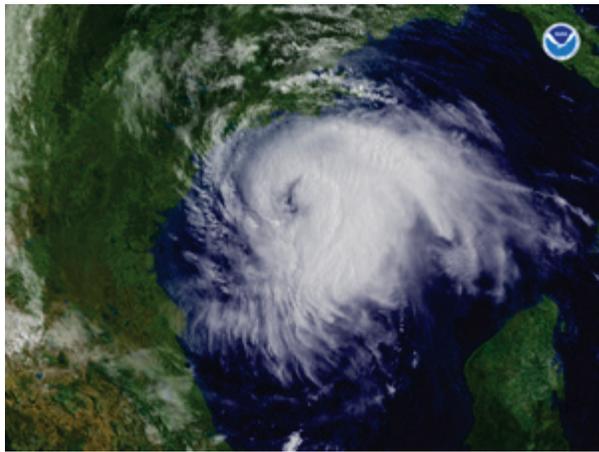
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NOAA Gulf of Mexico News

Four Hurricane Names Retired From List of Storms

May 1, 2009



Hurricane Ike bearing down on Texas.
[High resolution](#) (Credit: NOAA)

Three hurricane names in the Atlantic and one in the eastern North Pacific were retired from the official name rotation by the World Meteorological Organization's hurricane committee because of the deaths and damage they caused in 2008.

The names Gustav, Ike and Paloma in the Atlantic and Alma in the North Pacific will not be used again. Those names would have been used again in 2014. In their place will be Gonzalo, Isaias and Paulette in the Atlantic and Amanda in the North Pacific. The committee issues the list of potential names for tropical cyclones to be used every six years for both the Atlantic basin and eastern North Pacific basin. Details of the retired 2008 named storms are

shown below:

Gustav became a hurricane on Aug. 26, making landfall in Haiti as a Category 1 hurricane. Gustav then struck western Cuba as a Category 4 hurricane, making its final landfall near Cocodrie, La., on Sept. 1 as a Category 2 hurricane. Hurricane force winds, storm surge and heavy rain produced more than \$4 billion damage in Louisiana. Gustav killed 112 people, including 77 in Haiti.

Ike became a hurricane on Sept. 3 and rapidly intensified to a Category 4 hurricane northeast of the Leeward Islands. The storm struck the Turks and Caicos Islands and Great Inagua Island in the Southeastern Bahamas on Sept. 7, and the northeast coast of Cuba later that day. Ike made its final landfall at Galveston Island, Texas on Sept. 13 as a Category 2 hurricane. Ike killed more than 80 people across the Caribbean and Bahamas, and another 20 in Texas, Louisiana and Arkansas. Total estimated U.S. property damage from Ike is estimated at \$19.3 billion.

Paloma reached hurricane intensity on Nov. 7 and became the second strongest November Atlantic hurricane on record the next day, reaching Category 4. According to the Cuban government, more than 1,400 homes were destroyed on that island with \$300 million U.S. dollars in damage.

Alma was the first eastern North Pacific basin tropical cyclone to make landfall along the Pacific Coast of Central America since records began in 1949. The storm formed quickly on May 28 west-northwest of Cabo Blanco, Costa Rica. Alma was responsible for two direct deaths and the destruction of thousands of homes.

NOAA understands and predicts changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and conserves and manages our coastal and marine resources.

NOAA Report: Four Fish Stocks Declared Fully Rebuilt

Largest Number of Stocks Rebuilt Since 2001

May 19, 2009

NOAA's Fisheries Service reported to Congress today that four stocks — Atlantic bluefish, Gulf of Mexico king mackerel and two stocks of monkfish in the Atlantic — have been rebuilt to allow for continued sustainable fishing. This is the largest number of stocks to be declared rebuilt in a single year since the fisheries service declared the first stock successfully rebuilt in 2001.



Monkfish.
[High resolution](#) (Credit: NOAA)

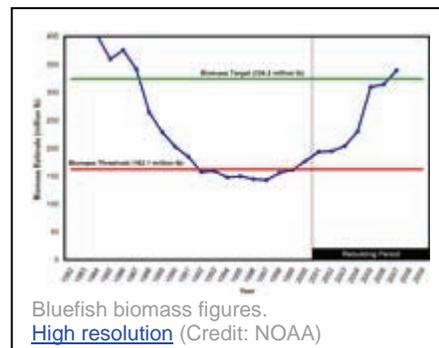
“Rebuilding these four stocks so they can support the highest sustainable harvest for future generations of Americans is a significant milestone,” said Jim Balsiger, acting NOAA assistant administrator for NOAA’s Fisheries Service. “And while we can claim success with these stocks and 10 others we’ve rebuilt since 2001, this year’s report also shows the major challenges we face to end overfishing on other domestic fish stocks in 2010, as we are ordered to do by law.”

Three stocks — thorny skate, Atlantic blacknose shark and Atlantic shortfin mako shark — were added this year to the list of those that are being fished unsustainably. A fourth stock, Gulf of

Mexico pink shrimp, was also listed as subject to overfishing but the stock assessment is being reviewed.

“NOAA is working with the eight regional fishery management councils around the nation to end overfishing through annual catch limits and accountability measures,” said Balsiger. “NOAA strongly supports establishing catch share programs that allocate the annual catch to participants in the fishery to give fishermen an economic incentive to conserve fish stocks for the long term.”

Today’s report to Congress, *2008 Status of U.S. Fisheries*, is the latest annual update on stocks that are subject to overfishing or stock populations that are overfished — too low to ensure a maximum sustainable yield. Ending overfishing allows the fish population to increase over time if conditions are favorable and the stock responds as predicted. In the report, NOAA scientists reviewed 199 stocks and stock complexes to determine if they were overfished — a population too low to ensure a maximum sustainable harvest — and found that 153 (77 percent) are not overfished, and 46 (23 percent) are overfished.



NOAA scientists also reviewed 251 stocks or stock complexes to see if they were currently subject to overfishing — currently being fished at a level that would threatened the stocks — and found only 41 (16 percent) are.

Under the [Magnuson-Stevens Fishery Conservation and Management Act](#), NOAA and the regional fishery management councils are required to end overfishing, and prevent future overfishing, through annual catch limits and accountability measures. Federal fishery management plans must establish annual catch limits and accountability measures by 2010 for stocks subject to overfishing, and by 2011 for all other stocks. The new report to Congress, *2008 Status of U.S. Fisheries*, which gives listings of stocks that are overfished or undergoing overfishing by region, is available [online](#).

NOAA Issues Atlantic Hurricane Season Outlook, Encourages Preparedness



Commerce Secretary Gary Locke.
[High resolution](#) (Credit NOAA)

NOAA forecasters say a near-normal Atlantic hurricane season is most likely this year. However, as with any season, the need to prepare for the possibility of a storm striking near you is essential.

“Today, more than 35 million Americans live in regions most threatened by Atlantic hurricanes,” Commerce Secretary Gary Locke said. “Timely and accurate warnings of severe weather help save lives and property. Public awareness and public preparedness are the best defenses against a hurricane.”

In its initial outlook for the 2009 Atlantic hurricane season, which runs from June through

November, [NOAA's National Weather Service Climate Prediction Center](#) calls for a 50 percent probability of a near-normal season, a 25 percent probability of an above-normal season and a 25 percent probability of a below-normal season. Global weather patterns are imposing a greater uncertainty in the 2009 hurricane season outlook than in recent years. Forecasters say there is a 70 percent chance of having nine to 14 named storms, of which four to seven could become hurricanes, including one to three major hurricanes (Category 3, 4 or 5).

“This outlook is a guide to the overall expected seasonal activity. However, the outlook is not just about the numbers, it’s also about taking action,” said Gerry Bell, Ph.D., lead seasonal hurricane forecaster at NOAA’s Climate Prediction Center. “Prepare for each and every season regardless of the seasonal outlook. Even a near- or below-normal season can produce landfalling hurricanes, and it only takes one landfalling storm to make it a bad season.”

Shaping this seasonal outlook is the possibility of competing climate factors. Supporting more activity this season are conditions associated with the ongoing high-activity era that began in 1995, which include enhanced rainfall over West Africa, warmer Atlantic waters and reduced wind shear. But activity could be reduced if El Nino develops in the equatorial Eastern Pacific this summer or if ocean temperatures in the eastern tropical Atlantic remain cooler than normal.

NOAA’s seasonal hurricane outlook does not project where and when any of these storms may hit. Landfall is dictated by weather patterns in place at the time the storm approaches. For each storm, [NOAA's National Hurricane Center](#) forecasts how these weather patterns affect the storm track, intensity and landfall potential.

“NOAA strives to produce the best possible forecasts to help emergency officials and residents better prepare for an approaching storm,” said Jane Lubchenco, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. “I’m pleased to have the Administration’s support for an additional \$13 million in next year’s budget request to continue the trend of improving hurricane track and intensity forecasts.”

Tropical systems acquire a name – the first for 2009 will be Ana – upon reaching tropical storm strength with sustained winds of at least 39 mph. Tropical storms become hurricanes when winds reach 74 mph, and become major hurricanes when winds increase to 111 mph. An average season has 11 named storms, including six hurricanes with two becoming major hurricanes. NOAA scientists will continue to monitor evolving conditions in the tropics and will issue an updated hurricane outlook in early August, just prior to what is historically the peak period for hurricane activity.

Habitat Planning Tool Aids in Conservation Efforts in Mobile Bay

On April 24, the Mobile Bay Coastal Habitats Coordinating Team, consisting of some 30 representatives from the Mobile Bay National Estuary Program and various other organizations in coastal Alabama, met to consider updated conservation, protection, and restoration priorities for the Mobile Bay area. The team used the Habitat Priority Planner tool, developed by NOAA's Coastal Services Center (CSC), to visualize and discuss conservation options for ten key coastal habitats. The group contributed local and ecological knowledge to generate prioritized habitat maps using the tool. This effort is a collaboration between CSC, National Marine Fisheries Service's Office of Habitat Conservation, and The Nature Conservancy to engage and equip communities with the tools and information needed to protect coastal and marine habitat. For more information, contact [Nancy Cofer-Shabica](#) or [Kara Meckley](#).

NOAA's Central and Gulf of Mexico Teams Identify Joint Priorities

The NOAA Central and Gulf of Mexico Regional Collaboration teams met on April 22 to discuss priority watershed issues that could benefit from collaboration between the two regions. The regions are connected by the Mississippi-Atchafalaya River Basin (MARB), which encompasses watersheds across 31 states to its outlet in the Gulf of Mexico. Each summer, the nutrient-rich waters of the MARB flow into the Gulf, creating the largest hypoxic zone in the United States. The MARB also once supported the rich delta wetlands of Louisiana, but in recent years hydromodifications and land use changes have greatly reduced sediment reaching those wetlands. The Office of Ocean and Coastal Resource Management staff presented collaborative work with the Gulf of Mexico Alliance to address eutrophication, water quality, and Gulf Hypoxia in cooperation with the Gulf States. The teams also discussed habitat restoration, climate change, and engagement opportunities. Participants identified several opportunities where NOAA resources and expertise could help address these nationally important issues and build a new framework for on-going collaboration between the teams. For more information contact Laurie.Rounds@noaa.gov.

NOAA Announces the 19th PORTS® at the Port of Lake Charles

The Port of Lake Charles, which encompasses 203 square miles in Calcasieu Parish, LA, and accommodates five million tons of cargo annually at its public facilities, has become the 19th location in the United States with an operational Physical Oceanographic Real-Time System (PORTS®). PORTS®, developed by NOAA, provides accurate, real-time oceanographic and meteorological data to mariners, significantly reducing the risk of vessel groundings while at the same time increasing the amount of cargo moved in and out of a port. On May 7, NOAA and the Lake Charles Harbor and Terminal District hosted a dedication ceremony to officially mark the system as operational. The ceremony included representatives from NOAA and the navigational community. PORTS® products and services contribute to the navigational safety and efficiency of transporting goods, services, and people through the 25,000 miles of navigable waters and the 3,700 marine terminals of the U.S. Marine Transportation System. For more information, contact [Darren Wright](#).

New Web Site Offers Access to Climate Change Resources

States and communities struggling with the question of how to prepare for climate change now have a resource to learn about its potential impacts, as well as the ways other coastal managers are planning for and adapting to those impacts. The NOAA Coastal Services Center (CSC) has released the [Coastal Climate Adaptation Web site](#), which focuses on adaptation-related resources, such as local and state plans, new policies, case studies, risk and vulnerability assessments, and decision-support tools. The Web site

provides one location for access to numerous resources for states and communities to address climate change impacts and develop their own plans. The site is also building a community of practice on coastal climate adaptation via a forum where users can suggest new resources, engage in dialogue on the issues, and submit comments and questions, providing a mechanism for climate and coastal management communities to engage on the topic. For more information, contact [Stephanie Fauver](#).

New Finding on Fish Exposed to Hypoxia Improves Understanding of Long-term Threat

National Centers for Coastal Ocean Science-supported researchers have identified the molecular mechanism that causes fish exposed to hypoxia to become reproductively impaired. Published online in *Environmental Science and Technology* on April 29, this study found Atlantic croaker exposed to hypoxia had significantly less of the hormone progesterin, which is critical to many animals' reproductive cycles. The loss of this hormone was found to reduce ovarian and testicular growth in adults, and subsequently led to a decrease in hatching success and survival of young. Identification of this molecular mechanism adds to the growing body of evidence on the long-term threat to living resource populations exposed to hypoxia. Researchers from the University of Texas-Austin, Marine Science Institute were funded to carry out this research. For more information, contact David Kidwell at David.Kidwell@noaa.gov.

Coastal Technology Progress Reports Now Online

The University of New Hampshire/NOAA Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) has posted its spring 2009 coastal environmental technology projects progress reports online. These projects are dedicated to developing tools that help coastal communities be more resilient in the face of increasing development and climate change. Their focus areas include improved tools for habitat restoration and water quality protection. For example, along the Chesapeake's Delmarva Peninsula, researchers are refining a system that directly injects poultry litter fertilizer into agricultural fields as a means to minimize nutrient pollution. In Louisiana, researchers are testing the effectiveness of sediment application as a restoration method for marsh ponds and other coastal habitats. These reports detail each project teams' progress in gathering data, meeting research objectives, reaching out to coastal management, and engaging the intended users of the tools they are developing. You can browse the reports by region at: http://ciceet.unh.edu/news/releases/spring09_reports/. For more information, contact dwright.trueblood@noaa.gov.

Grand Bay Green Building Gets Media Attention

The Coastal Resources Center, the new headquarters building at Grand Bay National Estuarine Research Reserve in Mississippi, is getting attention from local media even though it's still just an empty shell.

WLOX-TV in Biloxi this week featured the under-construction building, funded by NOAA, in a news story about the building's environmentally friendly features, including a cistern to catch rain water for flushing toilets and abundant use of natural light in the building. The story quotes reserve Manager David Ruple explaining that the building's green features not only reflect the reserve's mission to promote smart coastal management, but will also realize significant cost savings. NOAA is contributing about \$6.7 million of the building's cost. For more information, contact Matt.Chasse@noaa.gov.

OCRM Supports Mississippi's Coastal Development Strategies Conference

On May 12 and 13, Mississippi's Department of Marine Resources held its tenth annual Coastal Development Strategies (Smart Growth) Conference. The purpose of the annual event, funded in part by NOAA's Coastal Zone Management Program and the Gulf Coast Services Center, is to discuss how to build sustainable communities, spur economic development, and improve the quality of life in coastal Mississippi. NOAA Office of Ocean and Coastal Resource Management staff attended the conference along with approximately 400 other registrants that included elected officials, city and county staff (e.g., planners and zoning officials), developers, realtors, landowners, lawyers, environmentalists, and representatives from other federal and state agencies and private and corporate entities. The conference included discussions on the regional economy, green design, and coastal resiliency and concluded with a field trip to tour the new Grand Bay Coastal Resources Center, designed for Gold LEED Certification, at the Grand Bay National Estuarine Research Reserve. For more information, contact christa.rabenold@noaa.gov.

NOS Activates Storm QuickLook for 2009 Hurricane Season

In anticipation for the official June 1 start of hurricane season, NOS activated the [Storm QuickLook](#), which is NOAA's 24/7 operational tropical storm monitoring and analysis product, designed to provide a real-time view of a storm's impacts on coastal storm water levels, winds, and barometric levels. The QuickLook is used as decision-support tool by Federal, State, and local emergency managers to assist evacuation and road closing decisions and to "ground truth" National Weather Service storm surge models. The general public and the media also use the product to monitor and respond to storm conditions. Post-storm data reports are used in assessments of coastal flooding, for calibrating inundation models, and for proper design of coastal structures requiring maximum water-level elevations. For more information, contact [Lori Fenstermacher](#).

High Mercury Concentrations in Mobile Bay Algal Bloom Opens New Research Path

National Centers for Coastal Ocean Science researchers reported high concentrations of methylmercury in a dinoflagellate bloom in Mobile Bay at the third annual meeting of the Northern Gulf Institute (NGI), a NOAA Cooperative Institute, held May 30-31, 2009 in Mobile, Alabama. This surprising association highlights the need for enhanced research on the environmental behavior of mercury if water quality forecasting goals are to be met by the Gulf of Mexico Alliance. NGI partners reported on past accomplishments and planned for future research supporting Gulf of Mexico environmental priorities. A new round of competitive funding between NOAA and academic partners was ready to be announced, targeting the Institute's priority areas of ecosystem management, geospatial data information, climate change impacts on regional ecosystems, and coastal hazards and resiliency. A broad array of papers were presented, grouped into sessions on fish populations, sediments, monitoring, watershed management, modeling, harmful algal blooms and hazards, social sciences, education and outreach, data sources, hurricanes, metadata and ontology, and modeling fish. For more information, contact David.W.Evans@noaa.gov.

Other NOAA News

New Web Site, PSAs Promote Boating Safety and Weather Awareness **National Safe Boating Week Runs May 16-22**

May 19, 2009



[High resolution](#) (Credit NOAA)

NOAA's [National Weather Service](#) and the [National Safe Boating Council](#) today launched a new [Web site](#) to help boaters stay safe this spring and summer. The site includes seven public service announcements for use by broadcast media outlets. National Safe Boating Week runs through May 22.

“Warm weather means more boats on the water, but it also brings the possibility of severe storms,” said Jack Hayes, director of the National Weather Service. “Since weather can turn on a dime, boaters should monitor [NOAA Weather Radio All Hazards](#) before leaving the marina and continually while out on the water. Marine hazards can come in many forms, from thunderstorms to high winds, dangerous waves and swells to dense fog.”

“The National Safe Boating Council is proud to be part of this new partnership with NOAA,” notes Virgil Chambers, executive director of the National Safe Boating Council. “There are varying factors that help boaters stay safe — always wearing a life jacket and being aware of weather conditions are two very important aspects to safer boating.”

NOAA provides a suite of products to help boaters get up-to-date weather information. In addition to point-and-click forecasts that are available to all boaters, the Web site links to the latest marine forecasting innovations and to regional marine forecast Web portals — a one stop shop for local forecasts, observations and hazards. Visit the [safe boating](#) Web site to learn about weather terminology and new safety statistics on what causes the most boating fatalities and what actions to take for a safe 2009 boating season.

The National Safe Boating Council is a national 501(c)3 non-profit organization dedicated to the advancement and promotion of safer boating through education. The NSBC presently has a membership of over 350 U.S. and Canadian organizations, all with an interest in boating safety and education.

Study Published to Help Scientists and Managers Choose Appropriate Sensor

National Centers for Coastal Ocean Science researchers recently published a study comparing airborne LiDAR (light detection and ranging) and ship-based multibeam (MBES) SoNAR (Sound Navigation and Ranging) in order to allow scientists, resource managers, and surveyors to objectively assess the strengths and weakness of each sensor for mapping structurally complex shallow-water environments. Two important findings originate from this study: (1) LiDAR was found to be more time- and cost-efficient than MBES, although MBES collected data at higher spatial resolutions; (2) LiDAR was found to have the ability to identify similar seafloor features as MBES systems, although the LiDAR seafloor intensity algorithm needs to be improved before being used for habitat mapping. The study appears in the April 2009 issue of *Remote Sensing of Environment*. For more information contact Bryan.Costa@noaa.gov.

New Web Application to View Historic Current Data Now Available

Historic current survey data is now available on the [Tides and Currents Web site](#) providing NOAA customers with faster, friendlier, and easier access to historical current information. This is a significant improvement from the past when users had to request historic current data on a case-by-case basis. Now, data collected from more than 200 stations over the past 12 years can be easily retrieved and plotted allowing users to request data for a variety of depths and locations. Additional features include metadata information, enhanced plots, the ability to download the station listing in several formats, and the ability to download data sets in various units in either local time or Greenwich Mean Time. For more information, contact [Laura Rear](#).

NCCOS Publications Archived to Ensure Future Use by Coastal Managers

The National Centers for Coastal Ocean Science (NCCOS) Rice Library has begun archiving NCCOS's public domain and open access, full-text publications in a digital repository to promote wider accessibility; while ensuring that this research is available for use by coastal managers in the future. The Aquatic Commons located at <http://aquacommm.fcla.edu> is a thematic digital repository covering the natural marine, estuarine, brackish, and fresh water environments. The repository includes all aspects of the science, technology, management, and conservation of these environments, their organisms, and resources. The Aquatic Commons repository complements OceanDocs (<http://iodeweb1.vliz.be/odin>) which is supported by the Intergovernmental Oceanographic Commission specifically to collect, preserve, and facilitate access to all research output from members of their Ocean Data and Information Networks. A listing of the NCCOS documents is located at http://aquacommm.fcla.edu/view/issuing_agency/United_States_National_Ocean_Service.html.

In the Gulf States

ADEM Provides Coastal Beach Monitoring

The Alabama Department of Environmental Management will again provide water quality information for Alabama's Gulf Coast public beaches to assist people in making informed decisions about their recreational use of coastal waters this spring and summer. ADEM has initiated its enhanced monitoring efforts under the Coastal Beach Monitoring Program and the Department has resumed the weekly collection and analysis of water samples at 25 public beaches in Mobile and Baldwin counties.

ADEM scientists will conduct water quality sampling and testing to establish overall water quality data from each public beach location. The monitoring efforts will stretch from May through Labor Day with water samples being collected weekly, or more frequently if needed, at each of the public beach locations.

The selection of the public beaches that are being monitored under the program and the monitoring frequency was determined using a risk-based evaluation and ranking process that considers the amount of beach use, the level of risk, and any specific factors associated with each beach. In addition, the public beaches that are monitored display a color-coded sign advising swimmers of the most recent water quality conditions and providing information about potential health risks associated with swimming or other water activities at the beach. Water quality information is also available online at

www.adem.alabama.gov along with a map of the public beaches that are being monitored under the Coastal Beach Monitoring Program.

“The Department has dedicated a tremendous amount of resources to protect water quality along Alabama’s coastal areas,” said ADEM Director Trey Glenn. “I appreciate the efforts that our staff takes on behalf of the citizens of this state and I encourage all Alabamians to enjoy these coastal resources this summer.” Alabama has more than 50 miles of beaches along the Gulf of Mexico and approximately 65 miles of bay beaches. ADEM has partnered with the Alabama Department of Public Health and the Baldwin County Health Department to ensure the successful implementation of its Coastal Beach Monitoring Program.

ADEM Creating List of Supplemental Environmental Projects

The Alabama Department of Environmental Management is working to create a Supplemental Environmental Project (SEP) Bank that would contain a list of beneficial environmental projects that can be implemented at no cost to taxpayers. The creation of this SEP Bank will allow beneficial environmental projects to be reviewed by ADEM staff and then “deposited” into the SEP Bank for future implementation.

Once the SEP Bank has been established and projects have been deposited, an industry that is assessed a civil penalty for noncompliance with environmental regulations would be allowed to “withdraw” and implement one of the beneficial environmental projects, agreeing to pay the cost of implementation. Implementing environmental projects that have been deposited into the SEP Bank would benefit the environment and the local community while allowing the violating industry to offsetting a portion of the assessed civil penalty.

A SEP is defined as an environmentally beneficial project that a violator agrees to undertake as part of the settlement of an enforcement action. A SEP must be a voluntary project that the violator would not otherwise be legally required to perform. In addition, the implementation of any SEP is subject to ADEM approval.

A project must qualify to be deposited into the SEP Bank by illustrating that it would improve or protect public health and/or the environment. A SEP may include pollution prevention efforts, pollution reduction efforts, energy efficiency efforts, renewable energy efforts, environmental restoration/protection, as well as emergency planning and preparedness activities.

Due to the fact that a SEP is part of a settlement action, it must also meet certain legal requirements. There must be a relationship between the underlying violation and the human health or environmental benefits that will result from implementing the SEP. It must also improve, protect, or reduce risks to public health or the environment, and the SEP must be undertaken as part of a settlement of an enforcement action. The SEP must also be a project that the violator is not required to perform in the normal course of compliance or to remediate the effects of a violation.

According to ADEM Director Trey Glenn, “The development of a SEP Bank is an idea that we have been discussing for several years. We have looked at SEP Banks that have been created in other states and we have discussed this issue with EPA and environmental agencies in other states. We are confident that the creation of a SEP Bank in Alabama will result in the implementation of environmental projects at the local level that will benefit our natural resources and the health of our citizens.”

ADEM is currently collecting project ideas from interested parties for inclusion in the new SEP Bank. The SEP Bank will be compiled and maintained by the ADEM Office of General Counsel for consideration in future enforcement cases where the implementation of a SEP may be appropriate. In

instances where enforcement actions are warranted, industry representatives and ADEM staff may use the SEP Bank as a resource. Anyone interested in submitting a project idea for ADEM review and potential deposit into the SEP Bank should contact Jim Grassiano at (334) 271-3071.

A Thousand Dive In at Rookery Bay

About 1,000 people participated in the Rookery Bay National Estuarine Research Reserve's fifth annual Dive Into Oceans event, May 1-3, in Naples, Fla. Highlights of the outreach event included a presentation by photographer Clyde Butcher and filmmaker Elam Stolfus, the team that produced the Living Waters exhibit and film featuring Florida's Aquatic Preserves. Their presentation focused on the aesthetic, recreational and economic values of Aquatic Preserves and the work of CAMA within DEP.

The major attraction of the three-day event, as usual, was the 17,000-gallon pool sponsored by the Dive Equipment Manufacturers Association for introducing kids and adults to SCUBA. Visitors also could explore the reserve's environmental education center and talk with staff educators and scientists about the reserve's animals and habitats.

The event was co-sponsored by the Florida Department of Environmental Protection's Coastal and Aquatic Managed Areas, Friends of Rookery Bay, Oceans for Youth Foundation, Florida Sea Grant, Florida Fish & Wildlife Conservation Commission, DEMA, and several local Naples civic groups. For more information contact Tina.Oconnell@noaa.gov.

Governor Crist Recognizes National Beach Safety Week

~Floridians and visitors urged to practice safety in marine environments~

TALLAHASSEE – Highlighting May 18-25, 2008, as National Beach Safety Week, Governor Charlie Crist recently signed a proclamation urging all beachgoers to enjoy Florida's coastal resources while taking appropriate measures to protect themselves and their families from the dangers that can be found in aquatic environments.

“Florida's waters are a wonderful source of recreation and enjoyment for residents and visitors, but it's important to always use caution and be mindful of potential hazards,” said Florida Department of Environmental Protection (DEP) Secretary Michael W. Sole. “Beach safety is an important priority of the state, and by providing safety tools like beach warning flags, we are able to reduce the number of accidents while ensuring a pleasant beach experience.”



Florida has more than 1,200 miles of coastline, including more than 800 miles of sandy beaches. National Beach Safety Week, promoted through a partnership between DEP, the Florida Beach Patrol Chiefs Association and the Southeast and South Atlantic Regions of the United States Lifesaving Association, reminds visitors to use caution when enjoying the state's aquatic environment. You can enjoy a pleasant, and still safe, beach experience by:

- Refraining from alcohol consumption before swimming.
- Swimming near a lifeguard.
- Swimming in groups.
- Supervising children.
- Observing beach safety warnings and flags before entering the water.

In 2002, DEP's Florida Coastal Management Program developed a uniform warning and safety flag system for use by Florida's beachfront communities. DEP consulted with the United States Lifesaving Association, the International Life Saving Federation, state agencies and local governments to design a warning flag system that is simple to use and easy to interpret, based on the flag design and color coding proposed by the International Life Saving Federation. To encourage use of the system, the warning flags and interpretive signs to explain the flag's meanings are provided upon request free of charge annually to beachfront communities. Flag warnings and colors are:

- Red over Red (two flags flying): Water closed to the public.
- Red: High hazard, high surf and/or strong currents.
- Yellow: Medium hazard, moderate surf and/or currents.
- Green: Low hazard, calm conditions, exercise caution.
- Purple: Dangerous marine life.

For more information on beach safety and Florida's Coastal Management Program, visit www.dep.state.fl.us/cmp. To see the Governor's proclamation, visit http://www.dep.state.fl.us/secretary/news/2009/05/files/beach_safety.pdf.

Habitat Restoration Project Underway at Rookery Bay Reserve

-- Shell Island Road project aims to restore tidal flushing in mangrove forest --

NAPLES – The Florida Department of Environmental Protection's (DEP) Rookery Bay National Estuarine Research Reserve is partnering with Collier County and the U.S. Fish and Wildlife Service to complete a hydrologic project on Shell Island Road in order to restore tidal flushing in the Research Reserve's mangrove forest. Shell Island Road is located about 2.5 miles south of U.S. 41 off Collier Boulevard and was built in the 1960's. While being built, the dredge-and-fill construction method disrupted the natural tidal exchange between Henderson Creek and the mangrove forest, degrading surrounding habitat and depriving plant communities of necessary nutrients.

The Research Reserve was awarded \$500,000 in grant funds from the U.S. Fish and Wildlife Service National Coastal Wetlands Conservation Program to complete the project and restore water quality on both sides of the road reconnecting critical estuarine waters and significantly improving habitat value for all wildlife in the area. Contractors under the supervision of Collier County have been hired to install 13 culverts under the road and fill in the existing roadside ditch to restore tidal exchange and freshwater flow.

"We anticipate this project will significantly improve habitat for both aquatic and terrestrial wildlife in adjacent areas," said the reserve's assistant manager Randy McCormick. Work is now underway with the scheduled date for completion being June 30, 2009.

Travel on Shell Island Road during this time period may be affected and those traveling on the road should be prepared for delays. Portions of this dead-end road may briefly be reduced down to one lane with a flagman, but any public delays will be minimal.

Rookery Bay Reserve was established in 1978 as a partnership between the state of Florida and the National Oceanic and Atmospheric Administration. The reserve is one of 27 research reserves operating across the nation. DEP's Office of Coastal and Aquatic Managed Areas (CAMA) manages Rookery Bay Reserve along with aquatic preserves, two other National Estuarine Research Reserves and the Florida Keys National Marine Sanctuary. CAMA's programs and activities are designed to help Floridians better understand and conserve the state's resources through research, education and conservation.

For more information about the reserve, please visit www.rookerybay.org.

'Vandenberg' Artificial Reef Successfully Deployed

May 27, 2009

The highly anticipated placement of the world's second-largest ex-military ship as an artificial diving and fishing reef, near Key West, is finally a reality. The Florida Fish and Wildlife Conservation Commission (FWC) worked closely with its many project partners to successfully deploy the decommissioned military ship "Gen. Hoyt S. Vandenberg" at 10:24 a.m., May 27.

Thousands of delighted onlookers watched as 44 carefully placed explosive charges were detonated to blast holes in the hull of the 523-foot vessel. It took just one minute and 54 seconds for the "Vandenberg" to slip below the water's surface and settle right-side-up, on the sea bottom, at a site about 7 miles south-southeast of Key West, in 140 feet of water, in the Florida Keys National Marine Sanctuary.

The FWC's Division of Law Enforcement took the lead in working with the Navy, Coast Guard, Key West Police and Monroe County Sheriff's Office, as well as local fire and rescue officers on offshore security operations throughout the entire sinking event. FWC divers are working with a team of other underwater specialists to survey the ship to ensure it is safe for public diving. Other divers are retrieving more than 20 cameras that were mounted on the ship to capture images of the "Vandenberg" as it sank, and another team, led by Keys Sanctuary staff, is securing mooring buoys near the ship. Officials indicated the ship may be ready for public diving by Friday morning.

According to the FWC, the "Vandenberg" will provide recreational diving, ecotourism and fishing enhancements to the Florida Keys and provide a needed lift to the economy of Key West and its neighboring communities. The colorful vessel was commissioned in 1943 as a World War II troop transport ship, and it later became a missile range instrument ship in the 1960s, defending against missile attacks and tracking rocket and early space shuttle launches.

The ship was placed in the Florida Keys National Marine Sanctuary near Key West to help divert fishing and diving pressure away from natural reefs near the ship. The FWC estimates the vessel's minimum 100-year lifespan will contribute stable, long-term habitat for scores of marine fish species and provide exceptional diving and fishing opportunities for Florida residents and visitors from around the world. According to National Oceanic and Atmospheric Administration projections, the "Vandenberg" artificial reef will result in an annual increase of about \$7.5 million in expenditures in the Monroe County economy, and will create about 195 full- and part-time jobs.

The FWC played a major role in providing funding and technical assistance for the "Vandenberg" project since early 2001, including helping the City of Key West secure permits for the ship and performing numerous inspections of the vessel while it was being readied for its safe deployment.

The FWC served as the project liaison among the City of Key West (which owns the ship), Reefmakers, Inc. (the prime contractor for the project), the Florida Keys National Marine Sanctuary, the U.S. Maritime Administration (MARAD), the U.S. Army Corps of Engineers, the Florida Department of Environmental Protection and the U.S. Environmental Protection Agency. The FWC managed nearly \$2.5 million in funding for the "Vandenberg" preparation, cleanup and monitoring out of total project costs of about \$8.5 million. FWC funding partners included the Governor's Office of Tourism, Trade and Economic Development; MARAD; City of Key West; Monroe County; and Keys Tourist Development Council.

(Click on photo for larger image.)



Explosive charges detonate, triggering the Vandenberg's descent to the bottom.

(FWC photo by Tim Donovan)

The Louisiana DNR and The Nature Conservancy of Louisiana Sign Agreement on Atchafalaya Basin Program

The Louisiana Department of Natural Resources and The Nature Conservancy of Louisiana on Friday signed a Memorandum of Understanding to collaborate on issues and projects affecting the preservation of the Atchafalaya Basin area and other parts of the state.

State Department of Natural Resources Secretary Scott Angelle said the agreement represents an example of the commitment to ensure that the efforts to protect the Basin area make use of the best available scientific resources.

“It is appropriate that government draw upon the expertise and information of public-minded private groups such as The Nature Conservancy in developing the solid strategies for preservation of the Basin,” Angelle said. “This agreement goes toward two of our primary goals in the Basin – a science-based approach and transparency in the planning and project process.”

DNR Assistant Secretary Louis Buatt and Atchafalaya Basin Program Acting Director Stephen Chustz were on hand to represent DNR, while The Nature Conservancy Executive Director Keith Ouchley represented his group at the signing.

The Atchafalaya Basin Program is in the first year of a new planning process, involving development of an annual plan including water projects vetted by a team of scientists – the Technical Advisory Group – a public hearing process, approval by the state Coastal Protection and Restoration Authority and approval by the state Legislature. The first annual plan developed from the process the Legislature approved in 2008 is currently working its way through the state House and Senate.

The agreement between DNR and The Nature Conservancy includes the entire state, but specifically notes the sharing of information to help develop plans for preserving Basin habitats, providing information to the public on best practices for conservation and enhancement in the Basin, and DNR’s commitment to give consideration to The Nature Conservancy’s suggestions for project concepts, planning and execution. “The Nature Conservancy is proud to partner with the Louisiana Department of Natural Resources on important conservation issues in the Atchafalaya Basin and across the state,” Ouchley said. “Without great partners like DNR we could not be successful in our mission. The added value that is gained by working more closely together will benefit the resources that we both recognize as important to the state and its citizens.

Related links:

<http://www.2theadvocate.com/news/45193307.html>

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State of Louisiana Announces \$30 Million Assistance Program to Aid Fishermen Affected by Hurricanes Gustav and Ike

Today the Louisiana Department of Wildlife and Fisheries (LDWF) launched a \$30 million reimbursement program, designed in collaboration with the Louisiana Recovery Authority (LRA), to assist the commercial fishing industry that suffered damages from hurricanes Gustav and Ike this past year.

“Today we launch the first fisheries specific program dedicated to those who were affected by the twin storms of 2008,” said LDWF Secretary Robert Barham. “We have developed a program, along-side our state partners, to ensure these funds are invested back into the fishing industry that is so vital to our state and our nation.”

This week LDWF sent out more than 4,000 packets to commercial fishermen and wholesale/retail seafood dealers who were determined prequalified for this program based on the following criteria:

- Reported sales or purchases on LDWF trip tickets during Sept. 1, 2005 through Aug. 31, 2008 (and received by LDWF by Nov. 30, 2008) for crab, oyster, shrimp, saltwater finfish and menhaden
- Held a 2008 resident Louisiana commercial fishing or wholesale/retail dealer license.

This program will provide reimbursement to Louisiana resident commercial fishermen and wholesale/retail seafood dealers who provide acceptable receipts/invoices documenting expenses of eligible items. Examples of acceptable recovery related expenses are: 1) repairs to boats, motors and engines; 2) Drydocking expenses; 3) Rental of freezer trucks and/or generators; and 4) Cost of Insurance premiums.

“Louisiana’s fishing industry produces nearly one-quarter of our nation’s seafood, making it vital to the success of Louisiana’s economy. In the past three and a half years, our commercial fishermen and seafood dealers have suffered great loss at the hands of four hurricanes, and these much-needed funds are an investment in helping them recover from such devastation,” said Paul Rainwater, executive director of the LRA.

The packets mailed out this week are in envelopes labeled, “HURRICANES GUSTAV & IKE,” and should be opened immediately. After completely filling out the forms, participants must return the forms in the business-reply envelope provided no later than Sept. 30, 2009.

Funding for this program comes from a \$40 million appropriation by the U.S. Congress and allocated to Louisiana for fisheries disaster assistance to the commercial fishing industry under sections 308(b) and 308(d) of the Interjurisdictional Fisheries Act (16 U.S.C. 4107) (NOAA Grant Number NA09NMF4520024).

Any questions concerning eligibility or requests for information should be directed to the South Central Planning and Development Commission (SCPDC) by calling 1-800-630-3791 (toll-free) or 985-655-1051 (local) or mailing SCPDC at P.O. Box 1240, Gray, LA 70359-9902 or visiting the SCPDC Web site at www.scpdc.org/fisheriesassistance. LDWF will host a series of seven workshops in coastal communities beginning June 18 to present information about the program. SCPDC staff will also be on site to help in filling out the application. It is estimated that the total infrastructure and economic loss from hurricanes Katrina and Rita in 2005 and hurricanes Gustav and Ike in 2008 totaled over \$750 million. LDWF was charged with the coordination and distribution of federal recovery funds. *For more information, contact Laura Deslatte at ldeslatte@wlf.la.gov or 225-610-236.*

Interior Department Awards \$6 Million Grant for East Grand Terre Island Restoration

NEW ORLEANS – The Department of the Interior’s Minerals Management Service (MMS) has awarded a \$6 million grant to Plaquemines Parish in Louisiana through the Coastal Impact Assistance Program (CIAP) for the East Grand Terre Island Restoration Project. These funds will be combined with an earlier grant of \$21 million awarded through the CIAP to the Louisiana Department of Natural Resources for barrier island restoration at East Grand Terre.

Funding from the grant will be used to prevent the breaching of East Grand Terre Island by building 161 acres of dune and 456 acres of marsh. This project will implement restoration measures designed and engineered to overcome the loss of habitats, both on-shore and on marine barrier islands, while preventing island breakup caused by tropical storms, high shoreline erosion rates, and lack of sand and sediment.

“The Interior Department’s investment in worthwhile projects like this demonstrates what important work can be accomplished through partnerships with coastal States and parishes,” said Interior Secretary Ken Salazar. “This is another big step in restoring Louisiana’s barrier islands and Interior is proud to be a part of those efforts.”

East Grand Terre Island is located approximately 45 miles south of New Orleans in lower Plaquemines parish, northeast of Grand Isle. The project area is in the lower Barataria Basin, part of the vital barrier shoreline complex. Through this project, approximately 3.3 million cubic yards of material will be dredged from any of seven nearby permitted borrow sites. About 1.5 million cubic yards of sand will be used to create the beach and dune habitats, and 1.8 cubic yards of silty material will be used to construct the marsh habitat on the island.

The CIAP was created by the Energy Policy Act of 2005. Through the program, MMS will provide \$250 million in grants annually, from 2007-2010, to six eligible OCS oil and gas producing states – Louisiana, Alabama, Alaska, California, Mississippi, and Texas. The funding to Louisiana included \$127.5 million for each of the fiscal years 2007 and 2008. Nineteen Coastal Political Subdivisions (parishes) share in the funding of projects outlined in the state’s approved plan.

Louisiana DEQ’s Updated Disaster Debris Management Plan Available

BATON ROUGE – With hurricane season upon us, the Department of Environmental Quality is reminding local governments and communities of the importance of a debris management plan. In order to make debris management more efficient, the department has updated its debris management plan and made the debris site application form available at www.deq.louisiana.gov.

In keeping with the Governor’s theme of “*Get a Game Plan*” we at DEQ are working with local communities to ensure they have a debris management plan in place before an emergency arises, said DEQ Secretary Harold Leggett. We saw the benefits of preparedness during Hurricanes Ike and Gustav, but are striving to make cleanup more efficient and easier for local governments.

DEQ is urging community leaders to be prepared ahead of time. A debris management plan can help reduce cleanup costs, increase recovery speed, minimize the impact upon public health and the environment, and make the federal reimbursement process much easier.

The plan has several key themes, such as the importance of waste reduction and recycling, approving and activating pre-approved sites and how to proceed with debris management in a way that facilitates federal reimbursement.

The goal of the plan is to streamline and expedite disaster cleanup, while still adhering to the protection of human health and the environment. While it has been amended several times since its inception after Hurricane Katrina in 2005, the plan will continue to be reviewed and updated as new challenges arise.

Alexandra Cousteau Explores the Mississippi River



Alexandra Cousteau interviews Dr. Gene Turner

Photo courtesy of Blue Legacy International

Great-granddaughter of the famous ocean explorer Jacques Cousteau, Alexandra Cousteau, journeyed down the Mississippi River to look at its influence on the area of low oxygen in the Gulf of Mexico (also known as hypoxia, or ‘The Dead Zone’).

This documentary is the fourth of six in her project “Expedition: Blue Planet—Exploring the Life Support System of Our World.” Ms. Cousteau visited the Midwest, the Jean Lafitte National Historical Park and Reserve, the Mississippi River in Baton Rouge, and the blessing of the fleet in Golden Meadow.

Alongside the Mississippi River, Ms. Cousteau interviewed Dr. Nancy Rabalais, Executive Director of LUMCON, and Dr. Gene Turner, Professor of Oceanography and Coastal Sciences, Louisiana State University. Besides the scientific basis for the linkages between the Mississippi River and Gulf of Mexico hypoxia, Ms. Cousteau continued on with aspects of conservation, societal changes, and the importance of water as a vital and imperiled renewable resource. The results of her journey will be published in a book, and the videos will be readily available on the Internet. Videos of the Interview can be viewed online here: <http://www.alexandracousteau.org/videos-usa>.

Research Awards for Coastal Restoration Science

Coastal Restoration and Enhancement through Science and Technology (CREST) is a program for academic research related to meeting the science background for restoration in coastal Louisiana and Mississippi. The program is funded by the National Oceanic and Atmospheric Administration through its Office of Response and Restoration. LUMCON administers the CREST program, which just awarded research grants in its 2009 competition. The awards are: Quantifying Ecosystem Services in Coastal Louisiana: A Pilot Study of the Economic Benefits of Wave and Surge Attenuation (University of New Orleans) Development of New Geospatial Technology/Traditional Ecological Knowledge-Derived Information Tools for Enhancement of Current Coastal Restoration Decision Support Processes (University of New Orleans) The Effect of Diverted Mississippi River Nitrate on Marsh Soil Resilience (Louisiana State University) Evaluating Prescribed Fire Effects in Hurricane-Influenced Coastal Habitats along the Northern Gulf of Mexico (Louisiana State University) Long-term Field Experiments in Freshwater Coastal Marshes (Louisiana State University) Modeling Land Subsidence in Coastal Louisiana Due to the Growth of the Mississippi Delta (Tulane University) The need for the program is verified with a record number of pre-proposals (43) received for this year’s competition, and 24 selected for full proposals. Yet, funding is endangered for FY2010. Letters have been provided for submission to NOAA from the Mississippi and Louisiana Legislatures for support of the critical role this research program plays in coastal restoration. For more information concerning the program and the research completed and underway, visit <http://www.gulfcrest.org>.

Mississippi DMR Wins National Communications Award

BILOXI, Miss. – The Mississippi Department of Marine Resources (DMR) Office of Coastal Management and Planning received a 2009 Blue Pencil Award at the annual National Association of Government Communicators (NAGC) Communications School held recently in Orlando, Fla. DMR Staff Officer Susan Lepoma Perkins, APR, won an Award of Excellence for the *Mississippi Gulf Coast on the Move... Coastal Development Strategies (Smart Growth) Conference* press kit.

The NAGC Blue Pencil & Gold Screen Awards Competition salutes superior communications efforts of government agencies and recognizes the people that create them. Blue Pencil Award categories are designed for writing, editing, photography and published products, such as pamphlets, books, newsletters, and other related materials.

More than 575 entries in 49 categories were received and judged by a prestigious panel of experts and merited a total of 169 first place, second place, and awards of excellence. Sixty-nine federal, state and local government agencies submitted entries. This was the first year international entries were accepted. The NAGC is a national not-for-profit professional network of federal, state and local government employees who disseminate information within and outside government. Its members are editors, writers, graphic artists, video professionals, broadcasters, photographers, information specialists and agency spokespersons.

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.ms.gov.

MMS Approves \$276,000 Grant for Marine Education Center

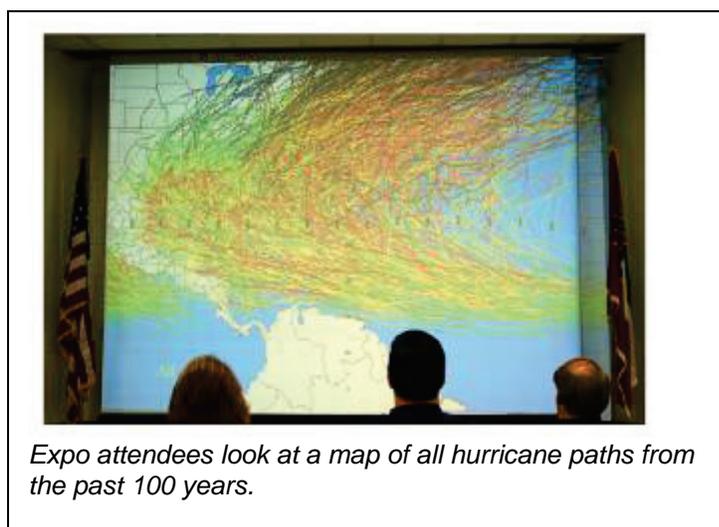
NEW ORLEANS – The Minerals Management Service (MMS) has awarded a \$276,000 grant through the Coastal Impact Assistance Program (CIAP) to Mississippi's Department of Marine Resources to build a new Marine Education Center in Ocean Springs, Mississippi. This is the first CIAP grant to be awarded since the state's overall plan was approved in February 2009.

The CIAP was created by the Energy Policy Act of 2005. Through the program, MMS will provide \$250 million in grants annually, from 2007-2010, to six eligible Outer Continental Shelf oil and gas producing states – Mississippi, Louisiana, Alabama, Alaska, California and Texas. The funding to Mississippi included \$30.9 million for each of the fiscal years 2007 and 2008 and \$23.8 million for each of the fiscal years 2009 and 2010. Three Coastal Political Subdivisions (counties) are eligible to share the funding of projects outlined in the state's approved plan.

Funding from the grant will allow the proposed center to be constructed at the 224-acre Cedar Point Campus of the University of Southern Mississippi's Gulf Coast Research Center complex. Cedar Point is a slightly elevated cape infrastructure within Ocean Springs, which is located on the eastern gulf coast of Mississippi in Jackson County, about two miles east of Biloxi. "MMS is proud to partner with Mississippi in its coastal conservation, education, and wildlife protection efforts," said MMS acting Director Walter Cruickshank. "MMS is committed through the Coastal Impact Assistance Program to support our state partners with important public projects like this Marine Education Center in Ocean Springs."

The new education center is expected to have a strong impact on researchers, students, educators, and the visiting general public. Among its many planned functions, the center will enable implementation of hands-on educational activities enhancing the relevance of coastal research; contribute to the restoration, conservation, and protection of fish and wildlife resources in the Gulf of Mexico region; and promote awareness of marine life and aquatic habitats to the public. The center will also feature exhibits of living and static marine and coastal wildlife using the latest graphics technologies and environmental demonstrations within the facility's structured educational programs. The new Marine Education Center will also initiate a structured feedback assessment program to determine the impact of the facility and its exhibits, programs, and activities on selected visitors and program participants; and to educate them on conservation practices and coastal restoration issues.

Hurricane Expo Kicks Off Storm Season



Expo attendees look at a map of all hurricane paths from the past 100 years.

Ocean Springs, MS – Experts recently were on hand at the Community Hurricane Preparedness Expo to share information about storm surge models, crisis management, ham radio operating, church programs, weather data collection and more at The University of Southern Mississippi Gulf Coast Research Lab.

Keynote speakers for the event included Carolyn Nelson, area coordinator for Mississippi Emergency Management Agency; Maj. Chad Gibson of the Hurricane Hunters; and Kenneth Graham, meteorologist in charge of the National Weather Service of Slidell, La.

Graham told expo attendees that a hurricane can shift from its projected path and turn an expected small storm surge into a disaster. Storm surge can vary by as much as 20 feet or more over a short distance. He used computerized models to demonstrate how dramatically storm impacts change depending on where the storm comes ashore and encouraged people to be prepared for whatever comes their way.

Many organizations represented at the event offered information about volunteering with groups, such as the American Red Cross or Community Emergency Response Teams (CERT). Others offered information to help residents prepare for the hurricane season. Organized by the City of Ocean Springs, the May 30 event was funded through the Mississippi-Alabama Sea Grant Consortium and the National Oceanic and Atmospheric Administration's Coastal Storms Program. Chevron Products Company of Pascagoula, Miss., also made a donation to the event. For more photos from the expo, please [look here](#).

StormSmart Coasts Network Launches Pilot Web Site for Mississippi

In mid-May, Mississippi joined Massachusetts as a pilot state for the new StormSmart Coasts Network. The StormSmart Coasts Network, a partnership between the NOAA Coastal Storms Program, NOAA RiskWise Partnership, the Gulf of Mexico Alliance Coastal Community Resilience Team, and others, is a Web resource dedicated to helping coastal decision makers address the challenges of storms, flooding, sea level rise, and climate change. This network of state and local sites serves as a definitive place to find and share the best resilience-related resources and tools available. Sites for the remaining states of the

Gulf of Mexico and New England will follow this summer. The StormSmart Coasts sites include six main sections: Before the Storm, During the Storm, After the Storm, Funding, Your Community, and an interactive forum. To view StormSmart Coasts: <http://stormsmartcoasts.org/>.

DMR Reminds Fishermen to Recycle Fishing Line

BILOXI, Miss. – The Mississippi Department of Marine Resources (DMR) wants to remind fishermen along the Coast to drop their used fishing line in the designated recycling tubes located at piers and boat launches throughout the three coastal counties. Only monofilament fishing line should be placed in the tubes. Bait, hooks, nets and all other trash should be placed in a proper garbage receptacle.

DMR, along with partners National Oceanic and Atmospheric Administration, Coastal Conservation Association and the Mississippi Wildlife Federation, launched the state's first large-scale monofilament, or fishing line, recycling program in May 2008.

“The first year of the program was very successful, with more than 100 pounds of fishing line collected,” says Wesley Devers, DMR marine fisheries scientist.

Fishing line is consistently in the top 10 of debris found during the Mississippi Coastal Cleanup, which is now held each year on the third Saturday in October. Monofilament is non-biodegradable and can last about 600 years in the marine environment.

“Monofilament poses an entanglement hazard for all marine life,” says Devers. “Plus it causes extensive damage to boat motors and water intakes on marine vessels and industrial facilities.” The monofilament recycling tubes, made from 6-inch PVC piping, are posted along with signs encouraging fishermen to “Help Keep Our Gulf Clean” by dropping their used fishing line into the tubes. There are 45 locations across the Mississippi Coast.

The used fishing line is collected by DMR and partnering organizations and then shipped to Pure Fishing America, the parent company of Berkley fishing line. Foreign debris is removed from the line and then the line is put through a processing machine. The line is ground into tiny pieces, melted down and then remolded into various products, such as spools for fishing line, tackle boxes and freshwater fish habitats. The recycled monofilament is not used to make new fishing line.

Monofilament is a high-density plastic and requires a special recycling process. The fishing line must be placed into the specially designated receptacles. Even fishing line thrown in the garbage can find its way into and along the environment or marine waters, either by blowing out of the garbage can or landfill, or by being taken out by birds or animals.



Patterson: Coastal Lawmakers Must Act Now to Help the Coast

Land Commissioner rallies support behind restoring import oil tax to fund coastal projects

AUSTIN — In the final, frenzied days of the 81st Legislative Session, Texas Land Commissioner Jerry Patterson is working to rally support to save funding for coastal protection projects worth millions. During the session, Patterson met one-on-one with lawmakers working to convince them to restore a 2-cent fee on each barrel of oil imported to Texas. This import fee was dropped in 2005.

“Texas needs a dedicated source of funding for coastal protection,” Patterson said. “Restoring this fee of just 2-cents for every 42-gallon barrel of imported oil would provide the funding we sorely need and have never had.”

Patterson said restoring the 2-cent fee is just too important to be lost in the final crush of issues that crowd the end of each session. Since 2000, the Texas General Land Office’s Coastal Erosion Planning and Response Act (CEPRA) program has funded more than 200 projects with \$62 million dollars. But the impact of that \$62 million in state money was more than doubled by leveraging an additional \$62 million in local and federal money. Still, the needs on the Texas coast are greater than CEPRA’s budget. In the last grant cycle, the Texas General Land Office received more than \$136 million in grant requests for only \$17 million in available funding.

A fully dedicated and funded CEPRA program will enable the Texas General Land Office to better leverage federal dollars by more accurately planning for future expenditures. Just as Texas parks deserve a dedicated revenue stream, so do our beaches and the most sensitive ecological areas of our state, our bays and estuaries, Patterson said.

“For decades, we’ve left hundreds of millions of dollars in federal money on the table because we just didn’t have the local match,” Patterson said. “Restoring this fee on imported oil and dedicating the millions of dollars it will bring in each year to protect the Texas coast is a no-brainer.”

Beach Restoration Brings Back Historic Park’s Former Glory

The once sandy shores of Sylvan Beach attracted throngs of visitors in the 1900s

AUSTIN — A \$3.5 million Texas General Land Office beach restoration is under way at Sylvan Beach and crews are working full-time to restore the glory days of one of Galveston Bay’s historic gems. “We’re putting the beach back in Sylvan Beach,” said Jerry Patterson, Commissioner of the Texas General Land Office. “This is one of those projects you can put a pencil to and see the state’s investment in rebuilding a beach will bring back a substantial economic return.”

Patterson oversees the Coastal Erosion Planning and Response Act (CEPRA) program that is funding the work. Sylvan Beach is a public park along the western shore of Galveston Bay between Morgan’s Point and Shoreacres. The historic park dates back to the 19th century when the railroad had a stop in La Porte, bringing visitors from all over the country. In its heyday during the early 1900s, Sylvan Beach attracted huge crowds to its sandy beach and large grassy park.

Missing from the park today, however, is its historic sandy beach. Over time, the beach eroded away due to wave action generated by wind and large vessels in the Houston Ship Channel. The city of La Porte took stopgap measures to protect what was left of the Sylvan Beach shoreline using a wooden bulkhead and an assortment of concrete rubble, both of which are failing in areas. This allows the bay to encroach behind the wall causing further shoreline retreat and accelerated bulkhead failure. The existing rock

rubble lying against the deteriorating bulkhead makes bay access for visitors nearly impossible if not hazardous.

In 2007 the 80th Texas Legislature appropriated a record \$18 million toward the CEPRA program for implementing erosion response projects. That same year the city of La Porte applied for funding through the Texas General Land Office's CEPRA program to construct the project that was designed and permitted in a previous funding cycle in 2001. The Sylvan Beach Nourishment and Shoreline Protection Project was selected for funding in partnership with the city of La Porte, the primary local funding partner. Harris County, the county of park jurisdiction, is also contributing funds toward the project. Total project cost is approximately \$3.5 million, with the Land Office funding 60 percent.

Work on the project has already begun, with crews using heavy equipment to remove the old bulkhead and concrete rubble. Crews will then begin armoring the shoreline with an articulated concrete mattress that allows for safer pedestrian walkover and natural vegetation to grow through the open grid. The shoreface will be protected with improved stone riprap designed to stop the erosive force of waves.

Finally, two pairs of stone groins will be constructed on either side of the pier, enclosing two 500-footlong pocket beaches built with imported sand that meets strict specifications for durability and safety. Enhanced sidewalk and landscape lighting amenities are also built into the design. The project design calls for 1,700 feet of improved shoreline protection. URS Corporation of Houston is the project engineer that designed the project and will provide construction management. Lester Contracting of Port Lavaca was selected as the general contractor for the job through the state of Texas competitive bid process.

Construction began in April and is expected to last approximately five to six months. When completed, for the first time in many decades, Sylvan Beach will have a restored beach and shoreline for visitors to enjoy and is expected to provide significant economic benefits for the surrounding community. 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.

Patterson: Call on Governor Perry to veto HB770

Last-minute deal creates Open Beaches Act exemption for lawmaker's beach house

AUSTIN — Texas Land Commissioner Jerry Patterson today took aim at what he called a last-minute amendment that created an exemption to the Texas Open Beaches Act for an East Texas lawmaker with a beach house. Patterson urged Texans who love the beach to call Governor Perry's office at (512) 463-2000 and ask him to veto HB770. "Governor Perry has always welcomed public input and he's reviewing a thousand or more bills now and your opinion is important," Patterson said.

The Texas Open Beaches Act prohibits building structures on the public beach, ensuring that everyone is able to access and enjoy Texas beaches. If HB770 becomes law, Bolivar beaches will be exempt from the Open Beaches Act. Patterson said the proposed law is likely unconstitutional, and certainly will be if the Open Beaches Constitutional Amendment is approved by Texas voters in November.

"This proposed law would hurt more than it helps," Patterson said. "If this passes, Bolivar will lose millions in state and federal funds related to hurricane recovery and coastal protection."

If houses are built on the public beach or in the surf, a healthy natural dune system won't develop. And houses built in the surf will break loose and become battering rams, destroying other beach homes, once the next big storm inevitably hits.

“This proposed law isn’t just bad for Texas, but bad for most of the folks on Bolivar,” Patterson said. “All so a select few will be able to rebuild on the public beach.” Because the amendment was added in conference committee, the public wasn’t informed or able to comment on the change before House members unanimously voted to create the special exemption to the Texas Open Beaches Act. “This was a covert, last-minute change that would have never passed on its own,” Patterson said. “The public never had a chance to testify on this change to the Texas Open Beaches Act. It would have never seen the light of day if they had. Texans need to let their voices be heard now.”

Other News

Dredged Material Placement May Serve as a Life Preserver for Drowning Marshes

In a time when sea level rise is becoming a reality for coastal ecosystems and communities, coastal marshes face a special challenge: keeping their heads above water as sea level rises faster than sedimentation can build up new marsh land. As the edges of a marsh become water-logged and vegetation dies off, shallow ponds form in the marsh interior, which then enlarge through continued erosion and subsidence. One strategy undertaken to assist marshes in keeping pace with rising waters is to add sediment to the marsh surface to increase marsh elevation and enhanced growth of marsh vegetation.

Does it work?

One study of six sites in the Mississippi Delta where a thin layer of dredged material was piped over the marsh surface suggests that this approach may work particularly well for interior ponds. Marsh response to sediment additions was assessed in the short term (6-12 months after sediment application) and trajectory models were used to predict long-term growth of marsh vegetation for marshes and interior ponds at all six sites. Short and long-term assessment revealed that soil addition increased soil nitrogen content and bulk density in both deteriorating marsh and interior pond sites; in contrast, vegetative cover and productivity were not enhanced long-term at deteriorating marsh sites, but long-term response models predicted that the vegetative biomass of the interior ponds will recover to reference levels over a seven-year period.

The authors conclude that sediment enhancement is a viable approach for restoring marsh sites, particularly interior ponds. They stress that selection of appropriate targets for elevation restoration will be critical to the success of this approach, and that the use of trajectory models shows promise for assessing projects.

Source: La Peyre, M. K., B. Gossman, and B. P. Piazza. 2009. Short- and long-term response of deteriorating brackish marshes and open-water ponds to sediment enhancement by thin-layer dredge disposal. *Estuaries and Coasts* 32 (DOI [10.1007/s12237-008-9126-8](https://doi.org/10.1007/s12237-008-9126-8)).

New Data and Methods for Predicting Nitrogen Removal in Streams Reveal Important Effects of Land Use and Stream Hydrology

Results of two new studies led by USGS scientists are available in a special issue of the journal [Biogeochemistry](#), which highlights findings from a workshop sponsored by the National Science Foundation on new approaches to modeling denitrification—an ecologically important bacterial process that converts reactive nitrogen compounds to inert nitrogen gas.

The two studies, conducted in collaboration with scientists in universities and other federal agencies, report on physical, biochemical, and land-use factors that can affect the spatial variability and seasonality in nitrogen removal by denitrification in agricultural and forested streams.

The findings show that the fraction of nitrogen removed by denitrification depends upon the nitrogen concentration in a stream, and, specifically, that relatively small proportions are removed in streams with elevated concentrations (see the sidebar illustration for two watersheds with contrasting land use).

Unfortunately, nitrogen concentrations are highest in many agricultural streams in the winter and spring. This is the time when many streams also have high flows and export the largest amounts of nitrogen to coastal estuaries and other receiving waters. Excessive nitrogen can result in the growth of large amounts of algae and a zone of low dissolved oxygen (hypoxia), which can stress aquatic life in receiving waters, such as the northern Gulf of Mexico and Chesapeake Bay.

The new studies may contribute to more accurate model-based watershed assessments, which currently assume that the proportion of nitrogen removed by denitrification is unaffected by the levels of nitrogen concentration in streams. In addition, the findings provide scientific support for targeting nutrient management strategies in watersheds with relatively high nitrogen levels, where in-stream denitrification is expected to be least efficient.

Other findings in the USGS led studies highlight seasonal variability in denitrification and nitrogen removal, and the importance of land use and hydrology, such as related to stream flow and water velocity, on nitrogen concentrations and removal.

The articles are authored by [Böhlke and others](#) ("Multi-scale measurements and modeling of denitrification in streams with varying flow and nitrogen concentration in the upper Mississippi River basin, USA") and by [Alexander and others](#) ("Dynamic modeling of nitrogen losses in river networks unravels the coupled effects of hydrological and biogeochemical processes"). For questions, contact Richard Alexander, ralex@usgs.gov or John Karl Böhlke, jkbohlke@usgs.gov.

Grant Opportunities

National Wetland Program Development Grants

EPA has released its FY09 National Wetland Program Development Grants Request for Proposals (RFP). The total amount of expected federal funding available under the announcement is approximately \$550,000 and the federal portion of the awards will range from \$25,000 to \$225,000. Grants are awarded through Section 104(b)(3) of the Clean Water Act and are made to build the capacity of all levels of government to develop and implement effective, comprehensive programs for wetland protection and management. This year the RFP lists five national priority areas: 1) State/Tribal Technical and Meeting Support; 2) Regulation; 3) Monitoring and Assessment; 4) Voluntary Restoration/Protection; and 5) Water Quality Standards for Wetlands. The RFP will close at 7pm EDT on July 15, 2009, with decisions expected by the end of the fiscal year. The RFP can be viewed on the EPA wetlands website: <http://www.epa.gov/owow/wetlands/pdf/HQrfp09.pdf>.

Conferences and Workshops

Gulf of Mexico Foundation: Down Under, Out Yonder Workshop

July 11-15, 2009

Land-Based and Field Activities
at Workshop on the Flower
Garden Banks NMS:

- Informative presentations and activities about the Flower Garden Banks National Marine Sanctuary, coral reef biology, natural and human impacts on coral reefs, research in the sanctuary, resource management, etc.
- Reef fish identification course with field trip to Moody Gardens.
- Networking with workshop presenters, alumni and other participants.
- Development of action plans to incorporate new knowledge and skills.
- Field Activities on board the M/V Fling out of Freeport, TX (July 13-15, 2009).
- Opportunity for up to 11 SCUBA dives.
- Review of fish ID skills and participation in REEF's fish survey program.
- Informal discussions with researchers and staff.



<http://www.gulfmex.org/>

Location: Galveston, Texas, USA

Dates: July 11-15, 2009

Contact Information: Bobbi Reed

Email: bobbi@gulfmex.org

Home Page URL: <http://www.gulfmex.org/attachments/DUOY2009Information.pdf>

Project Design and Evaluation Workshop

July 15-16th, 2009 and

Preparing for Meaningful Evaluation Workshop (PDE pre-requisite required)

August 11-12th, 2009

On July 15 & 16, 2009 at the Weeks Bay Resource Center, plan to attend the Program Design and Evaluation Workshop. This course provides participants with the knowledge, skills, and tools to design and implement projects that have measurable impacts on the intended audience. The interactive curriculum can help increase the effectiveness of projects by applying instructional design theory including logic modeling. The course includes an introduction to evaluation elements for newly designed programs. Following the July workshop is Planning for Meaningful Evaluation Workshop on August 11 & 12, 2009. The course addresses in detail the increasing demand for evidence of program accountability and impact by preparing participants for a meaningful evaluation. Participants will actively engage in creating a comprehensive evaluation plan. The purpose of the training is to provide an indepth understanding of the elements of evaluation, so that participants are able to make informed choices to create fundamentally sound evaluation plans for existing or longstanding programs.

Contact Call Michael Shelton or Margaret Sedlecky at 251-928-9792 for more information. A minimum of 25 participants are required for each course. The Weeks Bay Reserve is a component of the National Estuarine Research Reserve System and funded by the Alabama Department of Conservation and Natural Resources, State Lands Division, Coastal Section, in part, by a grant from the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management.

Coastal Waters Institute Professional Development

This is a sponsored 40 hour professional development funded by NOAA B-WET, Texas Education Agency, and Environmental Protection Agency The CWI is designed to show Galveston, Brazoria, Chambers, Houston, and Liberty County, 7th and 8th grade teachers how to utilize the experiential learning cycle to promote science, math, and art. The content of the professional development will be based on the Galveston Bay Estuary Program's 17 priorities outlined in the "The State of the Bay: A Characterization of the Galveston Bay Ecosystem" and the National Oceanic Atmospheric Administration standards for Ocean Literacy. During this professional development teachers will earn 40 CPE hours while learning about the significance of Galveston Bay (our estuary), non-point source pollution, natural resources, restoration, and native flora and fauna through the hands-on lessons of Artist Boat's Environmental Curricula and by participating in kayaking, vessel tours, and habitat restoration, and using NOAA data tools. Teachers will develop a lesson with math and science TEKS alignment that is based on the experiential learning cycle, relates to the coastal zone, and relates to the current global economy. That developed lesson will earn an extra 8 CPE hours. This opportunity allows teachers to see how different disciplines can be integrated and how utilizing the experiential learning cycle will create a powerful learning curve.

The Coastal Waters Institute will be held over the course of five days for the following weeks of July 6 and July 27, 2009. There is limited space; 20 teachers will be accepted for each week, totaling to 40 teachers. To receive more details and an application contact Rani Henderson via phone 409-770-0722 or email, rhenderson@artistboat.org. Applying schools with a team of 2-6 teachers will be given highest priority.

Some requirements of participating teachers to consider:

Students of participating teachers will participate in the Eco-Art Workshop, Eco-Art Kayak (7th graders)/Vessel (8th graders) Adventure, and perform pre/post lessons of the Environmental Curricula. As

a measurement of the program, students must take a pre and post test of the Eco-Art Workshop and Adventure and take an Environmental Literacy test of the Environmental Curricula. Other measurements of knowledge gained from this program will be conducted through out the school year. All teachers who are accepted should and will be expected to give their fullest potential. Please see application for more details of requirements.

Remote Sensing for Spatial Analysts

July 29-30, 2009

Presented by the National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Center In Partnership with: Northern Gulf Institute (NGI), Mississippi State University's Geosystems Research Institute (GRI), Grand Bay National Estuarine Research Reserve's Coastal Training Program (CTP); Mississippi Department of Marine Resources (DMR); and the Mississippi Gulf Coast Community College

Location: Mississippi Gulf Coast Community College Estuarine Education Center, Gautier, MS

This two-day course will teach participants how to use remote sensing techniques, in combination with spatial data, to investigate issues such as land cover and use, shoreline change, and fisheries and benthic habitat assessment. Familiarity with ArcGIS is a pre-requisite for this class. Target audiences include planners and natural resource managers representing local, state, federal, and nonprofit agencies/organizations. By the end of the course, participants will:

Understand how remotely sensed data can be used to address coastal resource management issues;
Be aware of the benefits and limitations of remote sensing;
Use remote sensing data in a geographic information system (GIS) environment.

Additional course details are provided in the attached flyer. This training opportunity is FREE! Materials will be provided by NOAA's Coastal Services Center. Lunch will be on your own each day. The deadline for registration is **Monday July 13, 2009** or as soon as the class is filled. Classes are limited to 24 participants - EARLY REGISTRATION is recommended! If you have questions about this event, please contact Marian Hanisko at 228-475-7047 (marian.hanisko@dmr.ms.gov).

Visions of a Sustainable Mississippi River: Merging Ecological, Economic, and Cultural Values

August 10-13, 2009

Collinsville, Illinois

Organized by The National Great Rivers Research and Education Center (NGRREC) and The Nature Conservancy.

The conference will convene representatives from such diverse sectors as commerce, navigation, agriculture, research, recreation and management of our nation's largest river with the goal of presenting new and useful solutions and insights into multiple use issues. This four-day event will culminate with a special Policy Forum where elected officials and strategic decision makers will be present to hear a summary of river management recommendations prepared during the conference on four specific topics:

- 1) Ecosystem service and the economic value of the Mississippi River
- 2) Ethanol production and the Mississippi River



- 3) Floodplain connectivity, flood control, and hydrologic regime
- 4) Clean water and the Mississippi River: uses and threats.

Attendees will also have the opportunity to attend the grand opening of NGRREC's state-of-the-art river research facility. Visit the conference web site for a schedule, call for posters, and to register.

Early registration deadline: June 30, 2009

Location: Collinsville, Illinois

Dates: August 10-13, 2009

Early Registration Deadline: June 30, 2009

Contact Information: Vera Bojic: 618-468-4870

Home Page URL: <http://www.conferences.uiuc.edu/mississippiriver/index.html>

CALL FOR POSTERS

Topic Areas: You are invited to submit an abstract for a poster to be presented at the conference dealing with various aspects of the ecology of natural resources, policy and management, or socio/economic issues relevant to the Mississippi River. The Conference will consist of invited podium presentations and contributed poster presentations. Although we will accept abstracts for poster presentations dealing with any topic or issue relevant to the Mississippi River, special consideration will be given to new insights and approaches that address one or more of the following conference topics:

Topic 1 Ecosystem Services and the Economic Values of the Mississippi River

Topic 2 Ethanol Production and the Mississippi River

Topic 3 Floodplain Connectivity, Flood Control, and Hydrologic Regime

Topic 4 Clean Water and the Mississippi River: Uses and Threats

Submittal Instructions: Submissions should contain an abstract of no more than 350 words summarizing the content of the poster, along with title and listing of authors with institutional affiliations and contact information.

Abstract Deadline: Deadline for abstract submission is June 30, 2009. Submit your poster abstract as a Microsoft Word e-mail attachment to chick@inhs.uiuc.edu. Write "Mississippi Conference Poster Abstract" in the subject line of the email.

Did you find this edition useful? Please send suggestions, comments, and new items for publication to



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