Gulf of Mexico News

NOAA Ocean Service, Office of Ocean & Coastal Resource Management

January 2009

NOAA Gives Navy Marine Mammal Protection Measures for Sonar Training off the Atlantic Coast and Gulf of Mexico

NOAA's Fisheries Service has issued regulations and a letter of authorization to the U.S. Navy that includes measures to protect marine mammals while conducting Atlantic fleet active sonar training off the Atlantic coast and in the Gulf of Mexico. The regulations require the Navy to implement measures designed to protect and minimize effects to marine mammals.

Along with issuing these regulations, NOAA will undertake a comprehensive review of all mitigation measures applicable to the use of sonar and will report to the Council on Environmental Quality regarding the results of this review within 120 days. These regulations, in effect for five years, govern the incidental take of marine mammals during the Navy's training activities, include required mitigation and monitoring measures, and require annual letters of authorization. The letters of authorization, which are required for the Navy to legally conduct their activities, provide the Navy with the terms and conditions of the marine mammal mitigation measures, and requires annual reports, and Navy review of their activities to show they do not result in more numerous effects or more severe harm to marine mammals than were originally analyzed or authorized.

The Navy requested authorization under the Marine Mammal Protection Act because the mid-frequency sound generated by tactical active sonar may affect the behavior of some marine mammals or cause a temporary loss of their hearing. NOAA's Fisheries Service does not expect the exercises to result in serious injury or death to marine mammals and is requiring the Navy to use mitigation measures intended to avoid injury or death. However, in a small number of cases, exposure to sonar in certain circumstances has been associated with the stranding of some marine mammals, and some injury or death potentially could occur despite the best efforts of the Navy. Therefore, the regulations and the letter allow for a small number of incidental injuries to marine mammals.

NOAA's Fisheries Service has determined that these effects would have a negligible impact on the species or stocks involved. Under the regulations and the letter, the Navy must follow mitigation measures to minimize effects on marine mammals, including:

- establishing marine mammal safety zones around each vessel using sonar, and using Navy observers to shut down sonar operations if marine mammals are seen within these designated safety zones;
- implementing a stranding response plan that includes a training shutdown provision in certain circumstances (with special circumstances for North Atlantic right whales) and a memorandum of agreement to allow the Navy to contribute in-kind services to NOAA's Fisheries Service if the agency has to conduct a stranding response and investigation;
- minimizing helicopter dipping sonar and object detection exercises in the North Atlantic right whale critical habitat in the southeast Atlantic Ocean from December through March;
- using several cautionary measures to minimize impacts from torpedo exercises conducted in the North Atlantic right whale critical habitat in the northeast Atlantic Ocean;
- using designated planning awareness areas to raise awareness of Navy personnel and lessen impacts in designated productive marine mammal habitat;

- using several cautionary measures to minimize the likelihood of ship strikes of North Atlantic right whales.

These measures should minimize the potential for injury or death and significantly reduce the number of marine mammals exposed to levels of sound likely to cause temporary loss of hearing.

NOAA's Fisheries Service and the Navy worked to develop a robust monitoring plan to use independent, trained and experienced aerial and vessel-based marine mammal observers (as well as Navy watch standers) and passive acoustic monitoring to help better understand how marine mammals respond to various levels of sound and to assess the effectiveness of mitigation measures. The implementation of this monitoring plan is included as a requirement of the regulations and the letter.

The Navy has been conducting training exercises, including the use of mid-frequency sonar, in the Atlantic Ocean for more than 40 years. Exercises range from large, three week-long strike group training exercises using multiple submarines, ships and aircraft to two-to-three-day unit level training, consisting of several multi-hour exercises designed to target specific skills or weapons systems, such as object detection or helicopter dipping sonar.

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's Fisheries Service is dedicated to protecting and preserving our nation's living marine resources and their habitat through scientific research, management and enforcement. NOAA's Fisheries Service provides effective stewardship of these resources for the benefit of the nation, supporting coastal communities that depend upon them, and helping to provide safe and healthy seafood to consumers and recreational opportunities for the American public. To learn more about NOAA's Fisheries Service, visit the Web site.

New Report Shows Loss of Coastal Wetlands in Eastern U.S.

Crabs depend on wetlands for food and shelter. High resolution

While the nation as a whole gained freshwater wetlands from 1998 to 2004, a new report by NOAA and the U.S. Fish and Wildlife Service documents a continuing loss of coastal wetlands in the eastern United States.

The new report, Status and Trends of Wetlands in the Coastal Watersheds of the Eastern United States, shows a loss of 59,000 acres each year in the coastal watersheds of the Great Lakes, Atlantic Ocean and Gulf of Mexico from 1998 to 2004.

"This report shows the nation's need to expand the effort to conserve and rebuild valuable coastal wetlands," said Jim Balsiger, acting NOAA assistant administrator for NOAA's Fisheries Service. "Coastal wetlands are nurseries for important commercial and recreational fish and are vital to many threatened and endangered species. They also provide natural protection to coastal communities from the most damaging effects of hurricanes and storm surges."

Coastal wetlands protect coastal communities from erosion. High resolution

One reason wetland loss is concentrated in coastal watersheds is that with large numbers of people living here – more than half of the nation's population lives in coastal counties in densities five times greater than inland counties – the building of roads, homes and businesses have accelerated wetlands loss, particularly along the Gulf of Mexico. Wetland restoration is also more difficult in coastal areas where land values are high and factors such as storms and large expanses of soft muddy ground hamper restoration efforts.

The report contains a case study from Florida's St. Vincent Island that illustrates the challenges of restoring coastal wetlands, but also shows the enormous benefits including opening up areas for public recreation as well as habitat for fish, turtles, shorebirds and other wildlife.

"We are concerned by the findings of this report because coastal wetlands provide essential habitat for many migratory bird, fish, and endangered species," said Rowan Gould, acting director of the U.S. Fish and Wildlife Service.
"The high rate of coastal wetlands losses is even more alarming when we consider the anticipated stresses that climate change will bring to our coasts in the future. We look forward to working with federal and non-federal partners to stop this trend and achieve no net loss of coastal wetlands."

NOAA and FWS are discussing with the U.S. Environmental Protection Agency and other interested groups how to best respond to the alarming loss of coastal wetlands outlined in the new report. "Our coastal wetlands are ecological treasures that help protect shorelines and infrastructure in areas where more than half of Americans live," said Michael Shapiro, acting assistant administrator for water at EPA. "This report emphasizes the need for action to protect these valuable resources."
Status and Trends of Wetlands in the Coastal Watersheds of the Eastern United States, 1998 to 2004 is available online. The next national five-year study on wetlands will include the Pacific coast, as well as the eastern United States.

Coastal wetlands provide food for a variety of species including this blue heron. High resolution.

Fishermen's Workshop Offers Gear, Loan Information

(BILOXI, Miss.) -- About 25 Vietnamese-American fishermen attended a financial and business workshop for shrimpers Feb. 5 in Biloxi at the Hope Community Center. Mississippi-Alabama Sea Grant Fisheries Technologist Peter Nguyen told shrimpers about a new type of webbing, called Sapphire netting. Although this lighter, stronger material costs about twice as much as nylon, shrimpers who have used it have reported saving money on fuel.

In the long run, the nets can pay for themselves and increase profit, he said. Leo Esclamado of the National Alliance of Vietnamese American Service Agencies (NAVASA) told shrimpers there are funds available to help them outfit skimmer boats with equipment necessary to harvest oysters. While the idea is not new, oystering can become an additional revenue source for fishermen who have small boats, he said. And, there is a loan program that can help them get started.

Other NAVASA volunteers and representatives offered financial and business advice. They also gave information about the Access to Equity (A2E) program, which offers loans of $1,000 to $15,000, to refugees and low-income people who were devastated by Hurricanes Katrina and Rita. The loans can be used to help rebuild, start or expand businesses. The program aims to make communities self-sufficient. One-on-one counseling, business plan development and access to financing options are some of the services included in the loan program.

Mississippi-Alabama Sea Grant Fisheries Technologist Peter Nguyen displays a new type of netting that has helped some shrimpers save money on fuel.

Consultant Andy Tran, a NAVASA volunteer, said he took the opportunity to remind fishermen to make time each month to keep up with their accounts and bills. Because they so often are working, they tend to forget to dedicate time to those activities, he said. Fishermen showed interest in the loan program, Nguyen said, and 12 applications were started after the meeting. The workshop was sponsored by NAVASA, Mississippi-Alabama Sea Grant, Boat People SOS and Hope Coordination Center.

Innovative Class Uses Sea Urchins to Spawn Learning

Vigor High School completes first aquascience course

PRICHARD, Ala. – About 30 students at Vigor High School recently served as caretakers of aquatic animals during the inaugural semester of a hands-on aquascience course. "The class is a great class," student Kalyn Richardson said. "I think all students should take it."

Students raised sea urchins, white shrimp and tilapia in the class. They designed recirculation systems, checked and maintained water quality, including salinity and temperature, fed the animals and used science in ways they had only read about in books. Troy Latham teaches the class, which is part of the school's Coastal Program that offers higher-level math and science courses not available at some schools.

Students will receive a special diploma when they complete the program, which requires six science and math courses instead of the four that normally are required.

Vigor High School students Jamonica Watts, left, Maurice Adams, Jamia Williams, India Nelson, Jessica Edmond and Calondria Jones gather around a tank during the school's aquascience class.

The use of sea urchins in the aquascience program is rather unique, said P.J. Waters, extension specialist with Mississippi-Alabama Sea Grant Consortium (MASGC) and the Alabama Cooperative Extension System. Waters offers support to about 10 high-school aquascience programs in Alabama. "Sea urchins are great when it comes to embryology," Latham said.

To determine the aquatic animal's sex, students inject them with potassium chloride to see if they expel eggs or sperm, he said. Then, they fertilize eggs under a microscope and watch the cellular divisions that occur. Sea urchins became part of the Vigor High program through University of Alabama at Birmingham Scientist Stephen Watts, who studies sea urchins and has developed food to sustain them in aquaculture. Watts, who received funding for some of his research from MASGC, supplies sea urchins and the feed for the program. The collaboration began about two years ago when Latham read about Watts' research in the MASGC's newsletter, "Sea Briefs." "I made contact with him, and we kinda went from there," Latham said.

The use of sea urchins and Watts' feed in a high-school classroom is an example of how MASGC-funded scientists apply their findings outside their laboratories. "This is the type of outreach that MASGC wants to see from all scientists who receive funding through our program," LaDon Swann, director of MASGC, said. The teachers and administrators at Vigor High have impressed Watts.

"They have worked hard and spent a great deal of time, and often their own money, to provide an innovative teaching experience for their students," he said. "We would like to see other schools work with the sea urchins as they represent a unique opportunity to study fundamental processes in animal development."

Vigor High students seem to appreciate that opportunity. Richardson, who wants to study pharmacy after high school, said the aquascience class has given her more experience in the sciences. "In the other science classes, we sit in the class and do bookwork," she said. Cleaning tanks, growing fish and shrimp, learning the best water temperature for growth and how many animals can be in a tank at a time, feeding sea urchins and determining which ones were male and female through spawning were some of the highlights of the class, she said.

When student Michael Davis Jr. talks about his aquascience experience, he focuses on something other than science. "It was great practice for me for the future," he said. "I did a little plumbing, put together tanks and tried to design a filter system for our project in the class."

In the future, the school likely will offer additional classes, such as honors zoology, that will incorporate aquaculture, Latham said. He is optimistic about how students are reacting to the aquascience course. It's fun to see the kids' faces when they actually see something they read about. You can see the light bulb go on," he said.

This is the first year that Vigor High implemented the courses in the Coastal Program, Latham said, and they still have some things to learn. "Our shrimp didn't do well this year," Latham said. "We killed most of them."

$300,000 NOAA Grant to Develop Science Programs in Schools

OCEAN SPRINGS, Miss. — A $300,000 grant from the National Oceanic and Atmospheric Administration's Office of Education Bay Watershed Education and Training (B-WET) program will help teach Alabama and Mississippi educators about coastal landscapes, how they have changed and how they continue to change. Middle-school teachers who take part in the program will work with marine science educators to develop watershed education programs in their schools.

The Mississippi-Alabama Sea Grant Consortium (MASGC) will contribute additional funds to evaluate the program. An ongoing MASGC project that films oral histories of people who have been part of the Coast's seafood industry also will be incorporated into the program.

The B-WET grant will fund a watershed education program that will be conducted over a three-year period. Educators will learn about coastal landscapes and coastal resilience. Teachers and their students will map local watersheds and compare them to historical documentation. Changes on the coast will be compared to changes that occur in watersheds surrounding each participating school. Teachers and students also will conduct stewardship activities, such as planting shoreline vegetation.

"An important aspect of this watershed education project will be community-building," said Jessica Kastler, a research associate with The University of Southern Mississippi J.L. Scott Marine Education Center. "Motivated teachers and students will work with the J.L. Scott Marine Education Center for three years; thus building a learning community designed to examine the relationship among inland and coastal habitats."

Kastler will coordinate the effort through the J.L. Scott Marine Education Center at The University of Southern Mississippi Gulf Coast Research Laboratory. Sharon Walker, MASGC's education director, will help lead the project.

Revised Water Quality Criteria Provide Increased Protection for Florida Seagrasses

In a follow-up to earlier workshops, research and studies by researchers from the National Centers for Coastal Ocean Science (NCCOS) and other scientists recently determined that high light requirements of seagrasses, including differences between species and environmental conditions, should result in revised criteria for optimal water clarity for seagrasses throughout the state of Florida. Prior workshops in the early 1990s, organized by NCCOS staff, concluded that federal and state water quality criteria were insufficient to protect seagrasses. Participants at the workshop reviewed these studies and reached a consensus that a single standard would not be appropriate, and regional standards are needed.

Participants also reviewed the different water quality monitoring programs in order to determine the appropriate spatial and temporal scales for sampling. NCCOS and other investigators participated in the workshop convened by the Florida Department of Environmental Protection (FDEP) in Orlando on January 7-8, 2009. For more information, contact Jud.Kenworthy@noaa.gov.

NOAA Develops LiDAR Partnerships

A scientist from the Center for Coastal Monitoring and Assessment's Biogeography Branch participated in an inter-agency LiDAR (Light Detection and Ranging) specifications workshop hosted by the Joint Airborne LiDAR Bathymetry Technical Center of Expertise, from January 13-15, in Bay St. Louis, Mississippi. The workshop focused on the challenges shared by multiple federal agencies in collecting and disseminating topographic and bathymetric LiDAR data, and resulted in developing draft standards for data quality, applications, and metadata. These draft standards will be publicly available at http://shoals.sam.usace.army.mil/ after additional peer review. The adoption of uniform standards will enable the coordinated planning and implementation of LiDAR surveys that meet the requirements of multiple agencies, which should lead to significant time and cost savings. Such standards would also further NOAA's Integrated Ocean and Coastal Mapping principle of "map once and use many times." For more information, contact Bryan.Costa@noaa.gov.

Scientists Forge New Partnerships with NERRS Counterparts

To better address the needs of the National Estuarine Research Reserve System (NERRS), scientists from several National Centers for Coastal Ocean Science (NCCOS) met with NERRS research coordinators to give form and substance to the recent cooperative agreement between the two program offices. By applying NCCOS's research capabilities with NERRS ongoing monitoring and stewardship programs, the sites will be better characterized and used to help assess the Nation's coastal challenges. The presenters, in the context of NOAA's recent emphasis on Integrated Ecosystem Assessments, focused on research partnerships in such areas as estuarine habitat characterization, chemical contamination at NERR sites, climate change and sea level rise impacts, the use of NERRS sites as mercury pollution sentinels, and the exploration of links between environment and human health and well-being. The coordinator's annual meeting was held January 26-28 in St. Augustine, Florida. For more information, contact Susan.White@noaa.gov or Carol.Auer@noaa.gov.

Survey Studies Watershed Management on Atlantic, Gulf Coasts

Results from a survey of watershed management practices in Atlantic and Gulf coastal communities are now online at http://www.cwp.org/#survey. The survey was designed to identify which watershed techniques are most commonly applied, major gaps in watershed management, and innovative practices. For example, the survey found that while the majority of communities use watershed plans, only a few specific actions to support these plans—such as establishing regulations to reduce the impact of development on natural resources—have been broadly adopted.

Conducted by the Center for Watershed Protection and sponsored by the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET), the survey is the first step in adapting the center's Eight Tool Framework (8TF) so that it can be applied to coastal watershed planning. Survey results are informing the selection of pilot coastal communities to apply, test, and refine the adapted 8TF. The goal is

to train planners and watershed managers in these regions and then make appropriate resources available to those who need them. The project is part of CICEET's Living Coasts Program, which seeks to provide coastal communities with more effective tools to grow in a way that preserves water quality, protects natural areas, and improves quality of life. Learn more at http://ciceet.unh.edu/living_coasts/projects/coastal_plain_network.html. For more information contact: dwight.trueblood@noaa.gov.

Volunteer Monitoring Network HAB Observation Provides Tracking Data in Alabama Bays

Alabama volunteers participating in the National Centers for Coastal Ocean Science's Southeast Phytoplankton Monitoring Network (SEPMN) reported high concentrations of *Prorocentrum minimum* within Arnica Bay. Researchers at the Dauphin Island Sea Laboratory used these data to track the movement of this bloom from Weeks Bay and Arnica Bay into Mobile Bay. Blooms of this harmful algal bloom (HAB) species have been linked with coastal eutrophication worldwide. SEPMN enhances the awareness of harmful algal species and its impacts, and directly engages volunteers in coastal stewardship, with 113 groups monitoring over 140 sites in 15 coastal states. For more information, contact Steve.Morton@noaa.gov.

Other NOAA News

New Economic Report Finds Commercial and Recreational Saltwater Fishing Generated More Than Two Million Jobs

Fishermen hauling in Atlantic surf clams. (Credit: NOAA)

U.S. commercial and recreational saltwater fishing generated more than $185 billion in sales and supported more than two million jobs in 2006, according to a new economic report released by NOAA's Fisheries Service.

The commercial fishing industry — harvesters, seafood processors and dealers, seafood wholesalers and seafood retailers — generated $103 billion in sales, $44 billion in income and supported 1.5 million jobs in 2006, the most recent year included in the report, Fisheries Economics of the United States 2006, which covers 1997 to 2006. Recreational fishing generated $82 billion in sales, $24 billion in income, and supported 534,000 jobs in 2006.

"The report documents clearly that managing fisheries sustainably is good for the environment and the economy," said Jim Balsiger, NOAA acting assistant administrator for NOAA's Fisheries Service. "Fishing helps create a substantial number of jobs around the nation."

The report also breaks down the sales, income and job figures for each coastal state. The highest amount of sales generated by the commercial fishing industry were in California ($9.8 billion), **Florida ($5.2 billion)**, Massachusetts ($4.4 billion), Washington ($3.8 billion), and Alaska ($3 billion). The most jobs were generated in California (179,000), **Florida (103,000)**, Massachusetts (83,000), Washington (75,000) and **Texas (47,000)**.

Saltwater recreational fishing generated its highest economic effect in total sales and jobs generated in **Florida ($7.6 billion sales, 131,000 jobs); Texas ($2.2 billion sales, 34,000 jobs)**; California ($1.9 billion sales, 23,000 jobs); North Carolina ($1.2 billion sales, 24,000 jobs); and **Louisiana ($1.2 billion sales, 27,000 jobs)**.

Fisheries Economics of the United States 2006 also includes descriptive statistics on commercial fish landings, revenue, and price trends; recreational fishing effort, catch, and participation rates; and employer and non-employer establishments, annual payroll, and annual receipt information for fishing-related industries such as seafood retailers and ship and boat building. The report is the first volume in a new series designed to give the public accessible economic information on fishing activities in the U.S., and is a companion to Fisheries of the United States, and the forthcoming Fishing Communities of the United States.

The report also provides a snapshot of fishery management plans, limited access privilege fishing programs (a type of catch share program), buyback programs, and ecolabeling programs, as well as the status of fish stocks and an inventory of protected marine resources. Fisheries Economics of the United States, 2006 is available online.

Saltwater Recreational Fishermen Boon for Economy, Says NOAA

Angela Annino of Connecticut holds up an impressive striped bass, one of New England's most popular sport fish. High resolution (Credit: NOAA)

Recreational saltwater anglers pumped more than $31 billion into the U.S. economy in 2006, with Florida, Texas, California, Louisiana, and North Carolina receiving the largest share according to a new study issued by NOAA's Fisheries Service.

At the national level, saltwater anglers are estimated to have spent $5.8 billion on trip-based expenses, such as ice, bait, and fuel, and another $25.6 billion on fishing equipment and durable goods like fishing rods, fishing tackle, and boats.

The top five coastal recreational fishing states are: **Florida ($16.7 billion), Texas ($3.2 billion)**, California ($3.0 billion), **Louisiana ($2.9 billion)**, and North Carolina ($2.0 billion).

In addition to quantifying angler expenditures, this study examines how these expenditures circulated through each state's economy and the national economy using a regional assessment. The $31.4 billion in total U.S. expenditures in 2006 contributed $82.3 billion in total sales, $39.1 billion to gross national product, $24 billion in personal income, and supported nearly 534,000 jobs. The Economic Contribution of Marine Angler Expenditures in the United States 2006 is available online. A hardcopy of this report may be obtained by contacting Scott Steinback via e-mail or by mail at NOAA's Fisheries Service, Northeast Fisheries Science Center, 166 Water Street Woods Hole, MA 02543-1026.

Scientific Assessment Presents Best Practices for Characterizing, Communicating and Incorporating Scientific Uncertainty in Climate Decision Making

The U.S. Climate Change Science Program has issued its final assessment product presenting a summary of methods and strategies to characterize, analyze, and deal with uncertainty as it relates to climate change and its effects. The report is written to serve the needs of climate scientists, experts assessing the likely impacts and consequences of climate change, as well as technical staff supporting policy makers. The report explores the sources and types of uncertainty, the importance of correctly quantifying those issues, the ability to make decisions in an uncertain environment and how to effectively communicate this information to the public.

"While there is considerable uncertainty associated with climate change and its effects, there are good tools and methods available to address and deal with it, and to make decisions today. We routinely make important decisions in our public and private life in the face of comparable or even greater levels of uncertainty," said M. Granger Morgan from Carnegie Mellon University and lead author of the report.

This report is one of the 21 Synthesis and Assessment Products commissioned by the U.S. Climate Change Science Program as part of an interagency effort to integrate federal research on climate change and to facilitate a national understanding of the critical elements of climate change.

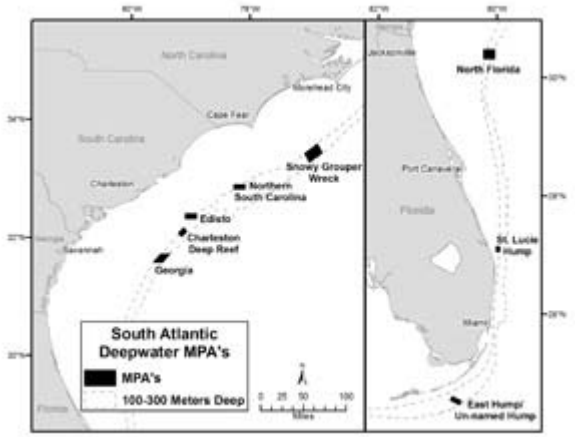
The full Climate Change Science Program report, Best Practice Approaches for Characterizing, Communicating and Incorporating Scientific Uncertainty in Climate Decision Making, is available online. NOAA plays a key role in the Climate Change Science Program, which is responsible for coordinating and integrating climate research, observations, decision support, and communications of 13 federal departments and agencies.

Coastal Technology Project Progress Reports Online

The University of New Hampshire/NOAA Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) has posted fall 2008 progress reports for its coastal environmental technology projects online. These reports allow coastal managers to stay abreast of science and technology developments in their regions. These projects are dedicated to developing tools that help coastal communities be more resilient in the face of increasing development and climate change. The projects focus on areas such as improved tools for land-use planning, habitat restoration and protection, and water-quality monitoring. The reports detail each project team's progress in gathering data, meeting research objectives, reaching out to coastal management, and engaging the intended users of the tools they are developing. For more information, contact Dwight Trueblood.

NOAA Establishes Eight Marine Protected Areas to Provide Safe Havens for Deep-Water Fish

NOAA has established eight separate marine protected areas encompassing a total of 529 square nautical miles in south Atlantic federal waters to shield deep-water fish species and their habitats from fishing.



High resolution (Credit: NOAA)

All fishing for snappers, groupers, tilefishes, grunts, porgies, and sea basses is prohibited throughout the protected areas, which are located off the coast from North Carolina south to Florida. The South Atlantic Fishery Management Council proposed the action to NOAA's Fisheries Service as part of a larger management plan to protect these South Atlantic fish populations.

"I applaud the hard work of the council and the strong spirit of cooperative conservation among commercial and recreational fisherman to take decisive action to conserve habitat in order to sustain healthy fisheries for generations to come," said James L. Connaughton, chairman of the White House Council on Environmental Quality.

"Marine protected areas are designed to provide long-term protection for our nation's natural resources," said Jim Balsiger, acting NOAA assistant administrator for NOAA's Fisheries Service. "These areas of the South Atlantic were chosen because they feature known spawning grounds and nursery habitats for deep-water fish – especially for snappers and groupers."

The marine protected areas are critical to the survival of over 70 species of deep-water fish susceptible to fishing pressure. These fish are not good candidates for catch-and-release fishing because they suffer trauma when captured and reeled up from great depths. In addition, some species, such as snowy grouper, can live longer than 50 years and are the most productive spawners. It is important to protect the larger fish so they can spawn to their maximum potential, and equally important to protect the younger fish so they reach maturity.

The new protected areas range in size from 21 to 150 square nautical miles. There is one area off North Carolina, three off South Carolina, one off Georgia, and three protected areas off Florida. Commercial shark bottom longline gear is also prohibited in these areas because the deep-water fish species are likely to be caught incidentally with this gear. All other types of legal fishing, such as trolling for tunas and marlins, are allowed because those gear types are not likely to incidentally catch the species warranting protection.

NOAA Dives into Ocean in Google Earth

Visitors to a new element of a popular online Earth exploration tool will discover an abundance of NOAA information and images during their journey. Google Earth today unveiled Ocean in Google Earth, a new way for online explorers to dive into the ocean's depths. The launch of Ocean in Google Earth took place in San Francisco.

High resolution (Credit: NOAA)

"This allows anyone, anywhere at any time to explore virtually the ocean from their home computer," said Richard Spinrad, NOAA assistant administrator for oceanic and atmospheric research. "And during their journey, they will benefit from abundant contributions of information and imagery supplied by NOAA." Spinrad serves on the Ocean in Google Earth advisory board.

NOAA contributed and will continue to contribute a variety of data and imagery to the project. Some of the expeditions from the NOAA Office of Ocean Exploration and Research, such as a trip to the submerged wreck of the Titanic, and information and ocean current maps demonstrating marine debris movement from the NOAA Marine Debris Program are included. NOAA also provides data from NOAA's National Data Buoy Center and seabed maps of U.S. coastal waters. Other NOAA contributions include information on marine protected areas including the 13 U.S. national marine sanctuaries and one marine national monument that are highlighted in detail via underwater video footage, high resolution seabed maps, and photography.

"Presenting NOAA information in this way is not only exciting, but also gives the public a better understanding of NOAA's ocean mission," Spinrad said. "We're also very excited that more young users may become interested in marine science careers while adults can learn more about the myriad issues affecting our ocean. Of course, everyone can enjoy the magnificent beauty of life below the water's surface."

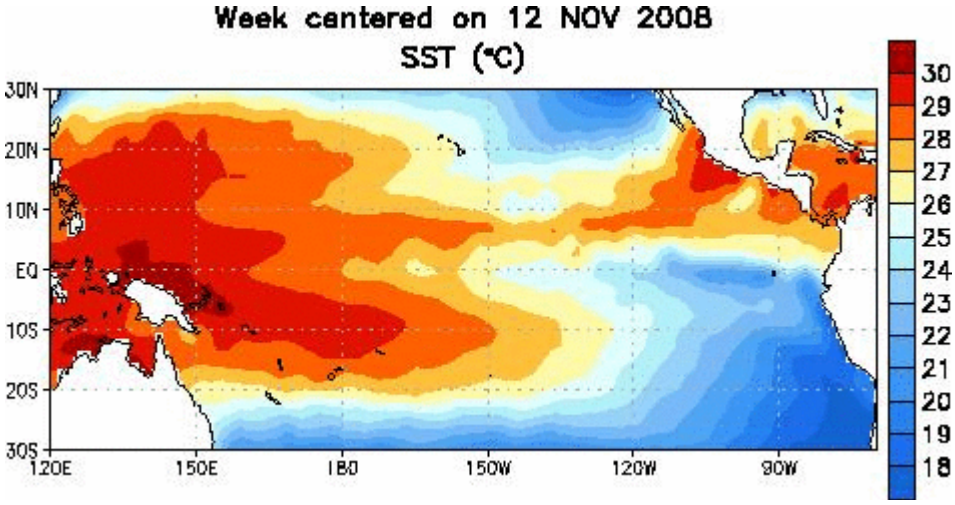
Visualization Software Workshop Now Available Via WebEx

In response to an increasing demand for CanVis visualization software training, the NOAA Coastal Services Center developed a virtual version of its three-hour hands-on workshop. CanVis is a free software used to investigate potential visual impacts from coastal development. Users can download coastal backgrounds and insert the objects (e.g., hotels, houses, docks, marinas) of their choosing. The first virtual workshop was delivered through a combination of phone and WebEx to 13 participants across the country. Virtual offerings of this training will be provided monthly. Visit http://www.csc.noaa.gov/canvis/workshops.html for a detailed schedule. For more information, contact Hansje Gold-Krueck.

NOAA Unveils New Alert System for La Niña and El Niño

La Niña Likely to Continue into Spring

NOAA's Climate Prediction Center today issued the first La Niña advisory under its new El Niño Southern Oscillation (ENSO) Alert System. Forecasters expect La Niña to influence weather patterns across the United States during the remainder of the winter and into the early spring.



Pacific Sea Surface Temperature Animation (Nov. 12, 2008 to Jan. 28, 2009). High resolution (Credit: NOAA)

Defined as cooler than normal sea surface temperatures in the central and eastern equatorial Pacific Ocean, La Niña impacts the weather globally. La Niña's opposite is El Niño, or warmer than normal ocean temperatures. These changes in ocean temperatures alter the tropical wind and rainfall patterns with far reaching implications.

"The typical weather patterns associated with La Niña and El Niño affect many industries including agriculture, transportation, energy, shipping and construction," said Michael S. Halpert, deputy director of the Climate Prediction Center. "The ENSO Alert System will succinctly inform industry, government agencies, academia and the public about the onset and status of La Niña and El Niño. This system will also help decision makers plan for the potential effects presented by these conditions."

La Niña conditions have been present since late December, but it is too early to say exactly how strong the event will be and precisely how long it will last. However, for the next few months La Niña is expected to bring milder and drier than average conditions to the southeastern and southwestern states. It is also expected to bring wetter-than-average conditions to the Ohio and Tennessee valleys, and cooler than average temperatures to the Pacific Northwest.

The new ENSO alert system includes La Niña and El Niño watches and advisories which the Climate Prediction Center will issue when specific conditions exist. La Niña or El Niño Watch: conditions in the equatorial Pacific are favorable for the development of La Niña or El Niño conditions in the next three months. La Niña or El Niño Advisory: La Niña or El Niño conditions have developed and are expected to continue. These watches and advisories are now part of the ENSO Diagnostic Discussion, which is issued by the Climate Prediction Center on the Thursday falling between the 5th and 11th of every month. It is available online.

New Research on Eutrophication and Harmful Algal Blooms

National Centers for Coastal Ocean Science (NCCOS) scientists and NCCOS-funded researchers recently published a paper concluding that increased nutrient pollution is one reason for the recent expansion of harmful algal blooms (HABs) in the U.S., and that management of watershed nutrient inputs may lead to significant reduction in HABs. HABs produce excess biomass or toxins, which can cause human and ecosystem health and socioeconomic impacts in all coastal states. This paper included seven consensus statements about the role of nutrients in promoting HABs and the possibility of reducing some HABs through nutrient management. For more information, contact Quay Dortch.

In the Gulf States

Auburn University Recognized by ADEM and EPA

Auburn University has been recognized as the first "Center of Excellence for Watershed Management" in Alabama. Auburn officials signed a Memorandum of Understanding with the U.S. Environmental Protection Agency and ADEM during a ceremony on campus at Samford Hall.

"We are confident that this agreement will help Auburn University continue and expand its efforts to protect and restore waterways throughout Alabama," said EPA Regional Administrator Jimmy Palmer. "At EPA, we believe watersheds represent the most logical basis for managing resources since all water, both surface and groundwater, within them eventually drains to the same place."

According to ADEM Director Trey Glenn who participated in the signing ceremony, "The Alabama Department of Environmental Management is committed to protecting and preserving our water resources here in Alabama. The signing of this memorandum and the establishment of this partnership will allow each of us to leverage our limited resources and accomplish our goal of ensuring clean waterways for the citizens of Alabama."

In order to become a recognized Center of Excellence for Watershed Management, Auburn had to demonstrate technical expertise in identifying and addressing watershed needs, document the involvement of students/faculty in watershed research, establish the capability to involve the full suite of disciplines needed for all aspects of watershed management, demonstrate the financial ability to become self-sustaining, identify a willingness to partner with other institutions, and garner support from the highest levels of the organization.

"We appreciate this opportunity to partner with EPA and ADEM to help manage water resources as prudently as possible, with an eye toward conservation and increased availability," said Auburn University President Jay Gogue. "Auburn has a broad array of expertise to contribute to these efforts."

Some of the benefits of being a Center of Excellence for Watershed Management include the receipt of EPA technical assistance, ability to network with other Centers that have been established, EPA/ADEM letters of support for grant opportunities, and identification of opportunities for involvement in various watershed issues.

ADEM Supports Designation of Alabama A&M University

The Alabama Department of Environmental Management and the U.S. Environmental Protection Agency have partnered to officially designate Alabama A&M University as a Center of Excellence in Watershed Management. The designation will enhance efforts to protect and preserve water resources in Alabama and will also provide opportunities for Alabama A&M University students and faculty to increase their study of water resources and watershed management.

ADEM Director Trey Glenn, EPA Water Division Director Jim Giattina, and AAMU President Dr. Beverly Edmond commemorated this event by signing a Memorandum of Understanding during a ceremony on January 29. Alabama A&M University becomes the first historically black college/university in the nation to receive this prestigious designation. In addition, Alabama becomes the only state in the nation with two universities to be designated as a Center of Excellence in Watershed Management as both Alabama A&M University and Auburn University have achieved this designation.

"The Alabama Department of Environmental Management is extremely proud to partner with Alabama A&M University in this effort to protect our water resources in Alabama," said ADEM Director Trey Glenn. "Alabama's water resources provide recreational opportunities and employment opportunities for countless Alabama citizens and this partnership will only enhance the Department's efforts to protect those water resources."

Alabama A&M University had to demonstrate technical expertise, a willingness to partner with other institutions, and support from the highest levels of the university prior to being selected. In addition, they had to document the ability to involve students and faculty in the area of watershed research.
The ability to address water issues on a watershed basis presents numerous advantages, as well as challenges. Watersheds cross political boundaries and efforts to address water issues on a watershed basis require enhanced, effective communication between all stakeholders. The establishment of Alabama A&M University as a Center of Excellence in Watershed Management will provide additional communication opportunities and will also provide local citizens a vested interest in protecting their water resources at the local level.

Magnolia River Sedimentation Study Begins

Survey to look at status of river and tributaries
Tuesday, February 10, 2009
By GUY BUSBY, Staff Reporter
Al.com, Everything Alabama

MAGNOLIA SPRINGS — In places, the Magnolia River isn't as deep as residents recall, but the waterway is not as clogged with sediment as many waterways, town officials said. During the coming year, officials with Magnolia Springs, Mobile Bay National Estuary Program and Geological Survey of Alabama will conduct a sedimentation study of the river. The Magnolia Springs Town Council commissioned a sedimentation study of the river by the Geological Survey of Alabama, said Councilman Brett Gaar. "The point of the study is to be proactive in identifying sites where sedimentation is occurring," Gaar said. "This will give us a good indication of where we are now and recommendations on the specific areas we need to monitor."

The project began in the fall and will continue until about the end of the year. Gaar, chairman of the Town

Council River Enhancement Committee, said the schedule for completion depends on the weather, but officials expect to have a report by the end of this year. "They have to wait until a substantial rain event to take samples," he said.

Marlon Cook, state hydrologist for the GSA, is taking samples from locations along the river and in the streams that feed into the waterway, Gaar said. Water samples are checked for the amount of sediment and the type of material found. The size of the grains of silt and sand found in samples can indicate where the material came from and how it might affect the river bed, he said. Most sediment that ends up in the river does not come from the banks of the Magnolia, but the creeks and springs that feed into it, Gaar said.

He said development in areas that drain into creeks throughout the watershed, which extends north of Foley, can send sediment downstream into the Magnolia River and Weeks Bay. Gaar, who grew up in the Magnolia Springs area, said the effects of development are more obvious in the water today than in the past. "It used to take a much more substantial rain to make the river muddy than it does now," Gaar said. He said the river is still in good condition, however.

Area residents have asked the Alabama Department of Environmental Management to designate the Magnolia River as an "Outstanding Alabama Water." A designation of Outstanding Alabama Water would give the river a higher level of official environmental protection than the current listing of suitable for fishing and swimming, and provide additional protection from pollution, according to a town statement. Gaar said the sedimentation study is not part of the effort to get the state's highest level of environmental protection for the river, but the findings could help the effort. The study will cost $58,000. About half the cost will be paid through a federal grant, another 25 percent paid by the state and about $6,000 in services by the town, Gaar said.

As part of the study and effort to improve the environmental protection status of the river and tributaries, Magnolia Springs officials will be working with representatives from other municipalities, the Baldwin County Commission and other agencies to address problems identified in the study, Gaar said.

SELC Names Weeks Bay to Top 10 Endangered Areas in the South List

The Southern Environmental Law Center (SELC) announced a list of ten special places in the South, including Weeks Bay in Alabama, that face immediate, and potentially irreparable environmental threats in 2009. The endangered areas were chosen among hundreds that are impacted by SELC's law and policy work throughout the six states of Virginia, Tennessee, North Carolina, South Carolina, Georgia and Alabama.

According to the SELC news release, the Weeks Bay area was placed on the list because unchecked development and weak regulations threatened an area so unique it is one of only three water bodies in Alabama to receive the designation of Outstanding Natural Resource Water.

Other areas in the South making the list include the Cherokee National Forest in Tennessee, Salt Marshes in Georgia, Pamlico River in North Carolina, Clinch and Powell Rivers in Virginia and Johns River in South Carolina. To read the entire top 10 list and previous endangered places lists from years past - visit http://www.southernenvironment.org/about/top_10_2009.

EPA, Florida DEP Work Together to Restore Florida's Surface Waters

(Washington, D.C. - Jan. 16, 2009) The U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) are taking actions to protect and restore both recreational uses and aquatic life in Florida waters. These actions include EPA issuing a formal determination under the Clean Water Act that "numeric" nutrient water quality criteria are necessary in Florida, and Florida accelerating its efforts to adopt numeric nutrient criteria into state regulations. Numeric nutrient criteria will significantly improve Florida's ability to address nutrient pollution in a timely and effective manner.

"EPA recognizes Florida as a national leader in managing nutrient pollution but more needs to be done," said Benjamin H. Grumbles, EPA's assistant administrator for water. "Therefore, we are taking the significant step today of requiring numeric nutrient standards for water quality. We look forward to working closely with the State to develop improved standards that will accelerate the protection and restoration of Florida's waters."

"The State of Florida recognizes that more needs to be done to address nutrient pollution in our rivers, streams, lakes and estuaries, and these actions will help our State and all of our stakeholders prevent and better manage sources of nitrogen and phosphorus from entering our waters," said Mike Sole, Secretary of FDEP.

Excess nitrogen and phosphorus levels (nutrient pollution) in waterbodies can cause harm to aquatic ecosystems and threaten public health. Nutrient pollution can lead to water quality problems such as harmful algal blooms, low-oxygen "dead zones" in water bodies and declines in wildlife and wildlife habitat. These effects also disrupt recreational activities and pose threats to public health.

Water quality degradation from nutrient pollution is a significant environmental issue in Florida. Florida's 2008 Integrated Water Quality Assessment revealed that approximately 1,000 miles of rivers and streams, 350,000 acres of lakes, and 900 square miles of estuaries are impaired by nutrients. The actual number of miles and acres of waters impaired for nutrients is likely higher, as many waters that have yet to be assessed may also be impaired.

Local governments in Florida have worked to improve wastewater treatment and stormwater management. In addition, many in the agricultural community have implemented best management practices for nutrient control. It takes focused attention by all stakeholders in each watershed to address this challenging issue.

The federal determination is intended to build upon the substantial investments that Florida has made to date in nutrient data collection, analysis, and stakeholder involvement, and is fully consistent with the state and EPA's commitment to a stronger nutrient control program. The new numeric nutrient water quality standards will help Florida improve the efficiency and effectiveness of its water quality management tools, identify waters impaired because of nutrient pollution, establish total maximum daily loads and Basin Management Action Plans and derive National Pollutant Discharge Elimination System permit limits.

EPA's decision letter on these actions: http://www.epa.gov/waterscience/standards/rules/#det
FDEP's 2008 Integrated Report: http://www.dep.state.fl.us/water/docs/2008_Integrated_Report.pdf
FDEP's Numeric Nutrient Criteria Development Plan: http://www.dep.state.fl.us/water/wqssp/nutrients

Florida Green Lodging Program Reaches 400 Milestone

~Number of designated properties tripled in less than one year~

TALLAHASSEE – The Florida Department of Environmental Protection's (DEP) Florida Green Lodging Program recently designated its 400th property, the Don Cesar Beach Resort, A Loews Hotel, in St. Petersburg Beach. The program's leap from 100 to more than 400 designated properties in less than a year proves that the green movement in Florida continues to gain momentum under the leadership of Governor Charlie Crist. With a total of 409 designated properties to date, Green Lodging properties represent more than 116,000 hotel rooms.

"We are pleased with the rapid growth the program has seen within the last year," said DEP Director of Sustainable Initiatives Deas Bohn. "Since the 2007 Serve to Preserve Florida Summit on Global Climate Change, where Governor Crist signed a suite of executive orders, more and more lodging facilities recognize that implementing green management practices not only preserves Florida's environment, but is also good for business – by saving money and attracting new customers."

"We are pleased with the rapid growth the program has seen within the last year."
~ Deas Bohn, DEP Director of Sustainable Initiatives

Many properties go above and beyond the minimum requirements for designation. Oleta River State Park Cabins installed an Energy Star rated tankless water heater in the bathhouse and solar powered lights on the docks. The Gardens Hotel in Key West replaced carpet with bamboo flooring, implemented the use of biodegradable laundry bags as well as planted an herb/vegetable garden and began composting.

Twenty-four new properties recently received a One or Two Palm designation by adopting cost-saving "green" practices that reduce waste and conserve natural resources. Facilities can achieve up to three levels of green within the Florida Green Lodging Program, ranging from One Palm to Three Palm based on increased reductions in waste, water and energy consumption.

To become a designated member of the Florida Green Lodging Program, hotels must implement a variety of green practices. These practices include, but are not limited to, water conservation measures by installing low flow plumbing fixtures and implementing a linen reuse program, and energy efficiency achieved by installing ENERGY STAR® appliances and programmable thermostats. The waste reduction criteria are met by providing the opportunity to recycle, purchasing items in bulk, purchasing recycled materials and by recycling ink and toner cartridges. All designated properties must also use green cleaners and high efficiency air filters, and clean air handler units frequently.

Launched in March 2004, the Florida Green Lodging Program establishes environmental guidelines for hotels and motels to conserve natural resources and prevent pollution. As reward for designation, the state is recommending designated properties in the Florida Green Lodging Program to companies and trade organizations seeking environmentally conscious lodging and convention facilities. For more information about the Florida Green Lodging Program, visit www.dep.state.fl.us/greenlodging.
On July 13, 2007, Governor Charlie Crist signed three executive orders to reduce Florida's greenhouse gas emissions, increase energy efficiency and remove market barriers for renewable energy technologies such as solar and wind energy. Executive Order 07-126 required state agencies and departments under the

direction of the Governor to contract for events only with hotels that had received the Florida Green Lodging program.

In June 2008, Governor Crist signed House Bill 7135, "The Energy, Climate Change, And Economic Security Act Of 2008", which built upon the framework of the executive orders and expanded the Florida Green Lodging Program requirement to all state agencies. This comprehensive energy and economic development legislation also encompassed reducing greenhouse gas emissions as well as encouraging investment in alternative and renewable energy technologies. To learn more visit www.myfloridaclimate.com.

Gulf of Mexico Alliance Holds Fourth Florida Public Workshop

~Workshop highlights Alliance's environmental and economic accomplishments and seeks public input on future priorities~

TAMPA – The Gulf of Mexico Alliance (GOMA) held a public workshop today at the Florida Aquarium to gain input from the community and a variety of stakeholders on the draft Governors' Action Plan II. The plan outlines GOMA's priorities and goals for the next five years. The workshop also reviewed GOMA's recent accomplishments in Florida, including local successes in the areas of water quality and nutrient loading. This is the last workshop in a series of four held in Florida to involve the public in GOMA's strategy to enhance the economic and environmental health of the Gulf of Mexico.

"With more than 120 participants attending the first three public workshops in Naples, Sarasota and Apalachicola, we are pleased to have the public share their ideas about the Gulf of Mexico," said Alliance Management Team Member, and Florida Department of Environmental Protection's (DEP) Director for the Apalachicola National Estuarine Research Reserve, Seth Blitch. "Community input will be considered as we shape the Governors' Action Plan II, which is scheduled to be finalized later this year."

DEP's Office of Coastal and Aquatic Managed Areas (CAMA) has been instrumental in planning and hosting the four public workshops. The first two were hosted by the staffs of the Rookery Bay National Estuarine Research Reserve and Apalachicola National Estuarine Research Reserve, which are managed by DEP. CAMA also partnered directly with Mote Marine Laboratory, the Sarasota Bay Estuary Program, Charlotte Harbor National Estuary Program, the Florida Coastal Management Program, the Florida Aquarium and the Tampa Bay Estuary Program to reach diverse stakeholders and to engage the private sector in these important workshops.

Established in 2005, the Gulf of Mexico Alliance is a federal-state partnership initiated by the five Gulf States which include Alabama, Florida, Louisiana, Mississippi and Texas. The goal of GOMA is to significantly increase regional collaboration in order to enhance the economic and environmental health of the Gulf. The 2006 Governors' Action Plan for Healthy and Resilient Coasts set the stage for a long-term regional partnership to address six priority issues. Today, more than 90 percent of the actions defined have been completed or are now in progress. When complete, the Governors' Action Plan II will guide GOMA priorities and projects for the next five years.

Climate change, improving coastal water quality and restoring coastal habitats are some of the primary issues identified by stakeholders including community members, business owners, government agencies and not-for-profit organizations who attended the first three workshops. Participants also offered creative ideas about reaching young people through educational websites, building coastal communities that are resilient to storms and mapping Gulf-wide ecosystems.

The Gulf of Mexico is the ninth largest water body in the world, accounting for half the wetlands in the United States and abounding with sea life, ranging from killer whales to unexplored deepwater corals living thousands of feet below the surface. With some 3,400 miles of shoreline from Cape Sable, Florida to the tip of the Yucatan peninsula, the Gulf is bordered by Florida, Alabama, Mississippi, Louisiana and Texas to the north, Mexico to the west and the island of Cuba to the southeast.

For more information about the Gulf of Mexico Alliance, the 2006 Governors' Action Plan for Healthy and Resilient Coasts and the status on the six critical priority issues visit www.gulfofmexicoalliance.org. For more information about the Florida community input workshops, visit www.supportthegulf.org. For more information on DEP's Office of Coastal and Aquatic Managed Areas, visit http://www.dep.state.fl.us/coastal.

DEP Announces Streamlined Efforts for Communities to Protect Florida's Coastal Resources

~Coastal program grant procedures to become more user friendly~

"By revising the rules the grant application process will now be easier for applicants to understand." ~ Sally Mann

TALLAHASSEE – This fall when eligible applicants apply for grant funds through the Florida Coastal Management Program (FCMP) the process will be much easier because of changes to grant rules that the Florida Department of Environmental Protection (DEP) is putting in place. Creating a separate grant procedure rule for state agencies will eliminate confusion and provide better service to the applicant.

The Coastal Partnership Initiative provides funds to local coastal governments, National Estuary Programs and National Estuarine Research Reserves. Changes to the existing rule (Rule 62S-4, FAC) will clarify and simplify the Coastal Partnership Initiative grant procedures and establish a new funding category. A new rule (Rule 62S-5, FAC) was created to house procedures for grants to state agencies and water management districts.

The FCMP is a federally authorized program that coordinates local, state and federal agency activities to ensure that Florida's coast is as valuable to future generations as it is today. Each year, the FCMP provides grants to local governments, state agencies and other eligible applicants to restore, protect and manage natural and cultural resources and to sustain waterfront communities. In fiscal year 2008–2009, more than $1.5 million was awarded to 21 recipients under this program.

"By revising the rules the grant application process will now be easier for applicants to understand," said Sally Mann, DEP's Director for Intergovernmental Program. "We are constantly striving not only to protect the environment but also to improve our programs and initiatives and this effort is a part of that mission. Streamlining the rules and procedures will be a big help in making this process easier for those applying under the Coastal Partnership Initiative grant program."

Grants funds for the Coastal Partnership Initiative can be used for a variety of projects in four specific categories: Resilient Communities, Coastal Resource Stewardship, Access to Coastal Resources and Working Waterfronts. Examples of previous Coastal Partnership Initiative projects include dune walkovers, boardwalks, canoe launches and restoration of native species.

An informational brochure about the revised Coastal Partnership Initiative rule procedures will be mailed in April 2009 to all eligible local governments in the 35 coastal counties, the National Estuary Programs and National Estuarine Research Reserves. The brochure will be posted on the FCMP Web site at http://www.dep.state.fl.us/cmp/grants/index.htm.

To ensure that potential Coastal Partnership Initiative applicants have an opportunity to discuss or clarify the new rule procedures, the FCMP will hold an informational teleconference in May 2009 in preparation for the fall 2009 application cycle. The specific date, time and phone number of the teleconference will be posted at the same Web site page in April.

Coastal Partnership Initiative awards are limited to no more than $60,000 and no less than $20,000. Applications are accepted once a year in response to a Notice of Availability of Funds published in the August-September time frame.

For more information on the FCMP's grant programs or the rule changes, please contact FCMP staff at (850)245-2161, or visit the FCMP grants Web site at http://www.dep.state.fl.us/cmp/grants/index.htm. The specific changes to Rule 62S-4, and new Rule 62S-5, are shown and summarized in the notices dated September 19, 2008, posted at the following address: http://www.dep.state.fl.us/cmp/public_notices.htm More information on FCMP activities and grant programs is available at: http://www.dep.state.fl.us/cmp

Florida FWC Lauds Sea Turtle Protection Proposal

Sea turtles in the Gulf of Mexico may get more protection, thanks to a vote by a federal fisheries management agency. On Thursday the Gulf of Mexico Fishery Management Council recommended emergency action to prohibit the use of a type of fishing gear that incidentally catches sea turtles in their offshore habitat on the west Florida shelf of the eastern Gulf.

The Florida Fish and Wildlife Conservation Commission (FWC) supported Thursday's vote by the Council to ask the National Oceanic and Atmospheric Administration's Fisheries Service to implement a temporary emergency rule prohibiting bottom longline reef fishing in waters less than 50 fathoms (300 feet deep) for the entire eastern Gulf of Mexico.

"We are extremely pleased with and supportive of the Gulf council's proposal to reduce sea turtle injury and mortality associated with this fishing activity," said FWC Chairman Rodney Barreto.

A 2006-2007 NOAA Fisheries Service report indicates the number of threatened loggerhead sea turtles that have been caught in the bottom longline fishery has exceeded authorized levels. The temporary emergency rule restricting the use of longline gear in Gulf waters off Florida where sea turtles are found would reduce the fishing impacts on this threatened species until the Gulf fishery council can further develop a reef fish plan amendment that will address the issue in the long term.

If the NOAA Fisheries Service implements the Gulf council's proposed emergency rule, it would be in effect for 180 days, and it could be extended for an additional 186 days.

Great Florida Birding Trail "signs" on in Panhandle

"That's awesome," said Debbie Hampton, 9, of Girl Scout Troop 854 from Tallahassee, after viewing a bald eagle through a telescope at St. Marks National Wildlife Refuge on Saturday. Debbie and five other members of her troop had come to the refuge for a sign-dedication ceremony to celebrate the installation of the Great Florida Birding Trail road signs erected across the Panhandle during December and January. Afterwards, birding experts from the Florida Fish and Wildlife Conservation Commission (FWC) led the girls and other birding enthusiasts on a wagon ride through the hiking trails in the refuge.

The tour made it clear why the St. Marks National Wildlife Refuge was chosen as one of the sites for the Great Florida Birding Trail. During the two-hour ride, 44 species of birds were spotted, including a bald eagle and a clapper rail hiding in the reeds of the marsh. Several species of heron and ibis, along with green-winged and blue-winged teals, were seen. The girls were excited to see ospreys flying overhead, since many of them had voted to make the osprey the new state bird.

The Florida Panhandle offers outstanding birding experiences and fewer crowds, with sought-after species such as the red-cockaded woodpecker, swallow-tailed and Mississippi kites, snowy plover, Swainson's warbler, Sprague's pipit and a remarkable diversity of winter visitors (including hummingbirds) not typically found in the peninsula. The Panhandle's coastline is an important migration corridor for waterfowl, shorebirds, songbirds and birds of prey, as the Girl Scouts from Tallahassee discovered on their first birding tour.

Officials with the FWC, which oversees the birding trail, commemorated the day by thanking the many individuals who have made the trail the success it is today. Attending the sign-dedication ceremony prior to the tour was Wakulla County Commissioner George Green.

"I feel honored to be here today," Green said. "We're very happy to be a partner in this project and promise to help the Great Florida Birding Trail in any way we can."

Mark Kiser, who oversees the Great Florida Birding Trail for the FWC, emphasized the importance of the partners who help make the trail possible. The U.S. Fish and Wildlife Service runs the refuge, and David Moody, refuge ranger, spoke about the importance of providing great birding sites.
"Birding folks are a dedicated bunch, and they travel and enjoy this part of the state," he said. "The refuge provides lots of opportunities to see wading birds, raptors and migratory birds, and we appreciate the partnership we have with the FWC."

Kiser also noted that Audubon of Florida played an important role in the creation of the Great Florida Birding Trail. He introduced a former employee of the FWC who helped bring the trail to fruition. Julie Wraithmell now works for Audubon of Florida as the wildlife policy coordinator, where she continues to be a strong supporter of the trail.

"I thank the FWC for its commitment to wildlife viewers," Wraithmell said. "There's a strong resiliency of wildlife viewing dollars, especially in rural communities. Unlike other popular destinations in Florida, this place is different every time I visit. In the winter, there are bald eagle nests, and in the spring, swallow-tailed kites feed over the refuge."

Jerrie Lindsey, director of the FWC's Office of Recreation Services, spoke about the economic benefits of wildlife viewing, noting that Wakulla County is home to seven sites on the Great Florida Birding Trail.

"Birding is big business in Florida, and the Great Florida Birding Trail is an integral part of the Sunshine State's $5.2 billion wildlife viewing industry," Lindsey said. "More people travel to Florida to see wildlife than to any other state."

The Great Florida Birding Trail is a conservation program initiated by the FWC to support the rapidly expanding activity of bird watching. More than 485 exceptional sites throughout Florida have been chosen, based on their quality, and compiled into trail guides representing four geographic regions. St. Marks National Wildlife Refuge, one of the Panhandle's gateway sites, along with the Big Lagoon State Park in Pensacola, provides extensive trail-related resources, with loaner optics available on site. They also act as hubs of regional birding information. Field guides in both English and Spanish are provided to enable visitors to identify which birds they are viewing. Additional materials for beginning bird watchers also are available at each gateway site.

The girls of Girl Scout Troop 854 will not soon forget the cold winter day they rode on a wagon to view some of the most beautiful birds in the world. The tour was just one of the activities associated with earning the Girl Scouts' "Your Outdoor Surroundings" badge, and becoming life-long wildlife viewers is one of the rewards. To find out more about the Great Florida Birding Trail and to access maps for all four regions in Florida, go to www.FloridaBirdingTrail.com.

FWC Releases Preliminary 2008 Manatee Mortality Data

Biologists with the Florida Fish and Wildlife Conservation Commission's (FWC) Fish and Wildlife Research Institute documented 337 manatee carcasses in state waters in 2008. The low number of red tide-related mortalities last year helped the number of documented manatee deaths remain below the five-year average of 357.

Watercraft strikes and perinatal (newborn) deaths were the two most commonly documented manatee mortality categories in 2008. The numbers for both categories were above the five-year average. Biologists documented 90 watercraft-related deaths and a record high of 101 newborn deaths. Biologists report that a variety of factors could have contributed to the high number of newborn deaths in 2008. These factors include the possibility that there were more manatee births or that biologists recovered a higher proportion of manatee calf carcasses.

The FWC uses trends in mortality figures to monitor ongoing and emerging threats to the manatee population. Throughout the year, FWC researchers, managers and law enforcement staff work closely together to evaluate mortality data and identify necessary actions. FWC law enforcement, in cooperation with partner agencies, uses knowledge of local boating habits, well-posted speed zones, and up-to-date manatee information to focus on-the-water enforcement operations. Enforcing manatee protection zones and informing boaters about manatee conservation is a priority for the FWC.

To report a dead or injured manatee, call the FWC Wildlife Alert hotline at 888-404-FWCC. For additional information about manatee conservation, visit MyFWC.com/manatee. For more information on manatee mortality research, visit http://research.MyFWC.com/manatees.

Florida Bay Nutrients Not to Blame for Florida Keys Reef Losses

Like many coral reefs around the world, the reefs of the Florida Keys National Marine Sanctuary are in trouble. Scientists do not know why coral cover in the sanctuary is declining, but they have some ideas. One common line of speculation posits that anthropogenic nutrient loads coming from Florida Bay through the many tidal passes between the Keys are to blame. Data to evaluate this suggestion have been lacking, but a recent study examined nutrient flux to the Sanctuary through Long Key Channel, one of the largest perforations in the Keys island chain. Although there was a net export of nutrients from Florida Bay to the reefs through the channel (approximately 3,850 tons of nitrogen per year and 63 tons of phosphorus per year), the concentration of nutrients flowing out of the bay is essentially the same as that going in, implying that no significant nutrient enrichment is occurring in the sanctuary's waters in the vicinity of Long Key Channel. Larger-scale nutrient budgets indicate that offshore inputs of nutrients dwarf those that come from Florida Bay.

So, the mystery remains: what is killing corals in the Florida Keys National Marine Sanctuary? These results indicate that a more detailed nutrient loading model can, and should, be constructed for this area to help understand its complex nutrient dynamics and answer this question.

Source: Gibson, P. J., J. N. Boyer, and N. P. Smith. 2008. Nutrient mass flux between Florida Bay and the Florida Keys National Marine Sanctuary. Estuaries and Coasts 31(1): 21-32. (View Abstract)

Governor Bobby Jindal Announces Plan to Restore 2,500 Acres of Coastal Marsh in Southwest Louisiana

LAKE CHARLES - Tuesday, Governor Bobby Jindal announced that Louisiana's Coastal Protection and Restoration Authority (CPRA) is signing a cooperative agreement with Ducks Unlimited, a leading conservation organization, to restore and protect nearly 2,500 acres of coastal marshland in Southwest Louisiana. A combined $3.26 million in state funds, federal grant money and private donations will be used to construct 250,000 linear feet of marsh terraces in areas that were once healthy marsh, but have become open water due to the effects of saltwater intrusion and wave action, largely from Hurricanes Rita and Ike.

Governor Jindal said, "This project shows what we can accomplish when we work hand-in-hand with private organizations who share our mission of rebuilding coastal wetlands and our essential natural habitats - while helping to better-protect our people from future storms. We will continue to work closely with local communities to address their needs for protection while also working side by side with conservation organizations including Ducks Unlimited to ensure the sustainability of our coastal ecosystems."

Ducks Unlimited received a $1 million grant from the federal government through the North American Wetland Conservation Act and CPRA is allocating $2 million from the coastal protection and restoration fund. The balance of the $3.26 million total is made up of private donations.

The funds will be used to construct marsh terraces - long, narrow ridges - which will limit saltwater intrusion, break up waves that can cause additional coastal erosion, improve water quality and spur plant growth. The project will also restore and protect the natural habitat for the nation's waterfowl that fly to Louisiana each winter. Louisiana's coastal marshes host up to 10 million of the nation's wintering waterfowl every year.

Governor Jindal was joined by CPRA Chairman Garret Graves and Ducks Unlimited Executive Vice President Don Young - who both signed the agreement authorizing the release of state restoration funds and making state coastal scientists, engineers and equipment available to build the project.

The state's Coastal Protection and Restoration Master Plan not only aims to restore wetlands and protect communities, but also preserve and protect the cultural heritage and wildlife that make our coast so important and unique," said CPRA Chairman Graves. "A project like this one, in which the state works with a conservation organization like Ducks Unlimited to provide better protection, better habitat for waterfowl and to preserve the resources that make our state such a tremendous place to hunt and fish are exactly the kind of projects we will be building."

Ducks Unlimited Executive Vice President Don Young added, "Today's agreement with the State of Louisiana represents yet one more tangible example of Ducks Unlimited's commitment to protecting this vital coastline for wildlife and people. Conservation of the Gulf Coast's wetlands is one of the key priorities of Ducks Unlimited's continent-wide Wetlands for Tomorrow Campaign. This noteworthy undertaking will protect vital energy and social infrastructure as well as the wildlife and recreational opportunities the coast of Louisiana is so well known for. We thank Governor Jindal for his strong leadership in making this project a reality."

Ducks Unlimited is the largest waterfowl conservation organization in the world, with close to 700,000 members in the U.S. and nearly 17,000 in Louisiana. One of the top priorities of Ducks Unlimited is to preserve essential habitat for ducks and geese.

CPRA Releases Draft 2010 Annual Plan

BATON ROUGE -- The Louisiana Coastal Protection and Restoration Authority, on Tuesday, released a draft of the "Fiscal Year 2010 Annual Plan: Integrated Ecosystem Restoration and Hurricane Protection in Coastal Louisiana". The draft plan identifies a host of coastal restoration and hurricane protection projects that will receive funding during the 2010 - 2012 fiscal years from a variety of state and federal funding sources. All projects identified in the draft plan are integral components of Louisiana's overarching Comprehensive Master Plan for a Sustainable Coast which was approved by the state legislature in 2007. The draft 2010 annual plan can be viewed on the CPRA website at http://www.lacpra.org/draftannualplan2010 .

Comments can be sent by mail to the Louisiana Office of Coastal Protection and Restoration, attention Karim Belhadjali, P.O. Box 44027, Baton Rouge, LA. 70804-4027. Comments will also be accepted by phone at (225) 342-4123 and by email at info@lacpra.org. The last day to submit public comments is March 27, 2009. All public comments will be considered before the writing and submission of a final plan for approval by the CPRA in advance of the 2009 legislative regular session which is scheduled to begin April 27, 2009. Once approved by the CPRA, the fiscal year 2010 Annual Plan will then be submitted for approval by the legislature. For more information about the CPRA's Fiscal Year 2010 Annual Plan and Louisiana's ongoing coastal protection and restoration efforts, please contact Chris Macaluso by email at chris.macaluso@la.gov.

Governor Jindal Announces Agreement for Largest State-Local Beneficial Use of Dredge Material To Rebuild Wetlands

LAKE CHARLES - Today, Governor Bobby Jindal announced that the state, the Port of Lake Charles and Calcasieu Parish signed an agreement to begin the largest state-local beneficial use of dredge material project in Louisiana to rebuild wetlands in Southwest Louisiana. The state is dedicating nearly $20 million from the Coastal Protection and Restoration Fund to projects that will build an estimated 670 acres of marsh in Southwest Louisiana using sediment dredged from the Calcasieu Ship Channel.

Governor Jindal said, "Today we are taking another critical step to rebuild our coast and protect our people and our infrastructure. This river sediment is the same material that built our river delta and our state. It's a vital resource that could reduce the rate of loss in our state. Using this dredge material is one of the fastest and most economical ways to restore our coastal wetlands."

In 2008, Congress passed an emergency appropriations bill that included $49 million to dredge the Calcasieu River to ensure access to the Port of Lake Charles. Under the agreement signed today, instead of disposing the material removed from the river in the Gulf of Mexico, it will be used to create approximately 440 acres in the Black Lake Marsh and 227 acres of marsh on the Sabine National Wildlife Refuge for a total of 670 acres of marsh.

The state is allocating approximately $15.5 million - including Surplus funds from 2007 and 2008 and Coastal Impact Assistance Program (CIAP) funds - for the Black Lake Marsh Project. The second site is in the Sabine National Wildlife Refuge where 227 acres will be created using $3.8 million in only state dollars from the 2007 surplus.

"The commitment of these funds is part of an overall effort by the state of Louisiana to complete projects across our coast that will use sediments taken out of our rivers, channels and canals to rebuild our coastal marshes," said Coastal Protection and Restoration Chairman Garret Graves. "The sediments removed from our rivers and channels are the greatest resource we have to rebuild land in this state and it's time to start using them wisely rather than dumping them in deep waters off our coast where they do no good."

With today's announcement of nearly $20 million for coastal restoration efforts, the state now has almost $200 million in ongoing coastal restoration and protection projects in Southwest Louisiana. For more information about Louisiana's ongoing coastal restoration and hurricane protection efforts, please contact Chris Macaluso at 225-342-3968 or by email at chris.macaluso@la.gov.

Water Quality Project Set for Tchefuncte River Area

BATON ROUGE – The Louisiana Department of Environmental Quality is conducting a water quality project along the Tchefuncte River and its tributaries. The project is part of an effort to inventory all wastewater discharges in the Lake Pontchartrain Basin. Staff from DEQ will be going throughout the basin to inspect area businesses for water discharges. The department has conducted inventories in other watersheds and has found many discharges are unpermitted. These discharges can lead to pollution in the state's waters. This project is an effort to gather discharge data to use when issuing future water discharge permits, to get non-permitted facilities into compliance with environmental regulations and to have complete information on all discharge points in the area. For this project, DEQ has added workshops to assist businesses with filling out permit applications for sanitary wastewater permits. Staff members from DEQ and the Lake Pontchartrain Basin Foundation

are scheduled to be on hand on Feb. 17 and Feb. 26 to provide assistance. There are two sessions on each day, with first scheduled at 3 p.m. and the second at 6 p.m. The workshops will take place at the St. Tammany Council Chambers, 21490 Koop Dr., in Mandeville. “By the time we finish this watershed we will have much better knowledge about pollution sources, how to police these sources and how to permit them as well,” said Chris Piehler, DEQ's project manager. “The goal is to get people into compliance so we can better protect human health and the environment. We’re not out here to issue a bunch of fines and enforcement actions. That’s why it’s important to have the Small Business Assistance group, the Lake Pontchartrain Basin Foundation and others involved. We’re pooling our resources in an effort to improve the state’s environment, which has many positives over the long haul.”

MMS Awards $10.6 Million to Louisiana for Coastal Restoration

Louisiana receives grant for Grand Lake Shoreline Protection

NEW ORLEANS – The Minerals Management Service (MMS) has awarded a $10.6 million grant to the State of Louisiana through the Coastal Impact Assistance Program (CIAP) for the Grand Lake Shoreline Protection project. The grant will be used to construct approximately 37,800 linear feet of rock breakwater to halt erosion on the south shore of Grand Lake, located in the Mermentau Basin in Cameron Parish, Louisiana. The breakwater will be between the mouth of Superior Canal on the east and Tebo Point on the west, approximately 35 miles southeast of Lake Charles, Louisiana.

“MMS is proud to partner with Louisiana’s in its coastal restoration efforts,” said MMS Acting Director Walter Cruickshank. “Through the Coastal Impact Assistance Program, MMS is able to support our state partners with coastal restoration projects like the Grand Lake Shoreline Protection project.”

Shoreline erosion rates in the Grand Lake area can be as high as 32 feet per year. However, this project should halt shoreline retreat and its adverse impacts on adjacent fresh marsh. The MMS grant is for final engineering and construction of the Grand Lake project, which is scheduled to be completed in about a year. “Providing better protection to the people and the wetlands in Southwest Louisiana is a top priority,” said Louisiana Coastal Protection and Restoration Authority Chairman Garret Graves. “We have indentified key projects like this one in Grand Lake and others across Coastal Louisiana that will be constructed using CIAP funds, and we will work tirelessly to put these funds to use as quickly as possible.”

This project was included in Louisiana’s final CIAP plan approved by MMS in November, 2007. The Grand Lake Shoreline Protection Project is one of many onshore coastal restoration projects that the CIAP has funded for the purpose of conservation, protection, and restoration of Louisiana coastal areas and wetlands. The CIAP was created by the Energy Policy Act of 2005 and provides $250 million annually, from 2007-2010, to six eligible Outer Continental Shelf 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.

LUMCON Host Teacher Water Quality Workshop

Aboard LUMCON' R/V Acadiana teachers return from their field trip to test water quality in Terrebonne Parish.

Teachers from throughout Louisiana spent the weekend of January 23, 2009 learning about water quality at the Louisiana Universities Marine Corsortium (LUMCON). After a tour of the W. J. DeFelice Marine Center, LUMCON Marine Educator Murt Conover introduced the 20 teachers to LUMCON's Bayouside Classroom program.

Other programs introduced included the Barataria-Terrebonne National Estuary Program (BTNEP) by Sandra Helmuth, the Louisiana State University (LSU) Coastal Roots Program by LSU's Dr. Pam Blanchard and the LSU Sea Grant by Dianne Lindstedt. Other presenters included LUMCON Librarian John Conover and Andrew Barron of BTNEP.

On Saturday, the teachers participated in hands-on sampling techniques aboard LUMCON's R/V Acadiana. The workshop ended on Sunday with presentations by the teachers followed by group discussions. Libra Lindon of Patterson, LA teaches 7th grade Life Science at B. Edward Boudreaux School in Baldwin said that since her school cannot take trips like many others, she plans to start a Science Club at the school and get the club to visit LUMCON and attend the Bayouside Classroom classes. "I learned on this trip to make science a fun memory and I hope that I will inspire my students for their future and the future of our world," Lindon said.

Marine Center Adds Faculty in Geological and Biological Oceanography

Cocodrie-The Louisiana Universities Marine Consortium (LUMCON) announces the addition of two new assistant professors, Alexander Kolker and Geoffrey Sinclair. Both bring to LUMCON their distinct scientific backgrounds. Kolker from the Department of Earth and Environmental Sciences at Tulane University's School of Science and Engineering brings his expertise in coastal sediment dynamics and wetland processes. Sinclair from the Department of Marine, Earth and Atmospheric Sciences at North Carolina State University (NCSU) is a specialist in the ecology of phytoplankton and toxic dinoflagellates.

Alexander Kolker received his Ph.D. in Marine and Atmospheric Sciences at the State University of New York, Stony Brook University and studied the influences of humans and climate on the coastal wetlands surrounding Long Island, NY. While at Stony Brook, he helped to develop research strategies to monitor salt marsh restoration to help government officials, academic peers and scientific advisory boards achieve their management goals. As a Scientist in Residence there, he investigated the marsh loss of Jamaica Bay, New York and advised the National Park Service on the salt marsh loss. Kolker has also studied the sedimentary geology of the Bohai Sea, China. Kolker worked under Dr. Mead A. Allison at Tulane University as a Postdoctoral Associate, then was promoted to the research faculty where he examined the

Mississippi River Delta geology, focusing on subsidence, compaction and sediment deposition. “It is the geological processes in south Louisiana that I want to investigate,” Kolker said.

Geoffrey Sinclair, phytoplankton ecologist conducted his M.S. research on environmental and behavioral influences on the uptake of nitrate by the harmful and toxic dinoflagellate, Karenia brevis, that occurs in inshore waters. His doctoral research focused on the implications of the physiological and behavioral ecology of the toxic dinoflagellate on red tide outbreaks. He has already sailed twice on LUMCON's R/V Pelican to study the unique benthic (bottom) habitat as a refuge for life stages of the red-tide forming Karenia. Sinclair’s extensive research has led to publications in the Journal of Phytoplankton Research, The African Journal of Marine Science, Harmful Algae and the Journal of Phycology.

Sinclair's travel scholarships have assisted attendance at Harmful Algal Bloom meetings at Woods Hole, MA and Cape Town, South Africa. He says that as a new assistant professor he looks forward to collaborating on projects with LUMCON and other scientists in the estuarine and coastal waters of the Gulf of Mexico. Dr. Sinclair served in the U.S. Peace Corps in the Republic of Benin before starting on his academic career.

Public Meeting to Be Held Concerning Evaluation of Mississippi’s Coastal Zone Management Program

BILOXI, Miss. – A public meeting will be held as part of the federal performance evaluation of Mississippi’s Coastal Zone Management Program. The public meeting is scheduled for Monday, March 16, 2009, at 6 p.m. in Room 205 at the Bolton State Office Building, 1141 Bayview Ave., Biloxi. The purpose of the meeting is to receive public comments regarding the state’s operation and implementation of Mississippi’s Coastal Zone Management Program. Written comments also will be accepted, and participation at the public meeting is not required for submission.

Written comments should be sent to Carrie Hall, NOAA/NOS/OCRM, 1305 East-West Highway, N/ORM7, Silver Spring, MD 20910 or via e-mail to carrie.hall@noaa.gov, no later than April 3, 2009. For more information, please contact Jan Boyd at (228) 374-5000 or e-mail at jan.boyd@dmr.ms.gov, or Carrie Hall at (301) 563-1135 or e-mail at carrie.hall@noaa.gov.

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

Louisiana, Mississippi Coastal Programs Hold Joint Strategies Workshop

OCRM Coastal Programs Division staff participated in a Coastal Strategies Workshop between the Louisiana and Mississippi Coastal Management Programs on January 27 and 28. The workshop was an opportunity to share information about how the programs are organized, their core responsibilities and functions, and their challenges and successes. As a result of the meeting, Mississippi is considering pursuing an electronic permit application system modeled after the system Louisiana developed. The USACE Mobile District also attended the workshop to discuss the benefits of having staff located in the

same building as the Mississippi coastal program staff. Based on the success of this working relationship, Louisiana is looking to institute a similar arrangement with the USACE New Orleans District. At the end of the workshop, the programs agreed to continue these exchanges and to consider holding similar meetings with other Gulf programs. *Contac:* carleigh.trappe@noaa.gov.

Mississippi's Katrina Recovery Progress In 2008

BILOXI, Miss. -- As Mississippians settle into a new year, the Federal Emergency Management Agency (FEMA) and Mississippi Emergency Management Agency (MEMA) recognize the many accomplishments that were made in 2008 as the state continues its recovery from Hurricane Katrina.

"In the last year, the state of Mississippi made great strides in the recovery process," said Alec Watson, acting director of FEMA's Mississippi Transitional Recovery Office (TRO). "It's a tribute to the dedication of the state, local communities and individual Mississippians as we all work together to rebuild south Mississippi."

Thousands of residents were able to transition out of disaster housing and into permanent housing. Millions of dollars have been obligated to the public school districts. Communities are steadily rebuilding stronger and safer than before.

"These accomplishments are the result of tremendous perseverance from the people of South Mississippi and the desire of the rest of the state to help them not only recover, but have a bright future," said MEMA Director Mike Womack. For more information: http://www.fema.gov/news/newsrelease.fema?id=47325.

Gov. Barbour Announces $60 Million in New Hancock County 'Ground Zero' Projects

Governor Haley Barbour said today an additional $60 million has been awarded for Hurricane Katrina recovery projects in Hancock County. The projects compose the second round of funding in the total $200 million 'Ground Zero' Program, which applies specifically in Hancock County, where some of Hurricane Katrina's most serious damage occurred. A total of $145 million in Ground Zero funding has been designated for Hancock County projects so far.

"The Ground Zero program is meeting unique recovery needs in Hancock County through projects identified, prioritized and submitted by the county government and the cities of Waveland and Bay St. Louis," Governor Barbour said. "Local people requested these projects to help restore the county's public services and make the local economy whole again."

The Ground Zero Program is funded through Mississippi's $5.4 billion federally-appropriated Hurricane Katrina recovery package. The package is composed of Community Development Block Grants (CDBG), which are administered through the federal Department of Housing and Urban Development (HUD) and the Mississippi Development Authority (MDA). All awarded projects have passed HUD's CDBG eligibility requirements.

HUD approved MDA's Ground Zero initiative last summer, paving the way for Hancock County's local leaders to determine local needs and submit proposals to MDA for Ground Zero funding in late 2008. MDA continues to process Ground Zero project applications submitted by Hancock County officials, with additional award rounds anticipated soon.

Today's awards are as follows:

- $1,359,863 - Boys & Girls Club, Bay St. Louis
- $1,000,000 - Athletic Complex Improvements, Bay St. Louis
- $762,549 - Elevated Water Storage Tank Improvements, Bay St. Louis
- $1,395,520 - Historic City Hall Restoration, Bay St. Louis
- $3,000,000 - Longfellow Dr. Improvements, Bay St. Louis
- $264,000 - Annexation Area Drainage System Master Plan, Bay St. Louis
- $1,195,520 - Historic Depot Bldg. Improvements, Hancock County
- $35,000,000 - Highway 603 Expansion, Hancock County
- $349,347 - Clermont Harbor Pier Repair/Improvements, Hancock County
- $1,000,000 - Fire Equipment Replacement as Needed, Hancock County
- $1,300,000 - Hancock East Library, Hancock County
- $2,000,000 - Longfellow Civic Center, Hancock County
- $300,000 - Farmers Market, Waveland
- $2,868,515 - Sanitary Sewer System Improvements West Waveland, Waveland
- $5,000,000 - Municipal Pier, Lighthouse & Harbor Complex, Waveland
- $3,000,000 - Community Center, Waveland

Total Awarded this Phase: $59,795,314

State Officials Share Recovery Ideas with Texas

AUSTIN, Texas -- If you're going through a struggle, sometimes the best thing you can do is find someone who has been through it before, someone who knows the ropes on what works and what doesn't. That was the idea behind a video teleconference (VTC) held this month by the Federal Emergency Management Agency's (FEMA) section dedicated to coordinating interagency resources for community recovery. The VTC brought together officials from four states to share experiences with officials from Southeast Texas who are coping with the devastation of Hurricane Ike.

The "Recovery Mentor Meeting" featured disaster recovery representatives from Pascagoula, Miss.; Windsor, Colo.; Punta Gorda, Fla; and Des Moines, Iowa. All described the major impact that disasters had on their communities and actions that have been taken to rebuild those communities.

Listening closely were officials from Chambers and Jefferson counties. The message they heard was clear: Get government, the private sector, community organizations and citizens together and use the disaster as a chance to make the community better.

Charlotte County, FL, suffered widespread, crippling damage during 2004 as Hurricane Charley blasted through the county and the city of Punta Gorda with sustained winds greater than 145 mph. Many public buildings, homes and business were destroyed. FEMA Community Recovery helped to coordinate the affected agencies' responses, said Charlotte County Housing Manager Bob Hebert, who was director of community recovery for Charlotte County after the hurricane hit. "At some time, the local community has to understand that FEMA will go away," Hebert said. But he added that FEMA "brought resources to bear that we would have never been able to put together in a hurry."

Punta Gorda Mayor Larry Friedman, a private citizen at the time, said the reason for the community's success in recovery was planning that involved the entire community and its citizens. A citizen group called Team Punta Gorda held public meetings and developed a citizen master plan, separate but aligned

with Charlotte County's recovery plan, outlining a vision of what the residents wanted the city to become and how to make it happen. The private sector became involved and raised $250,000 to expedite the process and put the plan on paper.

"We wanted better than what we had," said Roger Peterson, president of Team Punta Gorda. He added that one of the lessons learned was to "focus on one geography and a couple of key projects in order to show the world that progress is being made and there is light at the end of the tunnel."

Others disaster community representatives encouraged Texans to take the opportunity of the disaster and the increased flow of grant funds to do things that probably wouldn't be feasible at any other time. "This is the opportunity you have to do something special," said Kelly Arnold, town manager of Windsor, Colo., where a May 2008 tornado did major damage to residences. "You've got to take that optimistic viewpoint." Arnold and others advised setting aside biases toward agencies or communities and recommended coming together regionally to increase influence in obtaining resources for recovery.

Kay Kell, current city manager for Pascagoula, Miss., which suffered from Hurricane Katrina in 2005, said that, initially, she disliked going to partnership meetings. Later, she realized that the "best thing was the partnerships and getting people together." Now, governments and communities are doing things for each other they never would have done before, she indicated. Kell said Pascagoula didn't have the money to hire consultants, but discovered that many free resources were available from universities and from cities outside the disaster area. The International City/County Management Association provided a retired city manager who worked side by side with her in the recovery, she said.

Susan Dixon, long-term recovery manager for Rebuild Iowa, established by Gov. Chet Culver after the floods, tornadoes and severe weather of 2008, said the key to recovery is "trying to find what is right for that community." Buyouts are only one tool that is available, she said.

All participants from previous disasters stressed the importance of public participation. Dixon observed it was "very beneficial to listen to the public and understand that they needed to be heard." Kell cited frustration among the residents with the time the recovery takes, but taking positive steps helped. At one point the city decided to demolish any damaged home the owners agreed to have removed. "The city thought it could never recover as long as it had the homes still standing there," Kell said. She said it avoided "the depression every day of getting up and looking at a war zone."

The VTC originated from FEMA's Joint Field Office in Austin, where the disaster recovery is being coordinated, and linked FEMA's Area Field Offices in Webster, Beaumont and Galveston. Chambers and Jefferson officials participated from the Beaumont site. FEMA coordinates the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, including acts of terror.

Gavleston Judge's Ruling Could Halt Seawall Beach Project

State District Judge Susan Criss' controversial ruling clouds Texas' Open Beaches Law

AUSTIN — Efforts to shore up the Galveston Seawall could grind to a halt if a ruling by state District Judge Susan Criss goes unchallenged. Criss ruled Thursday that much of Galveston's beaches are in fact privately owned and not under jurisdiction of the state. Criss' ruling could endanger numerous state beach stewardship efforts, the most important being the $10 million Land Office emergency project to reinforce the Galveston Seawall.

The ruling was issued in a case involving the Porretto family, which has been fighting with the state over beach ownership. “Does Judge Criss’ ruling mean the beaches in Galveston are no longer public?” Patterson asked. “Our lawyers are obviously going to respond.”

Under Criss’s ruling, the Land Office could not legally renourish the beaches east of 57th Street because state money cannot be spent to improve private property. Patterson reiterated that while the state cannot fund a project to improve a private beach, he has no plans to stop the Galveston beach renourishment project. “The sand trucks are rolling,” Patterson said. “I will continue to do what’s right for Galveston regardless of this ruling. I challenge Judge Criss to stop the project, because I won’t.”

Land Office attorneys are working with the Attorney General’s office to prepare a response. Patterson stated the primary goal is to ensure the public’s right to access Galveston’s beaches and continue the renourishment project — a top priority in the recovery from Hurricane Ike. Hurricane Ike’s storm surge devastated Galveston, and in some places threatened to undermine the timber underpinnings of older sections of the Galveston Seawall. The emergency beach project, which will stretch from 61st Street to 10th Street, aims to protect the future stability of the historic seawall.

Patterson said the seawall project will protect hundreds of millions of dollars worth of public infrastructure, from roads, water and sewer systems, to the homes and businesses that make up the Galveston tax base. For nearly four weeks now, trucks have been hauling what was expected to be as much as 400,000 cubic yards of sand onto Galveston beaches.

Fifth Annual Winter Beach Clean Up

Patterson calls for volunteers

AUSTIN — The Fifth Annual Winter Beach Cleanup will be held Friday, February 20th and Saturday, February 21 announced Jerry Patterson, Commissioner of the Texas General Land Office. The cleanups will take place at several locations along the Texas shoreline. “The volunteers who help out with the Adopt-A-Beach Winter Clean Up are a dedicated lot,” Patterson said. “We can’t promise warm weather but we can promise a warm feeling of satisfaction knowing that you’ve helped keep the Texas coast beautiful.”

The Winter Beach Cleanup is one of three all-volunteer seasonal cleanups coordinated through the Adopt-ABeach Program of the Texas General Land Office. Registration will begin at 8:30 a.m. The beach cleanups will be from 9 a.m. to noon.

Each year, Texas’ beaches receive large amounts of marine debris due to a convergence of currents in the Gulf of Mexico. Since 1986, more than 374,000 Adopt-A-Beach volunteers have picked up more than 7,100 tons of this debris, some of it originating as far away as Greece. Volunteers record data on the trash to learn more about the causes of marine debris and to help mitigate pollution along Texas’ 367 miles of coastline. The Texas General Land Office’s Adopt-A-Beach Program is funded primarily by private contributions. To help out, or for more information, call the General Land Office at 1-877-TXCOAST or visit our Web site at http://www.texasadoptabeach.org.

Who: Winter Texans
When: Friday, Feb. 20, 2009
8:30 a.m. to 9 a.m. – registration
9 a.m. to 11:30 a.m. – cleanup
Where: Edwin Atwood Park, Access 5, Highway 100

When: Saturday, February 21, 2009
8:30 a.m. to 9 a.m. – registration
9 a.m. to noon – cleanup
Where:

- Aransas Pass – Redfish Bay, Lighthouse Lakes Park, 4 miles east of Aransas Pass on Highway 361, contact Lois Huff 361-882-3439, lois.huff@texasadoptabeach.org
- Corpus Christi – Texas State Aquarium, 2710 N. Shoreline Blvd., contact Kristin Ralls 361-881-1321, kristin.ralls@texasadoptabeach.org
- Padre Island National Seashore – Malaquite Visitors Center, 20420 Park Rd. 22, contact Buzz Botts 361-949-8068, buzz.botts@texasadoptabeach.org

Patterson Proposes New Rules for Recovering From Coastal Disasters

Changes provide clarity, reliability for coastal residents after big storms

AUSTIN — Jerry Patterson, Commissioner of the Texas General Land Office, today proposed new rules to help coastal communities recover from the next big storm. "Hurricane Ike revealed some shortcomings in our beach and dune rules that actually made it harder for those suffering the most to recover from a storm," Patterson said. "After Ike, we issued temporary emergency rules to remedy those shortcomings. The proposed new rules will formalize those changes and make them effective for two years."

Patterson said the new rules would give property owners clarity and certainty when it comes to recovery measures allowed in the wake of a coastal disaster. The proposed changes, now posted in the Texas Register for public comment, will allow the Texas Land Commissioner to issue a disaster recovery order that will:

- Allow local governments to issue permits to property owners to start repairs to make their property habitable and prevent further damage — even if the structure is on the beach
- Allow the construction of clay core dunes to provide stability for restored dunes and to encourage dune restoration activities that provide better shoreline protection
- Allow the repair of enclosed spaces with breakaway or louvered walls at ground level for houses on the beach in order for residents to secure personal property in the wake of a storm
- Allow the repair of properties that make use of fibercrete to restore access for the disabled
- Authorizes dune restoration in an area no more than 30 feet seaward of the post-disaster landward boundary of the public beach to encourage dune restoration.
- Allow a local government to temporarily close beach access points damaged beyond repair or blocked by a shore protection project, so long as they notify the Land Office and provide a plan to re-open the access point no later than six months prior to the expiration of the disaster recovery order

A complete copy of the proposed new rules may be found on-line at www.glo.state.tx.us.
Patterson said the proposed changes evolved after listening to the needs of coastal communities still struggling to recover from Hurricane Ike.

"These new rules make it clear what coastal communities can do following a disaster like Hurricane Ike," Patterson said. "This will make it easier for property owners and businesses to repair and protect their investments."

MMS Approves Texas Coastal Impact Assistance Program Plan

Federal grants will help Texas restore and protect its shoreline environments

WASHINGTON, D.C. – Minerals Management Service Director Randall Luthi today signed the Texas Coastal Impact Assistance Program (CIAP) Plan, making available more than $48 million through Federal grants to the State and 18 counties to restore and protect their shoreline environments.

"The Minerals Management Service welcomes the opportunity to fund these vital projects for the State of Texas and 18 of its coastal counties," Luthi said. "Restoring and protecting natural coastal resources is fundamental to the CIAP mission."

Luthi joined Texas General Land Office Deputy Commissioner Jody Henneke in a signing ceremony at the Port of Corpus Christi, ten miles southwest of Pelican Island, a project site included in the plan. The state is now eligible to submit grant proposals for CIAP projects involving conservation, restoration, and protection of natural coastal resources.

Created by the Energy Policy Act of 2005, CIAP disburses $250 million annually for four years, 2007 – 2010, to six eligible Outer Continental Shelf oil and gas producing states – Texas, Louisiana, Mississippi, Alabama, Alaska, and California. The first phase allocated $48.6 million for each of the fiscal years 2007 and 2008, to Texas and 18 Coastal Political Subdivisions (counties). The plan submitted by Texas detailed projects that would be completed using the FY 2007 allocation.

CIAP funds are allocated to each producing state and eligible counties based upon allocation formulas prescribed by the Act. Each eligible State is allocated its share based on the State's Qualified Outer Continental Shelf Revenue (QOCSR) generated off its coast in proportion to total QOCSR generated off the coasts of all eligible States. Allocation for the first two years of the program was completed in April 2007; the second allocation for fiscal years 2009 and 2010 will be calculated in Spring 2009. The states and counties are eligible to receive the funds from the previous years as long as they have an approved CIAP plan. Texas became the third state to receive approval from MMS for its CIAP plan. Louisiana and Alaska both have approved plans.

MMS will post Texas' Grant Program Announcement on www.grants.gov today. The announcement provides instructions and guidance on the submittal process for CIAP grant applications. Funding is made available to the State and counties when the grants are awarded. Texas' plan contains 136 projects covering the first year of the program. Each project must comply with one of five authorized CIAP uses: 1) the conservation, protection, or restoration of coastal areas, including wetlands; 2) mitigation of damage to fish, wildlife, or natural resources; 3) planning assistance and the administrative costs of complying with CIAP legislation; 4) implementation of a federally-approved marine, coastal, or comprehensive conservation management plan; or 5) mitigation of the potential impact of offshore oil and gas activities through funding of onshore infrastructure and public service needs.

"We are confident these projects meet the requirements of the program to further the State's efforts to restore, enhance and protect its natural coastal resources," said Luthi. The allocation of the $48.6 million will be divided with 65 percent of the funding, $31.6 million, going to the State of Texas and 35 percent, $17 million, being split among the 18 coastal counties. See the table at http://www.gomr.mms.gov/homepg/whatsnew/newsreal/2009/090112.pdf for county distribution.

Texas the 'State of Flowing Water' Video Documentary

AUSTIN, Texas — The one-hour video documentary Texas the State of Flowing Water aired Thursday, Feb. 12 on all Public Broadcasting Service (PBS) stations in Texas. It is the fourth in an award-winning series of water resource documentaries produced by Texas Parks and Wildlife Department and broadcast in partnership with PBS stations.

Texas the State of Flowing Water examines water resource threats facing Texas and looks at what people can do to protect the state's most precious natural resource. The documentary features images of rivers, springs, bays and estuaries, plus interviews with a wide array of experts, stakeholders and policy makers. The documentary is made possible in part by a grant from the federal Sport Fish Restoration Program, which funds nearly $18 million in Texas conservation efforts each year from boater and angler purchases of fishing equipment and motorboat fuels. It is part of a multi-year TPWD communication initiative called "Texas: The State Of Water," supported this year with additional sponsor funding from the San Antonio River Authority, Brazos River Authority, the Texas Water Foundation and the Texas Parks and Wildlife Foundation.

The program explores human use of rivers and water resources in several ways, including the trend of off-channel storage reservoirs to meet future water demands. Impacts to the natural flow of rivers will be examined, including a profile of the Fastrill Reservoir project, which is proposed for the same area where a new national wildlife refuge is being created on the Neches River. It will look at recent legislation designed to determine the amounts of fresh water that should reach the coast to maintain healthy bays.

Climate change is a new topic explored in this latest TPWD documentary, which looks at how changing conditions could alter the ecology of Texas. It will also examine the importance of keeping Texas rivers flowing into coastal estuaries and bays. It will look at how increasing municipal demand has elevated the importance of water conservation measures. It explores the link between creek beds and aquifer recharge. It shows how more Texans are gaining an appreciation of our rivers and bays through the ever increasing number of designated paddling trails. The documentary includes a brief look at the trend of green building and how simple steps people can take can collectively do a lot to diminish future water shortages.

The one-hour TV program is part of a broader TPWD public information initiative begun with a special water resource issue of Texas Parks & Wildlife magazine in July 2002. The initiative also includes radio, Internet and other components. A companion website, Texas The State Of Water, features a preview of the documentary, links to additional information, and after the show airs, the complete program presented via streaming video and a complete written transcript.

PHOTOS for news media use showing Producer Lee Smith shooting video on the Neches River near the proposed Fastrill Reservoir location, river scientists sampling fish as part of instream flow studies, plus various images of Texas rivers and bays and people boating and swimming, are available as high resolution .jpg files on the State of Flowing Water news images download group on the TPWD Web site.

PBS TV stations based in Dallas, Houston, San Antonio, Lubbock, Amarillo, Corpus Christi, Midland-Odessa, Harlingen, Killeen, Waco and Austin aired the documentary Feb. 12. It can be viewed online at http://www.texasthestateofwater.org/.

Energy

MMS Seeks Comment on OCS Oil and Gas Leasing Program

The Department of the Interior, Minerals Management Service (MMS), announces a draft proposed five-year Outer Continental Shelf Oil and Gas Leasing Program for mid-2010 through 2015, which would succeed the current five-year program that will expire on June 30, 2012 (74 Fed. Reg. 3631, January 21). According to the notice, MMS will prepare an environmental impact statement (EIS) for the new five-year plan, pursuant to the National Environmental Policy Act (NEPA). Comments are due March 23. Contact: Renee Orr, MMS, (703) 787-1215.

To read the full announcement: http://edocket.access.gpo.gov/2009/E9-1062.htm and the draft proposal.

Other News

EPA Releases Report on Sea Level Rise

(Washington, D.C. – Jan. 16, 2009) The U.S. Environmental Protection Agency, in collaboration with other agencies, has released a report that discusses the impacts of sea level rise on the coast, coastal communities, and the habitats and species that depend on them. The report, Coastal Sensitivity to Sea-Level Rise: A Focus on the Mid-Atlantic Region, examines multiple opportunities for governments and coastal communities to plan for and adapt to rising sea levels.

Sea-level rise can affect coastal communities and habitats in a variety of different ways, including submerging low-lying lands, eroding beaches, converting wetlands to open water, intensifying coastal flooding, and increasing the salinity of estuaries and freshwater aquifers. It is caused by a number of natural and human-induced factors and can vary by region. Some impacts of sea-level rise can already be observed along the U.S. coast.

The primary causes of global sea-level rise are the expansion of ocean water due to warming and the melting of glaciers and ice sheets. Locally, sea-level rise is also influenced by changes to the geology of coastal land, making coastal elevation mapping an important area of future study. The Mid-Atlantic region, the focus of this report, is one of the areas in the U.S. that will likely see the greatest impacts due to rising waters, coastal storms, and a high concentration of population along the coastline.

EPA led the development of the report with significant contributions from the National Oceanic and Atmospheric Administration and the U.S. Geological Survey. The report is one of 21 climate change synthesis and assessment products commissioned by the U.S. Climate Change Science Program (CCSP). CCSP was established in 2002 to provide the U.S. with science-based knowledge to manage the risks and opportunities of change in the climate and related environmental systems. The program is responsible for coordinating and integrating the research of 13 federal agencies on climate and global change.

More information on the report: http://www.epa.gov/climatechange/effects/coastal/sap4-1.html.
Information on the U.S. Climate Change Science Program (CCSP): http://www.climatescience.gov/

Video Shows Green Practices to Manage Stormwater Runoff

(Washington, D.C. – Jan. 15, 2009) The U.S. Environmental Protection Agency and the U.S. Botanic Garden produced an on-line video, "Reduce Runoff: Slow It Down, Spread It Out, Soak It In," that highlights green techniques such as rain gardens, green roofs and rain barrels to help manage stormwater runoff.

The film showcases green techniques that are being used in urban areas to reduce the effects of stormwater runoff on the quality of downstream receiving waters. The goal is to mimic the natural way water moves through an area before development by using design techniques that infiltrate, evaporate, and reuse runoff close to its source.

The techniques are innovative stormwater management practices that manage urban stormwater runoff at its source, and are very effective at reducing the volume of stormwater runoff and capturing harmful pollutants. Using vegetated areas that capture runoff also improves air quality, mitigates the effects of urban heat islands and reduces a community's overall carbon footprint.

The video highlights green techniques on display in 2008 at the U.S. Botanic Garden's "One Planet – Ours!" Exhibit" and at the U.S. EPA in Washington, D.C., including recently completed cisterns.

To watch the video: http://www.epa.gov/nps/lid. More information on stormwater management: http://www.epa.gov/greeninfrastructure.

Year of Science 2009: EPA Joins Grassroots Effort to Celebrate Science

(Washington, D.C., Jan. 7, 2009) Science is an integral part of everything EPA does to protect human health and the environment. In setting health protective regulations, EPA must use scientific research on the health and ecological effects of pollutants. Therefore, EPA has joined with the Coalition on the Public Understanding of Science (COPUS) -- a grassroots network of more than 400 universities, scientific societies, and organizations -- to celebrate The Year of Science 2009. COPUS was established to engage the public in science by showcasing how science works, who scientists are, and why science matters in our communities and everyday lives.

"The Year of Science 2009 presents an ideal opportunity for EPA scientists to share their passion for the science of environmental protection with the public," said Kevin Teichman, deputy assistant administrator for science in EPA's Office of Research and Development. "We're looking forward to actively participating in the kick-off events and throughout the year to demonstrate how EPA puts science to work for the American people."

Throughout the year, EPA will be blogging, hosting activities, inviting public participation and providing special content on a new Web site. On the first Wednesday of each month EPA staff and grantees will highlight the COPUS theme of the month in EPA's science blog, Science Wednesday.The EPA Web site will complement the COPUS Year of Science Web site, which allows visitors to search for science events such as science festivals and science cafes in their communities, and provides access to scientific resources and educational materials.

More information on the EPA Year of Science: http://www.epa.gov/yearofscience
More information on COPUS and The Year of Science 2009: http://www.yearofscience2009.org

Celebrate American Wetlands Month 2009!

This May will mark the 19th anniversary of American Wetlands Month, a time when EPA and its partners in federal, state, tribal, local, non-profit, and private sector organizations celebrate the vital importance of wetlands to the Nation's ecological, economic, and social health. It is also a great opportunity to discover and teach others about the important role that wetlands play in our environment and the significant benefits they provide - improved water quality, increased water storage and supply, reduced flood and storm surge risk, and critical habitat for plants, fish, and wildlife.

In organizing its activities, EPA is placing special emphasis on encouraging Americans to:
Learn about wetlands. This is a great time to better understand what a wetland is, where wetlands can be found, and the importance of wetlands. Activities may include reading and studying about wetland areas, drawing maps or illustrations of wetlands, and identifying native species found in wetlands. Information on wetlands and the important benefits they provide is available on this website, through EPA's wetlands fact sheets series, or by visiting the websites of our partners.

Explore a wetland near you. Unless you live in the most extreme climate zones, there is a good chance a scenic wetland exists nearby for you to visit and explore during American Wetlands Month and throughout the year. To find a wetland near you, consult your local parks department, state natural resource agency, or the United States Fish and Wildlife Service. If you live in the Washington, DC area, a guide has been created to highlight wetlands and wildlife sanctuaries.

Take action to protect and restore wetlands. Support and promote wetlands informing community members about wetlands' vital roles, "adopting" a wetland, joining a local watershed group, or participating in a wetland monitoring, restoration, or cleanup project. There are many other actions Americans can take to help conserve wetlands. To learn more about what you can do to help protect and restore these valuable natural resources in your state or local area, visit What You Can Do to Protect and Restore Wetlands or http://www.epa.gov/wetlands/awm/ for more information.

Coastal Ecosystems Need Better Public Relations, Says Study

Coastal ecosystems -- including coral reefs, mangrove forests, seagrass meadows, and salt marshes -- are as important as they are imperiled, but they don't get the public attention garnered by tropical rainforests. According to a recent study, scientific and public attention to these coastal ecosystems is not equitably distributed among the ecosystem types, either. While salt marshes cover the most area of the four, and seagrass meadows provide the most economic value per acre, it is the charismatic, colorful coral reefs that receive the most research and media attention. A survey of scientific publication records reveals that of the research publications on these ecosystems (approximately 30,000 total), 60% deal with coral reefs, and 11-14% are about mangroves, seagrasses, and salt marshes. The coral reef bias is even more apparent in popular media stories on these ecosystems, which can be considered a surrogate for public awareness and interest: 72.5% of media stories in surveyed media outlets (including such publications as the New York Times, National Geographic, CNN, China's People Daily, Mexico's El Universal, France's Le Monde, and seven others) concerned coral reefs, 20% were on mangroves, 6.5% on salt marshes, and a tiny 1.3% on seagrasses.

These authors argue that more effective education and communication about these critical habitats, especially seagrass beds, is warranted. Scientists need to communicate with the public more effectively, utilizing cutting-edge educational methods. The public can become interested in seagrass meadows, the authors assert, if scientists can capitalize on their "unobtrusive charisma." These efforts might have the

happy side effect of encouraging more funding for research on these key ecosystems. Because, as Baba Dioum said, "For in the end, we will conserve only what we love. We will love only what we understand. We will understand only what we are taught."

Source: Duarte, C. M., W. C. Dennison, R. J. W. Orth, and T. J. B. Carruthers. 2008. The charisma of coastal ecosystems: Addressing the imbalance. Estuaries and Coasts 31(2): 233-238. (Open Access)

New USGS findings released— Differences in Phosphorus and Nitrogen Delivery to the Gulf of Mexico from the Mississippi River Basin

By Richard B. Alexander, Richard A. Smith, Gregory E. Schwarz, Elizabeth W. Boyer, Jacqueline V. Nolan, and John W. Brakebill

Among new findings - Agricultural practices in 9 States contribute the majority of nitrogen and phosphorus to the Northern Gulf of Mexico. These states make up only one-third of the 31-state Mississippi River drainage area, but contribute more than 75 percent of the nutrients to the Gulf. Corn and soybean cultivation is the largest contributor of nitrogen to the Gulf. Animal manure on pasture and rangelands and crop cultivation are the largest contributors of phosphorus.

Visit our Web site, http://water.usgs.gov/nawqa/sparrow/gulf_findings and access study findings and supporting materials, including:

- Environmental Science and Technology article and supplemental material
- Press release
- Podcast
- Maps and graphics
    - Hypoxia in the Northern Gulf of Mexico
    - Primary sources of nitrogen and phosphorus
    - Nutrient contributions to the Gulf, by State
    - Stream size and reservoirs affect delivery to the Gulf of Mexico
    - Locations of monitoring stations used in USGS modeling
- Frequently Asked Questions (FAQs)
- Related links

For additional information:
Richard Alexander, ralex@usgs.gov
Donna Myers, dnmyers@usgs.gov
Pixie Hamilton, pahamilt@usgs.gov

Grant Opportunities

Gulf of Mexico Natural Hazard and Climate Change Resiliency Research

The Gulf of Mexico Sea Grant college programs, the U.S. EPA's Gulf of Mexico Program, the NOAA Northern Gulf Institute and the U.S. Geological Survey are inviting pre-proposals for funding for one- or two-year projects dealing with natural hazard and climate change resilience.
The goal of the funding initiative is to develop information, tools, technologies, products, policies or public decision processes that coastal communities can use to increase resilience to coastal natural hazards and sea level rise. Projects should address at least one of six research priorities outlined in the request for proposals.

Federal funds for each selected project will not exceed $200,000 per year for two years.
Non-federal matching funds are required at 50 percent of the federal amount.

Interdisciplinary projects are encouraged, and projects must be regional in scope. Projects must include investigators from states associated with at least two of the four Gulf of Mexico Sea Grant programs (Florida, Mississippi-Alabama, Louisiana and Texas). Collaboration with faculty from Mexican universities is encouraged.

For more information, including the six resilience priorities, go to http://flseagrant.org/funding/GOM. The submission deadline is Feb. 23, 2009.

Sea Grant Research Preproposals Request

The Mississippi-Alabama Sea Grant Consortium is pleased to announce a request for preproposals for 2010-2011 funding. The deadline for preproposals is 4:00 p.m. February 23, 2009. MASGC funds projects in the following focus areas: Healthy Coastal Ecosystems, Safe and Sustainable Seafood Supply, Sustainable Coastal Development and Hazard Resilience in Coastal Communities. Go to http://www.masgc.org/page.asp?id=364 for more information.

EPA Seeks Grant Proposals

The U.S. Environmental Protection Agency (EPA) is seeking proposals for the Community Action for a Renewed Environment (CARE) program. Up to $3 million is available in 2009 to support community-based partnerships to reduce toxic pollution at the local level. Eligible applicants include county and local governments, tribes, nonprofit organizations, and universities. Proposals are due by March 16. For more information: CARE website.

Training and Conferences

Diversion Summit

Date: March 3-5, 2009
Where: Bourbon Orleans Hotel, New Orleans, LA

Objectives:
1) To discuss with the leaders of the Louisiana coastal restoration community the state of the science with regards to river diversions into Louisiana marshes and estuaries;
2) To articulate the potential benefits and impacts to the lower Mississippi River system from river diversions;
3) To listen to the opinions and desires of agencies and stakeholders on these issues; and
4) To work together to develop a path forward.

The draft agenda, information on registration, hotel reservations, and details on how to sign up to give a stakeholder's presentation are available at: http://www.mrfds.dqsi.com/. The Diversion Summit is being sponsored by the US Army Corps of Engineers and the State of Louisiana.

For more information, please contact David Jenkins (David.G.Jenkins@usace.army.mil), Barb Kleiss (Barbara.A.Kleiss@usace.army.mil) or Rick Raynie (Richard.Raynie@LA.GOV).

Nutrient Criteria Research Framework Workshop

March 10-12, 2009

GULF OF MEXICO ALLIANCE

The Gulf of Mexico Alliance Nutrient Criteria Research Framework Workshop will examine the state of our understanding of nutrient flux and the corresponding ecological response for estuaries and near-shore coastal systems of the Gulf of Mexico.

Excessive nutrients are a common problem in the Gulf of Mexico region. The Gulf of Mexico Alliance (GOMA) is developing a Nutrient Criteria Research Framework for nutrient studies to provide information needed to understand the transport, fate and effects of nutrients. This information will be used to inform the development of estuarine and coastal nutrient criteria. The following goals will guide the development of a framework:

- Standardize a nutrient study design using a regional approach that can be used at locations around the Gulf of Mexico;
- Identify the core monitoring needed to characterize and better understand nutrient sources, fate, transport and effects; and
- Provide sufficient understanding of the relationships between nutrients, water quality, physical processes, and biological communities to develop protective nutrient criteria for coastal ecosystems.

GOMA will gather existing information and consult with local estuary experts to assist with study design and overall data collection and interpretation. Please join us at this workshop to contribute your

knowledge of Gulf of Mexico coastal systems and nutrients.

Registration is requested by March 2, 2009; please visit the workshop website to download a copy of the registration form. A registration fee of $50 will be collected at the workshop and will include the cost of breakfasts, breaks, and meeting materials during the workshop. A hotel block for a rate of $140 per night plus tax, has been set up at the Hilton on St. Charles Avenue. Reservations should be made by March 2, 2009 using the group code: "Gulf Alliance Nutrients Workshop". The hotel can be reached at (504) 524-8890.

Location: Hilton, St. Charles Avenue, New Orleans, LA
Dates: March 10-12, 2009
Early Registration Deadline: March 2, 2009
Abstract/Proposal Submission Deadline: January 23, 2009
Official Language: English
Contact Information: Laurie.Rounds@noaa.gov
Home Page URL: http://www2.nos.noaa.gov/gomex/nutrients/nuts_conf_09/welcome.html

Links to Event Information:
Agenda
Registration Form
Hilton St. Charles Avenue

NOAA Tide and Water Levels Training

March 24th- New Orleans, March 25th- Baton Rouge, LSU, March 26th- Lafayette NOAA

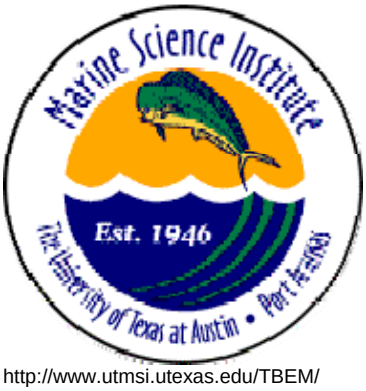
NOAA's Center for Operational Oceanographic Products and Services will hold 3 one day training seminars on the use of tide and water level data for coastal restoration, coastal protection and coastal storm and hurricane storm surge projects and programs. Sea level rise, the basic operation of tide and water level stations, relating tide and water level data to geodetic resources like CORS and NAVD88 will be among the number of topics discussed. Applications and related issues on geodesy, surveying and hydro surveying will be covered as well

Time:
8:15-8:30- Introduction of instructors and overview of training session
8:30-4:30- Seminar Training Presentations- made in 3 two hour sessions with a breaks and lunch

Topics:
Tidal theory (Basic)
Basic operation of tide gauges
Benchmark networks
Data collection (QA / QC)
Data to datums (Overview)
Tidal Epochs (19 and 5 year)
Sea level rise
CORS and tide gauge relationships
Datum computations
Datum support of hydro activities
Tidal and geodetic relationships
Applications of datums

Texas Bays and Estuaries Meeting 2009

The University of Texas Marine Science Institute (UTMSI) is pleased to announce the annual Texas Bays and Estuaries Meeting (TBEM) for 2009. The meeting will focus on work being done in the bays, estuaries and near-shore Gulf of Mexico. It provides an opportunity for Texas scientists working in the coastal zone to share information, results and insights into our diverse coastal environment. Both natural and social science research is welcome.



http://www.utmsi.utexas.edu/TBEM/
(11Feb 2009)

Location: Univ. of Texas Marine Science Institute, Port Aransas, Texas
Dates: April 28-30, 2009
Early Registration Deadline: April 9, 2009
Abstract/Proposal Submission Deadline: April 9, 2009
Official Language: English
Contact Information: Tracy Villareal
emial: t.villareal@mail.utexas.edu
Phone: 361-749-6732
Home Page URL: http://www.utmsi.utexas.edu/TBEM/

EstuaryLive!

Explore our nation's estuaries -- Friday, May 1st & May 15th, 2009

On May 1st, join naturalists from around the country and explore one of our nation's most precious resources- estuaries, where rivers meet the sea. EstuaryLive is an annual, free, live, interactive, field trip through our nation's estuaries.

What makes EstuaryLive interactive? Participants have an opportunity to submit questions directly to field trip leaders during the broadcast. Many of these questions are answered live during the broadcast. This year's program will feature six 30-minute segments broadcasting LIVE from three of NOAA's National Estuarine Research Reserves (NERR): Hudson River NERR in New York, South Slough NERR in Oregon, and Padilla Bay NERR in Washington. We will include a discussion of the impacts of global climate change on our coastal ecosystems. For more information & other educational materials: http://www.estuaries.gov/. Register for the broadcast: http://www.estuaries.gov/estuaries101/EstuaryLive/Register.aspx.

Can't make the May 1st broadcast? The Weeks Bay NERR in Alabama will broadcast a local EstuaryLive program on May 15th. For more information about estuaries, EstuaryLive, the Estuaries 101 Curriculum and other educational tools, please visit www.estuaries.gov. This year we will also offer a special program focusing specifically on the Weeks Bay Reserve which is located near Mobile Bay's eastern shore in Baldwin County, Alabama. This live broadcast offers various opportunities for students to compare and contrast estuaries. Visit the estuaries.gov site to find more details about this broadcast.

Don't forget September 26th is National Estuaries Day! Celebrate this important date with us and involve your students in a creative project about estuaries. Visit the www.estuaries.gov site to find ideas or things you can do to protect estuaries.

Tenth Annual Coastal Development Strategies Conference

May 12-13, 2009

BILOXI, Miss. – The tenth annual Coastal Development Strategies (Smart Growth) Conference will be held May 12-13, 2009 at the IP Casino Resort Spa in Biloxi. Conference attendees will learn about possible solutions to build sustainable communities, spur economic development and improve the quality of life in southern Mississippi.

The conference is hosted by the Mississippi Department of Marine Resources (DMR), Office of Coastal Management and Planning CRMP Program and conference partners the Mississippi Gulf Coast Chamber of Commerce and Mississippi Gulf Coast Business Council. CRMP is a program within the DMR. CRMP's mission is to develop a plan to sustain Mississippi's coastal resources while providing a healthy economy in the region.

The conference will feature speakers and breakout sessions, including topics such as sustainable development, heritage tourism, green building, working waterfronts, livable, walkable communities, Gulf Opportunity Zone (GO Zone) and insurance.

"We are excited to host this tenth annual event," said Tina Shumate, DMR Office of Coastal Management and Planning director. "We hope that you all will join us next year in celebrating 10 years of resilient and sustainable Smart Growth."

This multidisciplinary event draws elected officials, city and county staff, contractors, developers, bankers, planners, zoning officials, realtors and appraisers, engineers, landowners, industry, students, federal and state agencies, boards of supervisors, lawyers, private and corporate entities, environmentalists, resource managers and others committed to rebuilding the Gulf Coast.

Real estate agents and appraisers can earn 10 hours of continuing education credit by attending the tenth annual Coastal Development Strategies Conference, and receipts will be provided to all other professions—such as, engineers, teachers and architects—to submit for credit to their respective organizations.

For information on how you can be a sponsor of this tenth annual event, call Susan Perkins at (228) 523-4124 or Leslie Young at (228) 523-4123. More conference details will be announced in coming months. 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.

Data Integration and Management on the Gulf of Mexico

May 15-16, 2009

© Texas A&M University-Corpus Christi (5 Feb. 2009)

This workshop serves as a forum for researchers and practitioners from academia, industry, and government to discuss and exchange ideas of research and development in the areas of data integration and data management on the Gulf of Mexico. The workshop focuses on the emerging challenges for data integration and sharing in the biological, ecological and environmental sciences, and is especially interested in the techniques to integrate, archive and share public accessible Web data from a variety of sources and different domains.

Location: Corpus Christi, Texas, USA
Dates: May 15-16, 2009
Abstract/Proposal Submission Deadline: March 13, 2009
Contact Information: Dr. Longzhuang Li
Tel.: 361-825-2406
Email: Longzhuang.Li@tamucc.edu
Home Page URL: http://cs.tamucc.edu/dim/

2009 National Hurricane Conference

April 6-April 10

Austin Convention Center Austin, TX

The nation's forum for education and professional training in hurricane preparedness

Purpose of the Conference: The primary goal of the National Hurricane Conference is to improve hurricane preparedness, response, recovery and mitigation in order to save lives and property in the United States and the tropical islands of the Caribbean and Pacific. In addition, the conference serves as a national forum for federal, state and local officials to exchange ideas and recommend new policies to improve Emergency Management.

To accomplish these goals, the annual conference emphasizes:

* Lessons Learned from Hurricane Strikes.
* State of the art programs worthy of emulation.
* New ideas being tested or considered.
* Information about new or ongoing assistance programs.
* The ABC's of hurricane preparedness, response, recovery and mitigation -- in recognition of the fact that there is a continual turnover of emergency management leadership and staff.

For more information, contact David Tait, Conference Coordinator or visit http://www.hurricanemeeting.com/index.asp.

GOMA Diversity Project Symposium

Save the Date

06.03.09 - 06.05.09

2009 Gulf of Mexico Alliance
Diversity Project Symposium
in Thibodaux, Louisiana
more information coming soon

The Barataria-Terrebonne National Estuary Program, and the GOMA Diversity Mini-grant recipients invite you to the 2009 Gulf of Mexico Alliance Diversity Project Symposium.

Please join us in Thibodaux, Louisiana June 3rd, 4th, and 5th for a wonderful opportunity to celebrate, learn, and share. This symposium will bring together leaders from communities and environmental organizations to help strengthen and diversify environmental education and outreach in the five states bordering the Gulf of Mexico.

There will be workshops facilitated by participants of the 2008 GOMA Diversity symposium- educators and youth- on each of their projects, a poster session where all symposium participants are encouraged to bring a poster to share, an informational session on grant opportunities for environmental education diversity projects, a paddle boat trip, and much much more!

Adults and youth are welcome! There will be sessions specifically designed for youth, so if you are an educator and work with youth, bring some of them along.

Oceans 2009

26-29 OCTOBER 2009

MISSISSIPPI COAST COLISEUM AND CONVENTION CENTER
BILOXI, MS

OCEAN TECHNOLOGY for our FUTURE: GLOBAL and LOCAL CHALLENGES

IMPORTANT DATES
Abstract Deadline: 01 June 2009
Poster Abstract Deadline: 01 June 2009
Tutorial Proposal Deadline: 01 June 2009
Author Notification: 01 July 2009
Final Paper Submission: 15 August 2009
For more information, visit our website: www.oceans09mtsieeebiloxi.org

TECHNICAL TOPICS (Core OCEANS Topics)
• Underwater Acoustics and Acoustical Oceanography
• Sonar Signal/Image Processing and Communication
• Ocean Observing Platforms, Systems, and Instrumentation
• Remote Sensing
• Ocean Data Visualization, Modeling, and Information Management
• Marine Environment, Oceanography, and Meteorology
• Optics, Imaging, Vision, and E-M Systems
• Marine Law, Policy, Management, and Education
• Offshore Structures and Technology
• Ocean Vehicles and Floating Structures

ADDITIONAL TOPICS OF LOCAL INTEREST
• Operational Oceanography
• Ocean Observing Systems
• Hurricane Katrina: Lessons Learned
• Coastal Restoration

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