



GULF OF MEXICO NEWS

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NOAA Gulf of Mexico News

Deepwater Horizon Oil Spill Natural Resource Trustees Approve Two More Early Restoration Projects for Gulf Coast

Projects in Florida, Alabama and Mississippi will help beach-nesting birds and sea turtles

GULF COAST (Friday, Dec. 21, 2012) – Additional early restoration projects totaling about \$9 million will begin along the Gulf Coast in 2013, according to the Deepwater Horizon oil spill Natural Resource Damage Assessment (NRDA) trustees (trustees).

Following a 30-day public comment period on the “Deepwater Horizon Oil Spill Phase II Early Restoration Plan & Environmental Review” (Phase II), the NRDA trustees have finalized plans allowing for the initiation of two additional early restoration projects. These Phase II projects will help restore nesting habitats for beach-nesting birds and sea turtles impacted as a result of Deepwater Horizon oil spill response activities.

The Phase II projects, which are located within the Florida panhandle, state and federal lands in Alabama, and federal lands in Mississippi, were the focus of a public meeting held in Pensacola, Fla. on Nov. 13, 2012. During the comment period, more than 1,000 individuals and organizations submitted comments, which the NRDA trustees carefully considered. The comments, as well as the trustees’ responses to those comments, are included in the final Phase II plan, which can be viewed at www.gulfspillrestoration.noaa.gov and www.doi.gov/deepwaterhorizon or at repositories located in communities throughout the Gulf Region. A list of the repository locations is located online.

These two newly approved projects, described below, are planned to be implemented prior to the spring 2013 nesting season.

- Enhanced Management of Avian Breeding Habitat Injuries by Response in the Florida Panhandle, Alabama and Mississippi. This project will protect nesting habitat for beach-nesting birds from disturbance in order to restore habitat impaired by disturbance from oil spill response activities. It is to be conducted on sandy beaches in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin counties, Florida; Bon Secour National Wildlife Refuge (NWR) in Baldwin and Mobile counties, Alabama; and the Gulf Islands National Seashore (GUIS) – Mississippi District.
- Improving Habitat Injured by Spill Response: Restoring the Night Sky. This project will reduce artificial lighting impacts on nesting habitat for sea turtles, specifically loggerhead turtles, to restore habitat impaired by disturbance from oil spill response activities. It is being conducted on Gulf State Park in Baldwin County, Alabama; and in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin counties, Florida.

Phase II is the second phase of early restoration developed by the NRDA trustees under the April 2011 Framework for Early Restoration Addressing Injuries Resulting from the Deepwater Horizon Oil Spill (Framework Agreement) with BP to fund \$1 billion in NRDA early restoration projects.

Early restoration projects represent an initial step toward fulfilling the responsible parties’ obligation to fund the complete restoration of injured natural resources and the services they provide. Early restoration provides an opportunity to implement restoration projects agreed upon by the NRDA trustees and BP under the Framework Agreement prior to the completion of the NRDA. The damage assessment

continues and currently approved early restoration projects are being implemented while additional early restoration planning is under way. BP and other responsible parties are obligated to compensate the public for the full scope of the natural resource injury caused by the Deepwater Horizon oil spill, including the cost of assessing such injury and planning for restoration.

Eight early restoration projects are already in various stages of implementation as part of Phase I of early restoration under the Framework Agreement. Updates on the eight Phase I projects are available at www.gulfspillrestoration.noaa.gov.

“These additional projects are important steps in recovering from the oil spill, but they, along with the other Phase I projects, are just first steps,” said Trudy D. Fisher, Chair of the NRDA Trustee Council and Mississippi's trustee.

“Use of the early restoration funding has not moved quickly enough to suit any of us. I want to stress that the NRDA trustees are working hard to see that restoration funding is used in a way that is in the best interest of our natural resources.”

“The Phase II projects were selected at this time to allow their implementation prior to this spring’s nesting seasons for sea turtles and beach-nesting birds,” said Rachel Jacobson, the Department of the Interior’s Principal Deputy Assistant Secretary for Fish and Wildlife and Parks. “We greatly appreciate both the public’s engagement in this process and their support for these projects. Implementing projects as quickly as possible will benefit our precious natural resources, the uses they support and the local economy to which they are linked.”

“I appreciate the overwhelming support we have received from the public for these projects which go to the heart of the spill impact on nesting birds and sea turtles,” said Florida trustee representative Mimi A. Drew, special advisor to the Florida Department of Environmental Protection Secretary Herschel T. Vinyard, Jr. “My fellow trustees worked hard with us to ensure project approval in time for the 2013 nesting season.”

“These projects will continue the process of restoring Alabama’s unique coastal resources from injuries sustained by the Deepwater Horizon oil spill. We look forward to initiating these projects quickly in order to take advantage of the upcoming nesting seasons,” said N. Gunter Guy, Jr., Commissioner of the Alabama Department of Conservation and Natural Resources.

A New Guide to Planning for Project Evaluation

The NOAA Coastal Services Center has released a new publication entitled [Planning for Meaningful Evaluation](#). The document summarizes a process on planning for a project or program evaluation, and it illustrates many key concepts using examples from the coastal management field. Topics covered include determining an evaluation question, creating effective performance measures, and designing data collection and analysis. This publication is the newest in a [series](#) on social science tools and methods. For more information, contact [Zac Hart](#).

New Tool Provides Economic Data for Your Area of Interest

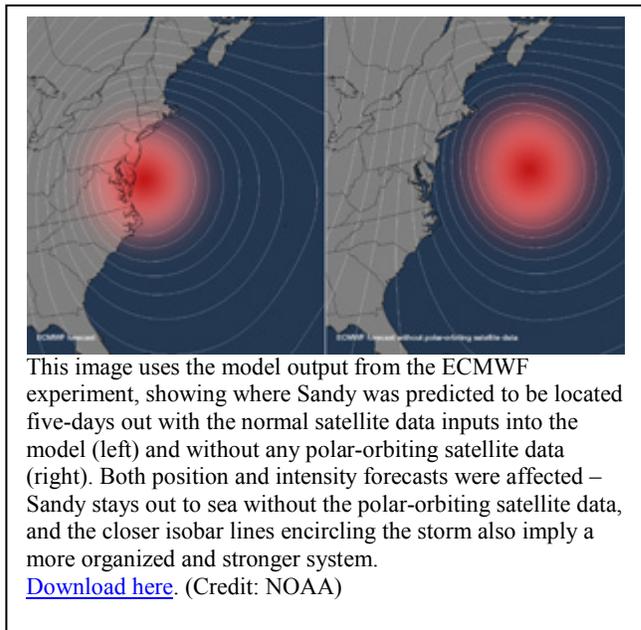
The Census Bureau provides some of the most sought-after data in the nation. NOAA's ENOW website (Economics: National Ocean Watch) delivers data from this agency most important to coastal resource managers. Now, the new [ENOW data wizard](#) is making the task of finding the right data even easier. Users can download or copy data for individual coastal counties, states, regions, or the coastal U.S. To simplify data use, the data are available in a wide variety of formats, from ready-made summaries to full datasets. For more information, contact [Jeff Adkins](#).

Study shows polar-orbiting satellite data was key to pinpointing Sandy's track and time of landfall

December 11, 2012

According to a new study by the [European Centre for Medium-Range Weather Forecasts](#) (ECMWF), the NOAA forecasts of Hurricane Sandy's track could have been hundreds of miles off without information from [polar-orbiting satellites](#). Rather than identifying the New Jersey landfall location within 30 miles five-days before landfall, the models would have shown Sandy remaining at sea.

"This study shows the value of polar-orbiting satellites in developing life-saving forecasts with longer lead times," said Dr. Kathryn Sullivan, assistant secretary of commerce for environmental observation and prediction, and deputy NOAA administrator. "Had we thought the brunt of the storm was going to stay out in the Atlantic, or if residents had only a day to prepare or evacuate, the results would have been even more devastating." The ECMWF is an independent, intergovernmental organization supported by 34 European nations, providing global medium-to-extended range forecasts.



Data from polar-orbiting satellites consist of accurate, high-resolution atmospheric temperature and water vapor information, which are critical inputs to forecast models that help predict the intensity and location of severe weather events, such as Sandy — several days in advance. These spacecraft are called polar-orbiting, because they circle the earth from pole-to-pole, providing full global coverage daily as the Earth rotates beneath them.

On October 29, Sandy made landfall just south of Atlantic City, N.J. It morphed into a hybrid storm, bringing strong winds, heavy snow, rain and a powerful storm surge to areas along the Eastern seaboard. "The global observing system based on polar-orbiting satellites, along with other observation resources, numerical models and the experience and skill of our forecasters, gave NOAA an advantage in tracking Sandy - from tropical wave, to hurricane, to post-tropical cyclone," said Louis Uccellini, director of [NOAA's National Centers for Environmental Prediction](#) in College Park, Md.

NOAA operates two types of satellites; polar operational environmental satellites (POES), which fly 540 miles above Earth's surface, circling from pole to pole, and [geostationary operational environmental satellites](#) (GOES), which remain stationary above the equator at an altitude of 22,300 miles. GOES spacecraft orbit at the same speed as the Earth's rotation, resulting in near continuous observations of a fixed region. As a result, GOES provides constant imaging and POES, the subject of this study, offer full global coverage — with improved spatial resolution and additional instruments to measure atmospheric temperature and water vapor.

NOAA is working with its partner NASA to develop and launch the next generation of polar-orbiting satellites, the [Joint Polar Satellite System](#) (JPSS). Last year, NASA launched the Suomi NPP satellite, which is the bridge between NOAA's current polar-orbiting satellites and NASA's current Earth Observing System satellites and JPSS. The JPSS-1 satellite is set to launch in early 2017.

“Our top priority is ensuring [NOAA’s National Weather Service](#) can maintain accuracy and timeliness of its forecasts and warnings today, and into the future,” Sullivan added. “The only way that can happen is with a robust satellite fleet.”

NOAA’s mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources. Visit us at www.noaa.gov and join us on [Facebook](#), [Twitter](#) and our other [social media channels](#).

OCRM Releases Accomplishments Report for FY 2011-12

The NOAA Office of Ocean and Coastal Resource Management has released its [accomplishments report](#) for FY 2011-12. The report highlights examples of the contributions made by the OCRM staff and its state partners to enhance ocean and coastal resource management and the lives of the American people. Highlights include: approving the Illinois Coastal Zone Management Program; restoring and protecting more than 57,000 acres of coastal habitat; protecting nearly 13,000 acres by acquisition; training over 28,000 coastal decision makers; educating more than 80,000 middle school students through a new estuaries 101 science curriculum; leading climate adaptation initiatives to help coastal managers prepare for a changing climate; installing sentinel site monitoring programs to better understand impacts of sea level change on marsh habitats; and reducing land-based pollution in Pacific coral reefs, among many others. For more information, contact [Lou Cafiero](#).

Study Details the Effect of a Marine Reserve on Fish and the Local Economy

NOAA researchers recently published [An Integrated Biogeographic Assessment of Reef Fish Populations and Fisheries in Dry Tortugas: Effects of No-take Reserves](#), an analysis of both biological and socioeconomic changes resulting from the remote Florida marine reserve during its first five years. The report indicates that there seemed to be an early increase in certain fish species within a few years, a sign that the reserve was working. It also notes that despite losing valuable fishing grounds, people employed in commercial fishing activities in the area did not experience any short-term financial losses. The integration and analysis of historical and current biological, physical, and economic data represents the first effort to evaluate the impact reserve designation has on both the living marine resources of the Tortugas region and the people whose livelihoods are connected to them. The National Centers for Coastal Ocean Science and Office of National Marine Sanctuaries contributed to this report. For more information, contact [Chris Jeffrey](#).

The New Digital Coast

One of NOAA's most popular information resources is now even easier to use. NOAA's Digital Coast provides the data, tools, and training most needed by coastal communities. A wide range of resources are available, from Light Detection And Ranging (LIDAR) data to guidance for local inundation mapping. User recommendations prompted the recent site redesign. A "Get Data Now" button is now on the front page, providing quicker access for those frequent users who want to go straight to the data delivery system. The top five products in each of the major content categories are now available from the home page, and the sorting function on the data and tool pages makes finding the right resource easier. Visit the Digital Coast at www.csc.noaa.gov/digitalcoast.

Global Sea Level Rise Scenarios for the United States National Climate Assessment

Published December 6, 2012

Global sea level rise has been a persistent trend for decades. It is expected to continue beyond the end of this century, which will cause significant impacts in the United States. Scientists have very high confidence (greater than 90% chance) that global mean sea level will rise at least 8 inches (0.2 meter) and no more than 6.6 feet (2.0 meters) by 2100.

More than 8 million people live in areas at risk of coastal flooding. Along the U.S. Atlantic Coast alone, almost 60 percent of the land that is within a meter of sea level is planned for further development, with inadequate information on the potential rates and amount of sea level rise. Many of the nation's assets related to military readiness, energy, commerce, and ecosystems that support resource-dependent economies are already located at or near the ocean, thus exposing them to risks associated with sea level rise.

These are the among the findings presented in this new report, published by NOAA's Climate Program Office in collaboration with twelve contributing authors from ten different federal and academic science institutions—including NOAA, NASA, the U.S. Geological Survey, the Scripps Institution of Oceanography, the U.S. Department of Defense, the U.S. Army Corps of Engineers, Columbia University, the University of Maryland, the University of Florida, and the South Florida Water Management District.

The report was produced in response to a request from the U.S. National Climate Assessment Development and Advisory Committee. It provides a synthesis of the scientific literature on global sea level rise, and a set of four scenarios of future global sea level rise. The report includes input from national experts in climate science, physical coastal processes, and coastal management.

Frequently Asked Questions

What are "scenarios"?

The term "scenarios" describes qualitative and quantitative information about different aspects of future environmental change to investigate the potential consequences for society. Scenarios do not predict future changes, but describe future potential conditions in a manner that supports decision-making under conditions of uncertainty.

How do you use scenarios?

Scenarios are used to develop and test decisions under a variety of plausible futures. This approach strengthens an organization's ability to recognize, adapt to, and take advantage of changes over time. This report provides scenarios to help assessment experts and their stakeholders analyze the vulnerabilities and impacts associated with possible, uncertain futures.



Which scenario is most likely?

Given the range of uncertainty in future global SLR, using multiple scenarios encourages experts and decision makers to consider multiple future conditions and to develop multiple response options. Scenario planning offers an opportunity to initiate actions now that may reduce future impacts and vulnerabilities. Thus, specific probabilities or likelihoods are not assigned to individual scenarios in this report, and none of these scenarios should be used in isolation.

What is the basis of the range of scenarios for global mean sea level rise?

We have very high confidence (greater than 9 in 10 chances) that global mean sea level (based on mean sea level in 1992) will rise at least 8 inches (0.2 meters) and no more than 6.6 feet (2 meters) by 2100. The biggest source of uncertainty within this range is the contribution of water from melting ice sheets and glaciers in Greenland and West Antarctica.

- The lowest sea level change scenario (8 inch rise) is based on historic rates of observed sea level change. This scenario should be considered where there is a high tolerance for risk (e.g. projects with a short lifespan or flexibility to adapt within the near-term)
- The intermediate-low scenario (1.6 feet) is based on projected ocean warming
- The intermediate-high scenario (3.9 feet) is based on projected ocean warming and recent ice sheet loss
- The highest sea level change scenario (6.6 foot rise) reflects ocean warming and the maximum plausible contribution of ice sheet loss and glacial melting. This highest scenario should be considered in situations where there is little tolerance for risk.

The actual amount of sea level change at any one region and location will vary greatly in response to regional and local vertical land movement and ocean dynamics. Parts of the Gulf Coast and the Chesapeake Bay will continue to experience the most rapid and highest amounts of sea level rise, as the land in some of these areas is subsiding, and adding to the overall "net" sea level rise. Parts of Alaska and the Pacific Northwest may experience much less sea level change or none at all, as the land in some of these areas is still rebounding from the last glaciation at a faster rate than sea level rise.

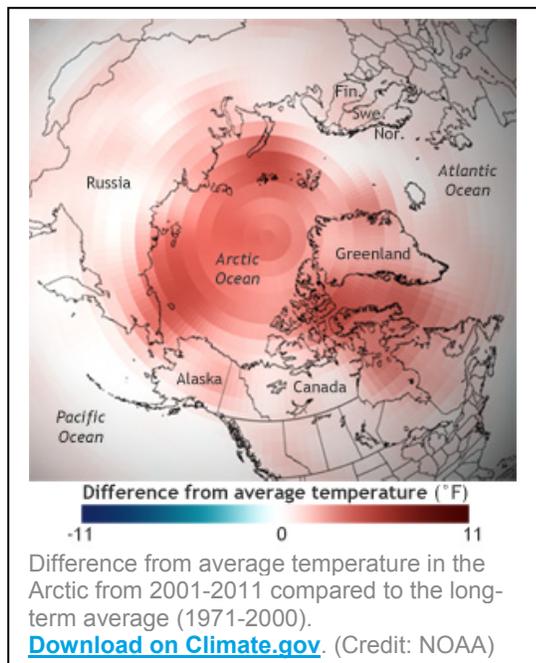
It is certain that higher mean sea levels increase the frequency, magnitude, and duration of flooding associated with a given storm. Flooding has disproportionately high impacts in most coastal regions, particularly in flat, low-lying areas. Regardless of how much warming occurs over the next 100 years, sea level rise is not expected to stop in 2100.

Arctic continues to break records in 2012

Becoming warmer, greener region with record losses of summer sea ice and late spring snow

December 5, 2012

The Arctic region continued to break records in 2012—among them the loss of summer sea ice, spring snow cover, and melting of the Greenland ice sheet. This was true even though air temperatures in the Arctic were unremarkable relative to the last decade, according to a new report released today. “The Arctic is changing in both predictable and unpredictable ways, so we must expect surprises,” said Jane Lubchenco, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator, during a press briefing at the American Geophysical Union annual meeting in San Francisco, Calif. “The Arctic is an extremely sensitive part of the world and with the warming scientists have observed, we see the results with less snow and sea ice, greater ice sheet melt and changing vegetation.”



Lubchenco participated in a panel discussion that presented the annual update of the Arctic Report Card, which has, since 2006, summarized the quickly changing conditions in the Arctic. A record-breaking 141 authors from 15 countries contributed to the peer-reviewed report. Major findings of this year's report include:

- **Snow cover:** A new record low snow extent for the Northern Hemisphere was set in June 2012, and a new record low was reached in May over Eurasia.
- **Sea ice:** Minimum Arctic sea ice extent in September 2012 set a new all-time record low, as measured by satellite since 1979.
- **Greenland ice sheet:** There was a rare, nearly ice sheet-wide melt event on the Greenland ice sheet in July, covering about 97 percent of the ice sheet on a single day.
- **Vegetation:** The tundra is getting greener and there's more above-ground growth. During the period of 2003-2010, the length of the growing season increased through much of the Arctic.
- **Wildlife & food chain:** In northernmost Europe, the

Arctic fox is close to extinction and vulnerable to the encroaching Red fox. Additionally, recent measurements of massive phytoplankton blooms below the summer sea ice suggest that earlier estimates of biological production at the bottom of the marine food chain may have been ten times lower than was occurring.

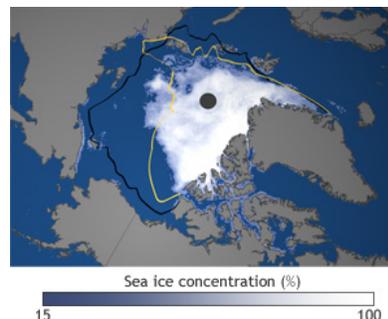
- **Ocean:** Sea surface temperatures in summer continue to be warmer than the long-term average at the growing ice-free margins, while upper ocean temperature and salinity show significant interannual variability with no clear trends.
- **Weather:** Most of the notable weather activity in fall and winter occurred in the sub-Arctic due to a strong positive North Atlantic Oscillation, expressed as the atmospheric pressure difference between weather stations in the Azores and Iceland. There were three extreme weather events including an unusual cold spell in late January to early February 2012 across Eurasia, and two record storms characterized by very low central pressures and strong winds near western Alaska in November 2011 and north of Alaska in August 2012.

“Popular perceptions of the Arctic as a distant, icy, cold place that has little relevance to those outside the region are being challenged”, said Martin Jeffries, co-editor of the 2012 Report Card and Arctic science adviser, Office of Naval Research & research professor, University of Alaska-Fairbanks. “As snow and ice retreat, the marine and terrestrial ecosystems respond, and talk of increased tourism, natural resource exploitation, and marine transportation grows. The Arctic Report Card does a great service in charting the many physical and biological changes.”

Apart from one or two exceptions, the scientists said the air temperatures were not unusually high this year relative to the last decade. Nevertheless, they saw large changes in multiple indicators affecting Arctic climate and ecosystems; combined, these changes are strong evidence of the growing momentum of Arctic environmental system change. The record-breaking year also indicates that it is unlikely that conditions can quickly return to their former state.

“The record low spring snow extent and record low summer sea ice extent in 2012 exemplify a major source of the momentum for continuing change,” added Jeffries. “As the sea ice and snow cover retreat, we’re losing bright, highly reflective surfaces, and increasing the area of darker surfaces—both land and ocean—exposed to sunlight. This increases the capacity to store heat within the Arctic system, which enables more melting—a self-reinforcing cycle.”

In 2006, NOAA’s Climate Program Office introduced the *State of the Arctic Report* which established a baseline of conditions at the beginning of the 21st century. It is updated annually as the Arctic Report Card to monitor the often-quickly changing conditions in the Arctic. To view this year’s report, visit <http://www.arctic.noaa.gov/reportcard/>.



Ice concentration on Sept. 16, 2012, compared to previous record low (yellow line) and historic median extent (black line.)

[Download on Climate.gov.](#)

(Credit: NOAA/National Snow & Ice Data Center.)

Research, response for future oil spills: Lessons learned from Deepwater Horizon

December 3, 2012



A view of the oil source as seen during an overflight on May 20, 2010.

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

A special collection of articles about the Deepwater Horizon oil spill provides the first comprehensive analysis and synthesis of the science used in the unprecedented response effort by the government, academia, and industry. Papers present a behind-the-scenes look at the extensive scientific and engineering effort — teams, data, information, and advice from within and outside the government — assembled to respond to the disaster. And, with the benefit of hindsight and additional analyses, these papers evaluate the accuracy of the information that was used in real-time to inform the response team and the public.

For the most part, information presented publicly during the spill was accurate. Oil was rapidly consumed by bacteria, seafood was not contaminated by hydrocarbons or dispersants, and the oil budget was by and large accurate. The only part of the oil budget that was later found to be inaccurate was the fraction of oil that was chemically dispersed versus naturally dispersed. That information had no impact on public safety, seafood safety or the response effort, but understanding the amount of oil that was dispersed chemically vs. naturally is important for future such efforts.

One of the most controversial issues concerned the rate at which hydrocarbons were spewing forth from the damaged well. The lengthy time it took for the scientific team to determine the flow rate led to considerable speculation that the government was withholding information. In reality, as described by the papers, the government/academic team charged with determining flow rate took the time they needed to get it right. The accuracy of the flow rates improved with time as more and better *in situ* data were acquired and more independent methods reported results.

Valuable lessons were learned, with preparation and knowledge being two key elements needed to respond to disasters such as the Deepwater Horizon oil spill, one of the worst environmental emergencies in the history of the U.S. and one that also took the lives of 11 oil rig workers.

Two overview papers and 13 specialty papers constitute a special section of the prestigious [Proceedings of the National Academy of Science](#). Of the 15 papers, three are newly published: two introductory papers and one specialty paper provide an inside look at the scientific and engineering aspects of stopping the flow of oil, guaranteeing the integrity of the well once it was shut in, estimating the amount of oil spilled, capturing and recovering oil, tracking and forecasting surface oil, protecting coastal and oceanic wildlife and habitat, managing fisheries and protecting the safety of seafood. The papers describe the process underway to determine the impact of the spill on the natural resources and ecosystems of the Gulf of Mexico, but because those analyses are not completed, no conclusions are presented. The remaining 12 papers have been previously published online.

“While the federal family was well versed in oil response and remediation, and we brought many resources to bear, the scale and complexity of Deepwater Horizon taxed our organizations in unprecedented ways,” said Jane Lubchenco, Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. “We learned much during this extraordinary disaster and we hope the lessons learned will be implemented before and used during any future events.”

In one of the papers — [“Science in support of the Deepwater Horizon response”](#)—lead author Lubchenco and her co-authors suggest future oil spill response preparedness include:

- Gather adequate environmental baselines for all regions at risk;
- Develop new technologies for rapid precise reconnaissance and sampling to support a timely and robust response effort;
- Fill large information gaps regarding biological effects of oil, changing climate, and other simultaneous drivers of variability in coastal and aquatic ecosystems;
- Require future oil extraction permits be conditional on having mechanisms in place to rapidly assess flow rate; and
- Conduct research on the impacts of dispersants and dispersants-plus-oil on a wide range of species and life stages.

Another paper — [“Application of science and engineering to quantify and control the Deepwater Horizon oil spill”](#) — describes the unprecedented collaboration among government, academic, and industry scientists and engineers. Lead author Marcia McNutt, Ph.D., director of the USGS, explains how scientific and engineering information was crucial to guide decision-making for questions never before encountered, especially during the tense hours after the well was capped, but might still be leaking underground.

“Although we all hope ‘Never again!’ will there be an oil spill like the Deepwater Horizon, there will always be some risk as we move into deeper water and more difficult environments in our quest for the planet’s remaining fossil fuels,” said McNutt. “A significant drawback in addressing many of the issues we confronted in Deepwater Horizon was the lack of peer-reviewed scientific publications from prior marine-well blowouts to help guide our actions; we will not make that mistake again by neglecting to publish for posterity the scientific lessons from this tragedy.”

The event also showed the value of federal partnerships with academic institutions.

“The coordination within and across agencies was impressive, but so too was the engagement of academic scientists in a joint effort to respond to the disaster” said Steve Murawski, a co-author on both introductory papers, chief scientist at NOAA Fisheries during the response effort and now a professor at the University of South Florida. “Through these partnerships, new scientific discoveries were made such as estimating flow rate from atmospheric measurements, testing for dispersant in seafood, understanding the behavior of the loop current, and discovering novel microbial communities in the Gulf.”

A final paper — “Scientific basis for safely shutting in the Macondo well after the April 20, 2010 Deepwater Horizon blowout” — further points to the unprecedented level of coordination among scientists, engineers, and emergency response officials in the public and private sectors. In this paper, scientists describe the geological hazards of shutting in the well and the conditions under which this could safely and successfully be done.

“Without this level of cooperation and round-the-clock engagement by people from many disciplines, it would not have been possible to carry out the continual scientific analyses needed to ensure the well was not leaking below the sea floor once the capping stack was closed,” explained lead author Steve Hickman, USGS research geologist. “For the government scientists onsite at BP headquarters, rapid acquisition and analysis of critical data sets and open exchange of ideas and possible outcomes was essential to ensuring the well had enough integrity to remain safely shut in until it was killed and sealed with cement.” USGS provides science for a changing world. Visit USGS.gov, and follow us on Twitter [@USGS](https://twitter.com/USGS) and our other [social media channels](#).

Busy 2012 hurricane season continues decades-long high activity era in the Atlantic

Four U.S. land-falling storms include devastating Sandy and Isaac

November 29, 2012



2012 hurricane season animation.
[Download here](#). (Credit: NOAA.)

November 30 marks the end of the 2012 Atlantic Hurricane season, one that produced 19 named storms, of which 10 became hurricanes and one became a major hurricane. The number of named storms is well above the average of 12. The number of hurricanes is also above the average of six, but the number of major hurricanes is below the average of three.

Based on the combined number, intensity, and duration of all tropical storms and hurricanes, NOAA classifies the season as above-normal. 2012 was an active year, but not exceptionally so as there were 10 busier years in

the last three decades.

This season marks the second consecutive year that the mid-Atlantic and Northeast suffered devastating impacts from a named storm. Sandy, and Irene last year, caused fatalities, injuries, and tremendous destruction from coastal storm surge, heavy rainfall, inland flooding, and wind. Storms struck many parts of the country this year, including tropical storms Beryl and Debby in Florida, Hurricane Isaac in Louisiana, and Post-tropical Cyclone Sandy in New Jersey.

“This year proved that it’s wrong to think that only major hurricanes can ruin lives and impact local economies,” said Laura Furgione, acting director of NOAA’s National Weather Service. “We are hopeful that after the 2012 hurricane season, more families and businesses all along the Atlantic and Gulf Coasts become more “weather ready” by understanding the risks associated with living near the coastline. Each storm carries a unique set of threats that can be deadly and destructive. Mother Nature reminded us again this year of how important it is to be prepared and vigilant.”

An interesting aspect of the season was its early start, with two tropical storms, Alberto and Beryl, developing in May before the season officially began. Also, this is the seventh consecutive year that no major hurricanes (Category 3, 4 or 5) have hit the United States. The only major hurricane this season was Hurricane Michael, a Category 3 storm that stayed over the open Atlantic.

Several storms this year were short in duration, weak in intensity, and went largely unnoticed by the general public because they stayed out over the Atlantic. A persistent jet stream pattern over the eastern portion of the nation helped steer many of this season's storms away from the United States. The number of named storms and hurricanes was higher than predicted in NOAA's pre-season outlook, in large part because El Niño – which likely would have suppressed overall storm activity – never materialized as predicted by many climate models.

Hurricane forecasters remind us that a well-established climate pattern puts us in an ongoing era of high activity for Atlantic hurricanes that began in 1995. Since that time, more than 70 percent of seasons have been above normal, including 2012. Historically, Atlantic high-activity eras have lasted 25-40 years, with the previous one occurring from the mid-1930s until 1970. Several inter-related atmospheric and oceanic factors contribute to these high activity years, including warmer Atlantic Ocean temperatures, an enhanced West African monsoon, and reduced vertical wind shear. NOAA will release its pre-season outlook for the 2013 hurricane season in May.

NOAA's National Weather Service is the primary source of weather data, forecasts and warnings for the United States and its territories. The National Weather Service operates the most advanced weather and flood warning and forecast system in the world, helping to protect lives and property and enhance the national economy. Working with partners, the National Weather Service is building a Weather-Ready Nation to support community resilience in the face of increasing vulnerability to extreme weather. Visit us online at weather.gov and on [Facebook](#).

New data prompts NOAA Fisheries to withdraw proposed rule to require turtle excluder devices in certain shrimp trawls

Based on new data collected this summer, NOAA is withdrawing a proposed rule to require turtle excluder devices (TEDs) for skimmer trawls, pusher-head trawls, and wing-net trawls in the southeast shrimp fisheries. NOAA observers collected data that showed the devices may not prevent small sea turtles from being caught in nets as previous data suggested. The proposed rule would have affected 2,600 fishermen, and had not yet taken effect.

TEDs are very effective at allowing turtles to escape from otter trawl nets operating offshore, but the device may need to be modified to work effectively for the inshore trawl fisheries. Typically, skimmer trawls fish in shallow areas where they tend to encounter smaller, young turtles, while otter trawls fish in both shallow and deeper waters so on average they tend to encounter larger turtles.

NOAA fishery observers found that turtles captured in skimmer trawls are so small that they are not necessarily able to escape through the TED door. Instead, the smaller turtles can pass through the bars of the TED and get caught inside the end of the net, potentially causing them to drown rather than allowing them to escape as intended. During the observed period, all of the turtles were released alive with one turtle assumed dead following release due to its behavior on the boat.

“We’re not abandoning this issue, there’s just more work that needs to be done to get it right,” said Dr. Roy Crabtree, southeast regional administrator for NOAA Fisheries. “This is the first time we’ve required observers on skimmer trawls and the information we now have suggests the conservation benefit does not justify the burden this rule would place on the industry. We need more research looking at different options.”

While TEDs have been required in otter trawls for more than 20 years, fishermen using skimmer trawls, pusher-head trawls, and wing-net trawls are authorized to use tow time limits instead to help prevent incidental catch of turtles. Limiting the amount of time a net is pulled underwater is one way to reduce impacts of shrimp trawls on sea turtles, as most turtles can survive for up to an hour or more underwater. Historically though, compliance with tow times may be low and is hard to enforce--which was one of the reasons for the proposed rule. As part of adopting future science-based management measures, fishery managers will continue to research turtles captured in skimmer trawls and increase outreach to the shrimp industry, focusing on education and compliance with tow times.

NOAA's mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources. Join us on Facebook, Twitter and our other social media channels at <http://www.noaa.gov/socialmedia/>.

NOAA Fisheries Service, Southeast Regional Office: <http://sero.nmfs.noaa.gov/>

Like us on Facebook: <http://www.facebook.com/usnoaafisheriesgov>

Follow us on Twitter: @NOAAFish_SERO

NOAA, University of New Hampshire fund projects to investigate effects of chemical dispersants in oil spills

NOAA and the Coastal Response Research Center (CRRC) at the University of New Hampshire today announced research funding for three projects aimed at better understanding the impact of dispersed oil and chemical dispersants used during oil spills. NOAA is awarding these grants using supplemental research funding provided by Congress as a result of the Deepwater Horizon oil spill. The grants, collectively totaling nearly \$500,000, were awarded on a competitive basis through a peer-review process that attracted 36 proposals from U.S. and international research teams.

"The subject of dispersant use will intensify the next time there is a significant spill in U.S. waters, which is why continued research in this area is needed," said Doug Helton, incident operations coordinator for NOAA's Office of Response and Restoration.

"The Deepwater Horizon spill pointed to the gaps in our knowledge about dispersants. These grants aim to fill some of those gaps with scientific studies," said Nancy Kinner, professor of civil and environmental engineering and UNH director of the CRRC, which is a partnership between NOAA and UNH.

The funded projects, each to be completed within one year, are:

University of Maryland Center for Environmental Science (Baltimore): \$150,000 to study the effects of dispersants and dispersed oil on the commercially-important blue crab, a keystone species of the Gulf of Mexico and Atlantic coast, and its larvae. Principal investigator: Eric Schott.

SEA Consulting Group (Cape Charles, Va.): \$179,945 to study the role of social media and other communications tools in risk communication around dispersants and oil spills. Principal investigator: Ann Hayward Walker.

Research Planning, Inc. (Columbia, S.C.): \$149,938 to create an easily accessible database of all the data on the toxicological effects of dispersants and dispersed oil on marine organisms. Principal investigator: Adriana Bejarano.

Established in 2004, the CRRC is focused on developing new approaches to oil spill response and restoration in marine and estuarine environments through research and synthesis of information. The Center's mission is to: 1) conduct and oversee basic and applied research and outreach on spill response

and restoration; 2) transform research results into practice; 3) serve as a hub for oil spill R&D; and 4) educate/train students who will pursue careers in spill response and restoration. For more information on these projects and on other CRRC-funded research, go to www.crrc.unh.edu.

The University of New Hampshire, founded in 1866, is a world-class public research university with the feel of a New England liberal arts college. A land, sea, and space-grant university, UNH is the state's flagship public institution, enrolling 12,200 undergraduate and 2,300 graduate students.

NOAA's mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources. Join us on Facebook, Twitter and our other social media channels.

New Web Resource for Teachers

A new [web resource](#) for teachers has been launched to explain the physics and application of tides and currents knowledge to real-world situations, and the impacts of tides and currents on climate, environment, and society. Cooperatively developed with CO-OPS and the National Science Teachers Association, the new module has over 130 links for teacher and students, along with nine new lesson plans integrating real-time tides and currents data, the effects of tides and currents on oil spills, and how climate change is related to tides and currents.

NOAA Releases NGS Data Explorer Application

This week, NOAA released a new web application to allow users to view National Geodetic Survey (NGS) geodetic control across the U.S. and its territories using Google Maps. The NGS [Data Explorer](#) map application is an interactive tool allowing users to explore NOAA's extensive geodetic control network, as well as the NOAA datasheet documentation for the specified control marks. This new map application will provide access to control mark information including the latitude, longitude, elevation, position source, and other available data.

Deepwater Horizon Natural Resource Trustees Call for Public Input on Next Round of Gulf Restoration

Trustees ask public to consider \$9 million in new projects focused on bird and turtle nesting habitat; comment period includes Nov. 13 public meeting in Pensacola, Fla.

Nov. 8, 2012

The Deepwater Horizon Natural Resource Damage Assessment (NRDA) trustees (Trustees) have released the Deepwater Horizon Phase II Draft Early Restoration Plan & Environmental Review (DERP/ER) for public review and comment. The plan includes two proposed projects totaling about \$9 million that focus on restoring nesting habitat for birds and sea turtles. Response efforts resulting from the Deepwater Horizon oil spill caused injuries to this natural habitat.

"This draft plan includes two Early Restoration projects which represent a near-term opportunity to improve the nesting habitats of birds and turtles, two species that are integral to the Gulf Coast wildlife community," said Cynthia Dohner, Natural Resource Trustee for the Department of the Interior. "Our desire is to provide these benefits during the next nesting season, but we'd first like to hear from the public. We encourage the public to attend the November 13 meeting in Pensacola and to give us their comments."

The DERP/ER describes the second round of projects proposed to receive funding from the \$1 billion BP committed to Early Restoration on April 21, 2011.

The trustees will hold a public meeting to solicit comment on the DERP/ER at the Escambia County Central Complex Building in Room 104, 3363 West Park Place Pensacola, Fla. 32505:

Nov. 13, 2012 6:00 – 7:00 PM

7:00 – 9:00 PM

Open House

Meeting and Public Comment

The DERP/ER and a list of public repositories are available at www.gulfspillrestoration.noaa.gov and www.doi.gov/deepwaterhorizon.

Comments will be taken until Dec. 10, 2012. Comments may be submitted in the following ways:

Via the Web: <http://www.gulfspillrestoration.noaa.gov>.

For electronic submission of comments containing attachments, email:

fw4coastalDERPcomments@fws.gov.

U.S. Mail: U.S. Fish and Wildlife Service, P.O. Box 2099, Fairhope, AL 36533.

“We are pleased to be able to move forward with these important projects that restore key nesting and wintering habitats for Florida’s coastal wildlife, and we will continue to work with our fellow Trustees to address the full injury the Deepwater Horizon explosion and resulting oil spill created,” said Nick Wiley, Florida’s Co- Trustee with the Florida Fish and Wildlife Conservation Commission. “Restoring these damages to the Gulf Coast is vital to the families and businesses that depend on healthy and diverse fish and wildlife resources, and we look forward to working closely with our coastal communities as these projects take shape.”

The DERP/ER describes two proposed projects for the second round of Early Restoration. These projects address coastal conservation for the purpose of restoring bird (avian) and sea turtle nesting habitats, which were injured by oil spill response operations. These projects are timed to enhance the bird and turtle nesting ground as the spring 2013 nesting season begins. Below is a brief description of each project:

- A Comprehensive Program for Enhanced Management of Avian Breeding Habitat Injuries by Response in the Florida Panhandle, Alabama and Mississippi. This project proposes to protect nesting habitat for beach-nesting birds from disturbance in order to restore habitat impaired by disturbance from oil spill response activities. It is to be conducted on sandy beaches in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin counties, Florida; Bon Secour National Wildlife Refuge (NWR) in Baldwin and Mobile counties, Alabama, and the Gulf Islands National Seashore (GUIS) – Mississippi District.
- Improving Habitat Injured by Spill Response: Restoring the Night Sky. This project proposes to reduce artificial lighting impacts on nesting habitat for sea turtles, specifically loggerhead turtles, to restore habitat impaired by disturbance from oil spill response activities. It is to be conducted on sandy beach public properties in Baldwin County, Alabama; and Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin counties, Florida.

NRDA is the process used by the Trustees to develop the public’s claim for natural resource damages against the party or parties responsible for a spill and to seek compensation for the harm done to natural resources and the services provided by those resources. For early restoration projects, the Deepwater Horizon NRDA trustees include the U.S. Department of Commerce, the U.S. Department of the Interior, U.S. Environmental Protection Agency, U.S. Department of Agriculture and state agencies from the five Gulf States --Florida, Alabama, Louisiana, Mississippi, and Texas.

Early Restoration projects represent an initial step toward fulfilling the responsible parties' obligation to fund the complete restoration of injured natural resources. Early Restoration provides an opportunity to implement restoration projects agreed upon by the Trustees and BP under the Framework Agreement prior to the completion of the NRDA. The damage assessment will continue while Early Restoration planning is under way.

BP and other responsible parties are obligated to compensate the public for the full scope of the natural resource injury caused by the Deepwater Horizon oil spill, including the cost of assessing such injury and planning for restoration.

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OCRM Marks 40th Anniversary of the Coastal Zone Management Act

NOAA's Office of Ocean and Coastal Resource Management (OCRM) joins state and federal partners in marking the 40th anniversary of the landmark Coastal Zone Management Act (CZMA). The act was established by Congress on October 27, 1972, to preserve, protect, develop, enhance and restore the nation's coastal resources.

The CZMA began a new era in the United States by recognizing the importance of safeguarding our nation's coasts, estuaries and oceans. Under the CZMA, OCRM works with state partners to balance economic development and environmental conservation, and ensure future generations have access to our nation's nearly 100,000 miles of shoreline.

"The programs, policies, innovative decision-making tools, and scientific study that followed CZMA have led to a better use of our coastal lands and waters," said Margaret Davidson OCRM acting director. "America's future depends on healthy and resilient coasts. The act remains one of the best legislative tools we have for coastal management and is a prime example of the value of federal-state partnerships."

The CZMA also created two cornerstone national programs in OCRM to better understand and manage our coastal areas: the National Coastal Zone Management Program and the National Estuarine Research Reserve System.

Over the past forty years, OCRM has partnered with coastal and Great Lakes states and territories to address critical coastal issues, and has invested more than \$1 billion in federal funds, matched by state funding, to develop and implement 35 state coastal management programs. OCRM has also established and funds 28 estuarine research reserves which are managed by a lead state agency or University, with input from local partners. The reserves have preserved more than 1.3 million acres of coastal habitat and provide ongoing vital research, education and stewardship activities and programs.

The CZMA federal-state partnership has increased public access to our coasts, protected and restored coastal habitat, and minimized the risk of coastal communities to coastal hazards. It has also helped

coastal communities manage development to promote healthy economies and people, and reduced polluted runoff, resulting in safe, swimmable, and fishable coastal waters.

America's economic and environmental prosperity is directly linked to the health and resiliency of our coasts. It is estimated that by 2025, nearly 75 percent of the U.S. population, over 250 million people, will live within 50 miles of the coast.

The U.S. coastal zone supports valuable coastal and ocean resources, including fisheries, marine mammals, minerals, oil, gas, and other energy resources, marine transportation, tourism, recreation and military operations. America's coastal regions are economic engines that provide for 40 percent of all U.S. jobs and provide over \$214 billion annually in leisure and hospitality jobs, according to the National Ocean Economics Program.

Flower Garden Banks National Marine Sanctuary Listed as a SPAW Special Protected Area

On October 27, 2012, during the Twelfth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention) three marine protected area sites proposed by the U.S. were formally listed under the Special Protected Areas and Wildlife (SPAW) Protocol. These new US SPAW Protocol sites are Flower Garden Banks National Marine Sanctuary, and the Florida Everglades and Dry Tortugas National Parks. They join the Florida Keys National Marine Sanctuary and 14 international sites that are listed under the SPAW Protocol.

The SPAW Protocol (in-force 2000) is part of the Cartagena Convention (in-force 1986). In signing the SPAW Protocol, the U.S. committed to take the necessary measures to protect, preserve and sustainably manage areas that require conservation to safeguard their special value, and threatened or endangered species of flora and fauna. Such areas include representative habitats, critical habitats, economically and/or socially valuable areas, and areas of special significance within the Wider Caribbean region. At their first meeting in 2001, the Contracting Parties (COP) to the SPAW Protocol agreed to develop guidelines and criteria for the evaluation of protected areas to be listed under the SPAW Protocol. The Office of National Marine Sanctuaries Southeast, Gulf of Mexico and Caribbean Region assisted with the development and review of these criteria. The Parties also decided at that time to initiate the listing process through a pilot project to help assess the guidelines and criteria, as well as the format for listing. The Florida Keys National Marine Sanctuary was listed as part of this pilot project.



Eligible sites for listing under the SPAW Protocol are those coastal and marine areas that are ecologically important to the Wider Caribbean region. The listing of marine protected areas is done to sustain the natural resources of the Wider Caribbean region, and to encourage ecologically sound and appropriate use, understanding and enjoyment of the areas. Ultimately, sites listed will contribute to a comprehensive and

representative system network of protected areas in the Wider Caribbean region, across all bioregions and across the range of ecosystems within each bioregion.

The Objectives of SPAW

- To significantly increase the number and improve the management of national protected areas and species in the Wider Caribbean Region (WCR), including support to national and regional conservation and management strategies and plans, where appropriate.
- To develop strong regional capability for the co-ordination of information exchange, training and technical assistance, in support of national biodiversity conservation efforts.
- To coordinate activities with the secretariat of the Convention on Biological Diversity, as well as other biodiversity-related treaties, such as the CITES, Ramsar, World Heritage, Bonn and Western Hemisphere Conventions.

The commitments by the Contracting Parties to SPAW

- To take the necessary measures to protect, preserve and manage in a sustainable way areas that require protection to safeguard their special value.
- To regulate and, where necessary, prohibit activities having adverse effects on these areas.
- To establish protected areas, some of which need not necessarily become “listed” areas within the SPAW network.
- To sustain the natural resources of the Wider Caribbean Region, in particular (a) representative ecosystem types; (b) habitats critical to the survival and recovery of endangered, threatened or endemic species; (c) the productivity of ecosystems and natural resources; and (d) areas of special biological, cultural, or other special interest.

The pilot project was completed in 2010 – 2011 to list MPAs under SPAW using the Annotated Format detailed in the Guidelines for listing protected areas.

This pilot resulted in the listing of the following areas:

Belize:

Hol Chan Marine Reserve
Glover's Reef Marine Reserve

Colombia:

Sanctuary Ciénaga Grande de Santa Marta
Regional Seaflower Marine Protected Area in San Andrés and Providencia Archipelago

France:

Grand Connétable Island Nature Reserve (French Guyana)
Guadeloupe National Park (Grand Cul de Sac Marin)

US:

Florida Key National Marine Sanctuary

Netherlands Antilles:

Bonaire National Marine Park
National Park the Quill and Boven on St. Eustatius

The latest sites to become part of SPAW are:*US:*

Flower Garden Banks National Marine Sanctuary
 Everglades National Park
 Dry Tortugas National Park

Cuba:

Guanahacabibes National Park in Pinar del Río
Saba (Netherlands):
 Saba Bank National Park

St Martin (France):

St Martin National Reserve
 St Martin Lagoon Ponds

Guadeloupe (France):

Petite-Terre National Reserve

French West Indies (France):

Agoa Sanctuary

[Click here for more information.](#) 

 [Full FGBNMS SPAW Protocol Proposal](#)

 [Full FKNMS SPAW Protocol Proposal](#)

NOAA announces \$5.5 million to support watershed education projects for K-12 students around the country

October 24, 2012



NOAA Office of Education's Bay-Watershed Education and Training (B-WET) Program participants.

[Download here.](#) (Credit: NOAA.)

NOAA today announced the winners of its recent competition for education grants that will allow thousands of K-12 students around the country to get outside and participate in hands-on environmental education opportunities. A total of 59 projects will benefit from \$5.5 million in grants from the [NOAA Office of Education's Bay-Watershed Education and Training \(B-WET\) Program](#) that will support activities ranging from data driven field investigations in the Pacific Northwest to studies of storm water management and invasive species in the Great Lakes.

All recipients of B-WET grants emphasize meaningful watershed educational experiences — sustained, hands-on activities that are aligned with academic learning standards and responsive to regional education and environmental priorities. Some 2012 student activities include learning about currents and marine debris on the coast of Hawaii with the Malama Kai Foundation, participating in field investigations in the Gulf of Mexico with the University of Texas, and developing urban schoolyard habitats with the Living Classrooms Foundation in Chesapeake Bay.

“Field-based STEM education activities, like those funded by B-WET, are a critical part of NOAA’s education portfolio,” said Louisa Koch, director of education at NOAA. “There is growing evidence that these types of activities contribute to understanding and commitment to environmental conservation and stewardship, which is core to NOAA’s mission.”

B-WET also provides funding for formal K-12 educator training programs to help teachers incorporate meaningful watershed educational experiences, as well as NOAA data and other resources, into their

classrooms. Teachers and education professionals involved with the B-WET Program are equipped with information they can share with their students and communities for many years to come.

B-WET currently serves seven areas of the country: California, Chesapeake Bay, Great Lakes, the Gulf of Mexico, Hawaii, New England, and the Pacific Northwest. This is the first year NOAA has made awards in the Great Lakes region, made possible by funds from the Great Lakes Restoration Initiative. New 2012 B-WET recipients, by region, are (see all regions [online](#)):

Gulf of Mexico:

- University of Texas at Austin (Austin, Texas)
- Florida Department of Environmental Protection (Tallahassee, Fla.)
- University of South Florida (Tampa, Fla.)
- University of Texas - Pan American (Edinburg, Texas)
- Audubon Nature Institute (New Orleans, La.)

For more details about the 2012 B-WET awardees, please visit:

http://www.oesd.noaa.gov/grants/bwet_awards.html or the regional program websites.

These new B-WET grants will reach an estimated 40,000 students and 4,000 teachers this year. New awards last from one to three years in duration and range in value from \$10,000 to \$420,000. Grantees were selected through a rigorous peer review process administered by a NOAA program office in their region. All B-WET applicants are encouraged to partner with local NOAA offices, and/or utilize local NOAA field sites and data where appropriate.

Congress established NOAA's B-WET Program in 2002. Since that time NOAA has awarded more than \$50 million to support more than 680 projects around the country. NOAA is currently accepting applications for new B-WET projects for the 2013 fiscal year. More information on NOAA's Office of Education funding opportunities is available [online](#).

NOAA's National Marine Sanctuaries: Preserving and protecting oceans' natural treasures

October 23, 2012

For 40 years, [NOAA's National Marine Sanctuary System](#) has preserved and protected some of the most spectacular and treasured resources in the world's oceans. The system, consisting of a network of underwater parks consisting of more than 150,000 square miles of America's oceans, includes beautiful coral reefs, lush kelp forests, whale migration routes and underwater archaeological sites.

“Over the past four decades, NOAA's sanctuaries have protected our nation's most vital and iconic coastal marine resources so that future generations can enjoy and learn from them,” said Daniel J. Basta, director of NOAA's Office of National Marine Sanctuaries. “Through active research, management and public engagement, sanctuaries sustain healthy environments that are the foundation for thriving communities and stable economies.”

Following an oil spill off Santa Barbara, Calif. in 1969, Congress passed the Marine Protection, Research and Sanctuaries Act in 1972, now known as the [National Marine Sanctuaries Act](#). The Act was signed into law by President Nixon and directed NOAA to lay the groundwork for the National Marine Sanctuary System, which now includes 13 sanctuaries and one marine national monument. “The National Marine Sanctuaries Act is the strongest piece of legislation protecting ocean areas today,” Basta said.

Ranging in size from one-quarter square mile in American Samoa's Fagatele Bay to more than 5,300 square miles in Monterey Bay, California, sanctuary waters provide secure habitats for species close to extinction and protect historically significant shipwrecks and artifacts. Sanctuaries also serve as natural

classrooms for students and researchers, provide cherished recreational spots, and support local economies. Within the sanctuary system's protected waters, giant humpback whales breed and calve their young, temperate coral reefs and kelp forests thrive, and shipwrecks tell stories of our maritime history in underwater archaeological sites.

Since 1972, NOAA's Office of National Marine Sanctuaries has worked cooperatively with the public and federal, state, and local officials to promote conservation while allowing compatible commercial and recreational activities. The primary objective of a sanctuary is to protect its natural and cultural features while allowing people to use and enjoy the ocean in a sustainable way.

NOAA's Sanctuary System includes: [Thunder Bay](#), [Stellwagen Bank](#), [Monitor](#), [Gray' Reef](#), [Florida Keys](#), [Flower Garden Banks](#), [Fagatele Bay](#), [Hawaiian Islands Humpback Whale](#), [Channel Islands](#), [Monterey Bay](#), [Gulf of the Farallones](#), [Cordell Bank](#) and [Olympic Coast National Marine Sanctuaries](#) and [Papahānaumokuākea Marine National Monument](#).

To learn more about NOAA's National Marine Sanctuary System and its most significant accomplishments over the past four decades, visit: <http://sanctuaries.noaa.gov/news/top40/welcome.html>.

NOAA announces \$4.9 million for collaborative research projects to help coastal communities manage effects of climate change

October 19, 2012

NOAA and the University of New Hampshire have announced more than \$4.9 million to fund nine collaborative research projects aimed at making coastal communities and environments more resilient to rising sea levels, changing weather patterns, extreme storms, and ocean warming and acidification. The grants, made by NOAA's National Estuarine Research Reserve System (NERRS) Science Collaborative through its partnership with the university, will fund projects in South Carolina, Maryland, Massachusetts, New Hampshire, Maine, Rhode Island, Alabama, Oregon and California.

Over the next two years, NERRS-led project teams will bring community stakeholders together with scientists, using the best science to make important resource management and public safety decisions. Projects will address community adaptation to sea level rise, implementation of low-impact development land use practices, oyster and wetland restoration, and river and watershed management.

"Few coastal resource management problems are purely environmental in nature," said Dwight D. Trueblood, Ph.D., NOAA's NERRS Science Collaborative program manager. "They affect economies and business, infrastructure and property, human health and well-being. The NERRS Science Collaborative is a prime example of how science in partnership with the community can make a big difference in people's lives."

The peer-reviewed grants were competitively awarded and include funding of \$4.2 million in current fiscal year funds and an additional \$741,509 from a prior NOAA grant. The grants will go to:

- Massachusetts Institute of Technology: \$637,023 to explore approaches to build consensus around climate change adaptation strategies;
- ACE Basin NERR, South Carolina: \$585,622 to restore oyster reefs to protect valuable shorelines from rising sea level, and \$329,943 to develop and train local communities to evaluate and use development practices with low impacts on the environment;
- Weeks Bay NERR, Alabama: \$371,099 to understand whether restoring wetlands can mitigate sea level rise;

- University of New Hampshire: \$683,472 to develop an integrated climate change adaptation plan for the Great Bay Estuary, and \$589,838 to use natural landscaping to prevent flooding and pollution;
- University of Maryland: \$598,645 to evaluate the cultural, economic and ecological effects of restoring drained marshes to mitigate sea level rise;
- South Slough NERR, Oregon: \$549,826 to develop socioeconomic and environmental conditions that may signal climate change in the Coos Estuary, and evaluate water flow in developed communities and the natural environment; and
- Tijuana River NERR, California: \$599,972 to develop wetland conservation and recovery goals that include both scientific data and community input.

NOAA's Estuarine Reserves Division established the NERRS Science Collaborative through a cooperative, agreement with the University of New Hampshire in 2009 to put science to work for coastal communities. The Science Collaborative also sponsors fellowships in the university's Integrated Coastal Ecosystem Science, Policy, and Management Program, a master's degree program that provides the knowledge and skills needed to bring science to coastal decision making.

NERRS is a network of 28 protected areas representing different biogeographic regions of the United States, from Wells, Maine to Katchemak Bay in Alaska. NOAA administers this program, through the Coastal Zone Management Act, in partnership with coastal states and territories. Through integrated research, education, and resource stewardship, the reserves help communities better understand these vital habitats and develop strategies to manage ongoing coastal resource challenges.

NOAA centralizes disaster planning, response expertise in Gulf region at new facility

Ceremony marks opening of NOAA's new Gulf of Mexico Disaster Response Center

October 15, 2012



Gulf of Mexico Disaster Response Center in Mobile, Ala.

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

NOAA leaders joined members of Congress, as well as federal, state, and local emergency responders today at the grand opening of the [Gulf of Mexico Disaster Response Center](#) in Mobile, Ala.

The new 15,200-square foot facility will serve as a central coordination point for federal, state and local emergency managers, and partners who rely on NOAA's scientific support to make decisions to protect and restore the Gulf Coast's communities, economies, and valuable natural resources.

"NOAA provides important services to the Gulf of Mexico response community, from forecasting the paths of hurricanes to restoring the environment after oil spills," said David Kennedy, assistant

NOAA administrator for coastal and ocean services. "I know this facility will greatly enhance our ability to coordinate regionally, while improving the accessibility of NOAA resources to emergency managers. We are grateful for the support Senator Shelby and others have provided to make it a reality."

“The Gulf of Mexico Disaster Response Center will be critical to Alabama and other states in the region as they prepare for and respond to disasters, natural and otherwise, that affect the Gulf of Mexico and those that thrive off of its resources,” said Sen. Richard C. Shelby of Alabama. “By assisting susceptible communities like Mobile in their emergency preparedness, this facility will help to prevent unnecessary tragedies in future crises.” Over the past decade, the Gulf region has faced both natural and human-caused disasters, including hurricanes, oil spills, tornadoes, droughts, harmful algal blooms, and wildfire. While many of these severe events cannot be prevented, NOAA can reduce their effects by helping to prepare federal, state, and local decision makers for a variety of hazards and threats.

The center allows NOAA to consolidate several programs in the Gulf region, streamlining response to emergencies. It will house navigation response crafts and their teams, as well as experts in oil and chemical spill response, incident meteorology, damage assessment, habitat conservation and restoration planning, marine debris, nautical charting, and navigation safety.

“The ultimate goal is to be a centralized hub in the Gulf of Mexico region and make our responses to emergencies more efficient,” said Charlie Henry, center director. “The data NOAA will provide from this center will inform daily weather reports, help to ensure national security, help us determine if seafood is safe, and guide cargo ships loaded with goods we all buy at the store. Bringing these closely linked talents and resources under one roof will help streamline delivery of NOAA services for regional emergency preparedness and response.”

Centrally located in the Gulf region, the center is designed to withstand severe weather events such as hurricanes and tornadoes; the facility was built to withstand a Category 5 hurricane and includes an interior F5 tornado shelter. The building was designed using sustainable principles and is built to the Silver Certification standards of Leadership in Energy and Environmental Design (LEED) from the U.S. Green Building Council.

In addition to office space, the facility includes a training room, conference rooms, and a large multifunction space that can be used for emergency response operations and drills.

Operations at the center are ramping up; NOAA employees are already conducting shoreline assessments, and have held oil spill response and storm surge workshop sessions for federal and state emergency managers. Over time, NOAA will increase its response training and workshops. Today’s opening event included a capabilities demonstration of NOAA products, services, and expertise that are available to the Gulf of Mexico emergency response community for disaster preparation, response, and recovery.

NOAA Regional Ocean Partnership Funding Program

In September 2012, the National Oceanic and Atmospheric Administration (NOAA) awarded \$3.14 million to regional partners through the Regional Ocean Partnership Funding Program (ROPFP). This grant program was developed to advance effective coastal and ocean management through regional ocean governance, including the goals for national ocean policy and comprehensive ocean planning set out in the president’s Final Recommendations of the Interagency Ocean Policy Task Force, July 19, 2010. The ROPFP program supported two categories of activities: 1) implementation of a spectrum of regional ocean partnership priorities, with a focus on marine planning activities, and 2) support for development and operations for regional ocean partnerships.

The following projects were selected for funding:

Northeast – The Association of U.S. Delegates to the Gulf of Maine Council, representing the Northeast Regional Ocean Council (NROC), was awarded \$625,000 to undertake foundational tasks necessary to support regional ocean planning by engaging with specific stakeholders and to support continued development of data and science products.

West Coast – The National Fish and Wildlife Foundation, representing the West Coast Governors’ Alliance (WCGA), received \$850,000 in grant awards to help engage the public, stakeholders, and tribal sovereign nations in a productive and collaborative process to support and inform ocean planning on the West Coast, update the WCGA Action Plan, and enhance the Regional Data Framework.

Mid-Atlantic – The Mid-Atlantic Regional Council on the Ocean (MARCO) received \$445,000 in support, including an award to Monmouth University to enhance MARCO’s Mapping and Planning Portal and support spatially explicit ocean planning in the Mid-Atlantic, and an award to the Coastal States Stewardship Foundation to enhance capacities for MARCO to improve regional ocean governance efforts in the Mid-Atlantic.

South Atlantic – The South Carolina Sea Grant Consortium, representing the Governors’ South Atlantic Alliance, was awarded \$276,000 to support continued development of the Regional Information Management System portal and to initiate two pilot-scale efforts to support ocean planning and other information management needs of the alliance.

West Coast – The Smith River Rancheria received \$225,000 to build the capacity of West Coast tribes to coordinate at a regional level to engage in ocean governance and to integrate tribal science and ecological knowledge into ocean planning efforts.

Gulf of Mexico – The Gulf of Mexico Alliance (GOMA) was awarded \$225,000 to support continued coordination of the GOMA priority issue teams for achieving the specific priority objectives outlined in the Governors’ Action Plan II.

Pacific Islands – The University of Hawai‘i, representing the Pacific Islands region, was awarded \$225,000 to continue support for the establishment of the Pacific Regional Ocean Partnership (PROP) as a governance structure to implement priorities of the Pacific region, as well as the National Ocean Policy, by enhancing the regional capacity for ocean planning.

Great Lakes – The Council of Great Lakes Governors was awarded \$275,000 to advance bi-national data exchange and information that supports local decision-making for adaptive coastal planning and management.

In the Gulf States

State Lands Go Social with New Forever Wild Website

The Forever Wild Land Trust has launched a new social media-driven interactive website, alabamaforeverwild.com. The new site serves as a social media hub that integrates services such as Foursquare, Twitter, Flickr, YouTube and Facebook, and is a forum for fans of Forever Wild to share their favorite outdoor experiences.

To help visitors get started using the new Forever Wild website, a helpful video tutorial has been posted in the blog section of the site, and on YouTube at <http://youtu.be/Prw7RHpmxGI>.

Greg Lein, Alabama State Parks Director and Director of the Forever Wild program for the Alabama State Lands Division, said the new Forever Wild web experience is a place for fans to interact and engage with each other, and to discover the beauty and recreational activities that Alabama’s public lands have to offer.

“Social Media has become a daily tool that most of us use to communicate and share information,” he said. “The new Forever Wild site helps people connect through shared experiences that are associated with public lands in Alabama. Social media is the perfect platform to promote Forever Wild because it is a medium through which the public has a direct voice.”

A primary social media feature of the new website is the ability for visitors to share their photos and videos of Forever Wild properties with the use of hashtags, a word or phrase with the prefix “#” that makes that word or phrase searchable in various social media platforms. In order to share a video or photo on the Forever Wild site, users can tag their personal Flickr photos or YouTube videos with the land tract hashtag provided on the tract’s individual page on the new Forever Wild website.

Users of the site can also virtually “check in” to the individual land tracts and become that tract’s “mayor” by using a Foursquare account. Each land tract page also features the news feed of its Facebook and Twitter pages as well as any YouTube videos associated with the property.

An educational component is also embedded into the site with a section just for educators. Have questions about the flora and fauna on a particular public land? Each tract also has an “Ask a Biologist” section and a list of plants and animals that are commonly found in the area.

Do you have a favorite outdoor activity or Forever Wild property? The new Forever Wild website allows users to search that category and find every land tract in Alabama that offers it, and the interactive map pinpoints each Forever Wild land tract in Alabama. The map is searchable by your current location or where you will be traveling. You can even check the local weather to ensure the conditions are favorable for your recreational activity.

Log on to alabamaforeverwild.com and share your favorite Alabama Public Lands experience today!

2013-2018 Draft Coastal Conservation Plan Released

The Mobile Bay National Estuary Program (NEP) has revised the 2002 Comprehensive Conservation Management Plan (CCMP) and is releasing the draft plan for public input and comment. Comments will be received through January 30, 2013.

The 2013 CCMP is a community road map for coastal environmental management and restoration, and a plan to arm citizens with the latest scientific knowledge related to our estuary to heighten their sense of ownership and ability to make a personal difference.

The original CCMP was completed and approved in April 2002. It included objectives of improving water quality, living resources, human uses, habitat management and education and citizen involvement. In total, the 2002 CCMP contained 29 specific objectives with 101 implementable steps on the “path to success.” As of September 30, 2012, of the 101 actions identified in the plan, 11 have been completed, 88 have been implemented on some level, and three are being reconsidered.

The new plan is based on scientific assessments of where the greatest stresses are on the services provided by our coast’s critical habitats and on what the community values most about coastal Alabama.

The NEP was created in 1995 with a mission to promote the wise stewardship of the water quality and living resources of the nationally significant Mobile Bay estuary. It is one of 28 federally authorized programs coordinated by the EPA.

Bays and Bayous Symposium draws 364 participants

The 2012 Mississippi-Alabama Bays and Bayous Symposium was held Nov. 14-15 at the Mississippi Coast Convention Center in Biloxi, Miss. The event brought together more than 350 scientists, students, professionals and coastal residents from 10 states to learn about current research and outreach efforts regarding coastal sciences in the Northern Gulf of Mexico. A total of 185 presentations focused on climate and hazard resilience, Deepwater Horizon Oil Spill science, habitat management and restoration, living estuarine resources, and water quality and quantity.

This year's theme was "Finding a common currency: Natural resource economics, ecology and culture," and included presentations about putting values on services ecosystems provide to humans.

The [abstracts](#) from the presentations are available online.

UF Oyster Recovery Team Updates Apalachicola Producers, Leaders on Recovery Project

Friday, December 7, 2012.

GAINESVILLE, Fla. — Apalachicola-area oystermen and community leaders received a progress report Thursday from University of Florida scientists working to remediate the area's oyster population collapse. Karl Havens, director of Florida Sea Grant and leader of the [UF Oyster Recovery Team](#), told a crowd of about 75 in Apalachicola that data being developed will help local industry representatives make management decisions to protect the area's world-famous shellfish.

"A good path forward will be one where scientists like us can give the community information to empower them to participate in the protection of the Apalachicola Bay system and its fisheries," Havens said.

At the meeting, members of the locally based seafood industry self-help organization Seafood Management Assistance Resource & Recovery Team, or SMARRT, announced plans for a stakeholders' group. Made up of oystermen, shrimpers, crabbers, guides, dealers and other industry personnel, the 15-member group would enable the local seafood community to "speak with one voice" in communications with management agencies and research teams.

Chris Millender, a SMARRT ad hoc committee member and chairperson of the Franklin County Seafood Workers' Association, said he hopes that with local expertise and scientific support, Apalachicola Bay can be managed sustainably and the oyster fishery collapse won't be repeated.

In early September, Gov. Rick Scott requested federal assistance to mitigate an expected decline in the area's fall and winter oyster harvest, which began Sept. 1. Shortly after, UF Senior Vice President for Agriculture and Natural Resources Jack Payne announced formation of the interdisciplinary oyster recovery team. The team includes experts from such disciplines as mollusk biology, aquaculture, commercial seafood processing, food and resource economics, water chemistry, environmental toxins, marine ecology, public health and community resiliency. Though based in UF's Institute of Food and Agricultural Sciences, the team includes representatives from Florida State University and state agencies.

In addition to looking for causes of the current oyster decline, the recovery team scientists hope to find ways the industry can move toward a more adaptive and resilient approach to oyster management. They expect to deliver recommendations in early 2013, Havens said. The team has already met several times with residents to get input on recovery efforts and outline proposed recovery team activities.

At Thursday's meeting, team leaders presented information about the progress of the team's six major divisions: contaminants and pathogens, water flow and salinity, nutrient inputs, oyster population dynamics, fisheries modeling, and food safety.

Some presentation highlights:

- The ongoing drought in the Southeast has reduced flow in the Apalachicola River, which provides freshwater to Apalachicola Bay. This has increased water salinity and cut nutrient availability, and most likely played a role in reducing oyster, shrimp and fish populations.
- Climate models predict more drought, meaning that the oyster industry must find ways to make production resilient to drought conditions.
- Scientists and producers discussed experiments that could help determine where oysters best survive under reduced water-flow conditions.
- One expert asserted that stricter policing of oyster size limits is needed to restore populations and ensure quality.

Havens noted that local involvement will continue to be critical in guiding scientific efforts. "It may take us a long time to gather enough data to explain what happened," Havens said, "but the community is energized to work with the team and find ways to preserve this historic industry and the area's seafood resources."

Credits

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DEP'S Coastal and Aquatic Managed Areas Celebrates the Re-Opening of the Tampa Bay Aquatic Preserves Office

~A new beginning for an existing management area~



Coastal and Aquatic Managed Areas staff celebrate with a ribbon cutting Tuesday in Dunedin.

DUNEDIN – On Tuesday, the Florida Department of Environmental Protection's Office of Coastal and Aquatic Managed Areas celebrated the re-opening of the Tampa Bay Aquatic Preserves office, a field site of the office. A ribbon cutting was held at the City of Dunedin Municipal Marina overlooking the preserve.

"I am proud of the work that is being done to manage and restore natural resources like this one, and provide additional recreational opportunities to our local communities," said CAMA Director Kevin Claridge. "I look forward to many generations being able to enjoy the benefits from these and other state lands our department offers."

The office for the Tampa Bay Aquatic Preserves is re-opening because of re-evaluations of the functions of the office in Tallahassee. Claridge directs nearly 50 coastal and aquatic sites statewide and has shifted functions away from the central office to field sites so that one full time position and two part-time positions were available to staff the Tampa Bay Aquatic Preserves.

"The Tampa Bay Aquatic Preserves office was established by the State of Florida to protect the abundant resources in this estuary," said Aquatic Preserve Manager Dr. Randy Runnels. "It is the second largest

urban estuary in the state and it is as important to commercial and a recreational interests now as it was when Tampa Bay was first settled. We attract tourists from around the world to these clean and beautiful waters right off shore from one of Florida's largest cities."

A local steering committee, comprising business and environmental leaders, will have a voice in promoting the activities of the aquatic preserves. Those activities focus on water quality, restoration of islands and shorelines, and helping the public to understand how they can keep the waters clean, the beaches beautiful, and the mangroves and seagrass beds productive.

About the Office of Coastal and Aquatic Managed Areas

The Florida Department of Environmental Protection's Office of Coastal and Aquatic Managed Areas (CAMA) is responsible for oversight of the State's 41 Aquatic Preserves, three National Estuarine Research Reserves, the Coral Reef Conservation Program, and the Florida Keys National Marine Sanctuary. It is the mission of CAMA to conserve and restore Florida's coastal resources for the benefit of people and the environment. For more information: <http://www.dep.state.fl.us/coastal/>.
<http://content.govdelivery.com/bulletins/gd/FLDEP-62d692>

DEP Secures Conservation Easement Over Seven Runs Creek

~Final land acquisition from the \$10 million secured under the MOEX consent decree~

TALLAHASSEE –The State of Florida has acquired conservation land over Seven Runs Creek in Walton County as part of a recently announced \$10 million settlement with MOEX, a company invested in the well involved in the Deepwater Horizon oil spill. After acquiring Escribano Point on Dec. 7, the remaining portion of the \$5 million land acquisition funds allocated under the MOEX settlement was used to purchase a conservation easement over Seven Runs Creek, which is a part of the Florida Forever project in Walton County. The closing was Friday.

Governor Scott said, "This \$5 million investment will benefit Florida's groundwater resources in Walton County and also support the region's surface water quality and wildlife. These dollars will support our mission of protecting and restoring Florida's natural resources, so that Florida families who depend on these treasures can enjoy them for generations to come."

With the assistance of The Trust for Public Land, the Board of Trustees of the Internal Improvement Trust Fund received the conservation easement that comprises more than 2,336 acres of Seven Runs Creek, which is owned by the M.C. Davis Trust. The conservation easement will be managed by the Florida Department of Environmental Protection's Division of State Lands.

"We are pleased to announce another important land transaction as part of this settlement that helps protect Florida's environment," said DEP Secretary Herschel T. Vinyard Jr. "A conservation easement on Seven Runs Creek fulfills our mission to buffer military installations and provides a host of environmental benefits to the Florida Panhandle."

The settlement includes not only \$5 million in land acquisitions, but also \$5 million in stormwater retrofit projects throughout Bay, Okaloosa and Santa Rosa counties. The Florida Department of Environmental Protection will oversee the expenditure of that money. The acquisition of the property has many benefits to the state. Part of the project is considered to be a groundwater recharge area, since it has been mapped by the Northwest Florida Water Management District as a groundwater rich area. The project also includes a number of seepage streams that are considered pristine waterbodies that feed directly and indirectly into a Surface Water Improvement Management area and Outstanding Florida Waters of the Choctawhatchee River. Finally, this property will help to provide an environmentally protected connection, in perpetuity, between Eglin Air Force base and the Choctawhatchee River Water Management Area.

“Conservation of this Seven Runs Creek property advances Florida's Gulf Coast restoration initiatives and permanently protects a beautiful natural area for the public to enjoy,” said Chris Kay, Chief Operating Officer for The Trust for Public Land. “The Trust for Public Land is proud to continue its partnership with the State of Florida to be responsive to Florida's conservation, restoration and clean water priorities.”

MOEX Offshore was a 10-percent non-operating investor in the lease on the Macondo well at the time of the Deepwater Horizon spill and is the first entity to resolve civil penalty claims. This recovery does not affect any outstanding claims the State may have against any other responsible party, including BP. For information directly related to Florida's response and restoration activities relating to the Deepwater Horizon spill visit <http://www.dep.state.fl.us/deepwaterhorizon/default.htm>.

DEP Releases Caloosahatchee River Restoration Roadmap

~More than \$18 million in local commitments for water quality blueprint~

FORT MYERS - The Florida Department of Environmental Protection today announced adoption of two Basin Management Action Plans in southwest Florida, one for Hendry Creek and Imperial River and the other for the Caloosahatchee River. Department Secretary Herschel Vinyard joined city and county officials at the celebration to kick off implementation of these critical water quality cleanup plans.

“One of DEP's top priorities is getting Florida's water right, ensuring an adequate supply and improving water quality,” said Secretary Vinyard. “The Department is focused on achieving measurable ecological progress through restoration programs all across the state. We will continue to partner with local stakeholders as we take collective, immediate action to restore the rivers, lakes and estuaries that give Florida so much of its unique character.”

Hendry Creek, Imperial River and the Caloosahatchee River are critical to the economy and quality of life in southwest Florida. The plans, developed in conjunction with local stakeholders, describes the pollution reduction responsibilities of each stakeholder and includes detailed lists of projects to be implemented over the next five years. They also outline monitoring plans to track changes in water quality, measure success and inform future management decisions.

“We are proud to partner with DEP and the other agencies and local governments that made these BMAPs possible,” said SFWMD Executive Director Melissa L. Meeker. “The South Florida Water Management District is committed to helping improve conditions throughout this vital watershed.” The ceremony took place at the Downtown Riverfront Basin in Fort Myers' River District just one week after the opening of the Detention Basin, an award-winning (Florida Institute of Consulting Engineers “Grand Award”) stormwater project.

Over the first five year phase of the Caloosahatchee River plans, stakeholders are expected to reduce approximately 148,000 pounds per year of total nitrogen, representing 40 percent of the required urban load reductions in the tidal basin. The first phase of the Hendry Creek and Imperial River plan should achieve urban load reductions of nearly 12,000 pounds of nitrogen, 66 percent of the needed urban load reductions in Hendry Creek and 45 percent of the urban load reductions required for Imperial River. Local agricultural operations will also be implementing best practices for water use and nutrient management.

To achieve these reductions, the local governments have already committed more than \$18 million to invest in specific stormwater management and water control projects in Lee County, Fort Myers and Bonita Springs.

Local government investment includes:

- City of Bonita Springs: More than \$500,000.
- City of Fort Myers: More than \$6 million.
- Lee County: More than \$12 million.

The plans were developed under the Department's comprehensive approach to identifying polluted waterways and building local and regional partnerships to restore them. They represent collaboration among area local governments and development districts, several state agencies in addition to the Department and the South Florida Water Management District.

A unique feature of the Caloosahatchee River is the large amount of fresh water delivered from Lake Okeechobee. Last week, the Department embarked on development of an additional plan to expand on the extensive work conducted under the Lake Okeechobee Protection Plan to restore the quality of the fresh water flowing into the river.

Statewide, the Department has adopted 13 basin management action plans to date, covering 95 waterbody segments. About half of those were adopted in the past 24 months. Seven more are currently in development covering 55 additional waterbody segments.

For more information about DEP's water quality protection and restoration programs visit <http://www.dep.state.fl.us/water/watersheds/bmap.htm>.

DEP Sets Restoration Goals, Provides Funding for Silver Springs, Kings Bay Springshed

~Department continues its efforts to restore and fund projects for Florida's iconic springs~

TALLAHASSEE- The Florida Department of Environmental Protection is expanding its efforts to restore Silver Springs and Kings Bay by finalizing restoration goals and committing \$2.5 million to water quality improvement projects.

"In the last two years, with support from Governor Scott, Senator Charlie Dean and the rest of the Florida Legislature, we will have directed \$11.5 million to restoring Florida's springs - more than double the spending in the previous three years," said Florida Department of Environmental Protection Secretary Herschel T. Vinyard Jr.

Department research and monitoring led to designating Silver Springs and the Upper Silver River as impaired for nitrates, a form of nutrients that can cause serious algae problems. The Department is now finalizing the Total Maximum Daily Load or, in this case, the maximum acceptable concentration of nitrates, at 0.35 milligrams per liter. This is the same restoration target that the U.S. Environmental Protection Agency has adopted for springs -- based on the Department's data -- and that has been upheld in both state and federal courts. Meeting the restoration target will protect aquatic life and bring the system back into balance.

A formal management plan to reduce nitrate inputs to meet the total maximum daily load will be developed. Local involvement will be key to identifying the specific actions that area stakeholders will implement to reduce nitrate inputs into the system, along with a schedule for carrying them out.

"Cooperation and partnerships between DEP, the Legislature and public and private stakeholders is the only way our springs will be restored," said Senator Charlie Dean. "I appreciate the Department's efforts as they continue to spend money allocated by the Legislature on meaningful projects to restore our springs."

The Department is not waiting on completion of the management plan to act, however. In July, the Department announced a \$1 million investment in wastewater projects identified in concert with Marion County and the St. Johns River Water Management District as critical to restoring area water quality.

The first project will redirect the current discharge from the Silver Springs Regional-Wastewater Treatment Plant, only 1.5 miles from the main boil of Silver Springs, to the Silver Springs Shores Wastewater Treatment Plant, 10 miles from the boil. It will also connect a series of small “package” wastewater treatment plants to the central facility, which will provide better treatment. Implementation of these actions will eliminate more than two tons of nitrates currently going into the Silver Springs system every year.

The Department will invest another \$400,000 to take Silver River State Park off septic tanks and hook it to central sewer, reducing nitrates in Silver River and Silver Springs by another 1,370 pounds annually.

“Florida is a national leader in water quality assessment and restoration, and we are aggressively attacking pollution in Florida’s fabled springs,” said Drew Bartlett, Director of DEP’s Division of Environmental Assessment and Restoration. “DEP uses the best science available to identify water quality problems and works with local leaders to solve them.”

On another front, to improve King’s Bay, the Department is committing more than \$1.1 million to a reuse project for the city of Crystal River. This ongoing project, jointly funded with the Southwest Florida Water Management District and the city, will send 750,000 gallons of reclaimed water from the Crystal River wastewater treatment plant to the Progress Energy Citrus County Power Complex. It will reduce wastewater nutrient loading to the local springshed by 16 percent and increase spring flow in Kings Bay by reducing the need for groundwater pumping at the power complex.

The Department will soon establish nutrient reduction requirements for the Rainbow, Jackson Blue and Weeki Wachee springs systems. Earlier this year, the agency adopted a water quality restoration plan for the spring fed Santa Fe River and is on track to adopt a similar restoration plan for the Wekiva Basin. The Department is also kicking off restoration plans for Wakulla Springs and multiple springs along the Suwannee River this year. The objective is to speed up the pace of restoration, tackling problems with clear solutions immediately and developing plans with local stakeholders to solve longer term goals.

ERC Approves Numeric Nutrient Criteria for Florida’s Six Major Panhandle Estuaries

~Rigorous standards now in place for more than 72 percent of the state’s estuaries~

TALLAHASSEE– The Environmental Regulation Commission on Tuesday unanimously approved numeric nutrient criteria for Florida’s six major Panhandle estuaries, further building on the already comprehensive nutrient standards set for Florida late last year. The action means the Florida Department of Environmental Protection has set rigorous nutrient criteria for more than 3,100 of the state’s estimated 4,290 coastal miles of estuaries, or 72 percent coverage. Data collection and analysis continues for the remainder of the estuaries.

“Floridians depend on healthy water resources for their livelihoods and everyday enjoyment. We have demonstrated once again, through cutting-edge science and aggressive action, that the Department meets its responsibilities to protect those resources ahead of its own and EPA’s schedules,” said Drew Bartlett, Director of the Department's Division of Environmental Assessment and Restoration. “We are gratified by the ERC’s action.”

These are the numeric nutrient standards for the Panhandle estuaries, which includes Perdido Bay, Pensacola Bay (including Escambia Bay), Choctawhatchee Bay, St. Andrew Bay, St. Joseph Bay and

Apalachicola Bay. The nutrient water quality standards adopted in 2011 included a schedule for the development of estuary specific numeric nutrient criteria for the Panhandle estuaries by June 30, 2013, and the Department has developed nutrient standards for total phosphorus, total nitrogen and chlorophyll a for individual estuary segments in each of the estuaries.

The numeric nutrient standards come nearly seven months before the Department's own deadline and 10 months before The U.S. Environmental Protection Agency's schedule for setting standards. And they come five months after the Department's overall numeric nutrient standards set last year were upheld by an Administrative Law judge in their entirety and submitted to EPA for review. EPA confirmed last year that the Department's rules are accurate and will serve to protect and improve Florida's water quality.

Florida taxpayers have invested millions of dollars to create the nation's most comprehensive rules, which account for the diversity and complexity of Florida's waters and the challenge that nutrient pollution represents. These rules afford local communities and private interests the tools essential to cleaning up and protecting rivers, lakes and estuaries. The Department is committed to working with affected stakeholders to finish the job.

For more information visit <http://www.dep.state.fl.us/water/wqssp/nutrients>.

DEP and FWC Announce \$6.3 Million for Florida Early Restoration Projects

TALLAHASSEE— Today, Florida's lead Trustee -- the Florida Department of Environmental Protection - along with Co-Trustee Florida Fish and Wildlife Conservation Commission announced that the Deepwater Horizon Natural Resource Damage Assessment Trustees approved two proposed projects for Florida totaling more than \$6.3 million. Of Florida's 770 miles of coastline, more than 170 miles experienced oil and response impacts from the Deepwater Horizon oil spill. This set of proposed projects focus on restoring nesting habitat for birds and sea turtles, which was injured during response efforts resulting from the spill. These projects will be finalized upon completion of the public comment period.

Governor Rick Scott said, "These restoration projects are important for our environment, our businesses and the communities that rely on these incredible natural habitats. While this is a step in the right direction, our work is not complete – and we will continue to work to ensure Florida communities are fully restored."

The Deepwater Horizon Phase II Draft Early Restoration Plan and Environmental Review projects describes the second round of projects proposed to receive funding from the \$1 billion BP committed to on April 2011, of which Florida will receive \$100 million as a down payment for early restoration. The Phase I projects are well underway in Florida, which include four boat ramp construction projects along with a dune restoration project totaling more than \$4.9 million, all located in Escambia county.

Florida's economy is heavily dependent upon tourism and commercial fishing, and hosts the highest density of sea turtle nesting for any panhandle gulf coast state. The proposed projects address injuries related to the habitats of species which were not addressed in Phase I.

One of the projects proposes to protect nesting habitat for beach nesting birds from disturbance, by restoring nesting habitats that were disturbed from oil spill response activities. The second project plans to reduce artificial lighting impacts on nesting habitat for sea turtles, specifically loggerhead turtles, which will begin to restore nesting habitat impaired by disturbances from the increased lighting and machinery on the beaches from oil spill response activities.

In Florida, both of the proposed projects are planned to take place in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf and Franklin counties. The projects in this plan are being addressed separately from other early restoration projects in order to derive more natural resource benefits by implementing them in time for the 2013 nesting season.

The Trustees will hold a public meeting to solicit public comment on the proposed projects Tuesday, Nov. 13, at the Escambia County Central Complex Building, also known as the LEED Building. An open house will begin at 6 p.m. central time with the public meeting beginning at 7 p.m.

Visit www.gulfspillrestoration.noaa.gov to view the proposed projects, access public meeting information, to view additional details of the proposed early restoration projects and ways to submit public comment. Public comment will be accepted until Dec. 10, 2012.

For more information on the Natural Resource Damage Assessment process and projects being submitted visit <http://www.dep.state.fl.us/deepwaterhorizon>.

DEP Kicks Off Water Quality Restoration Efforts for the Suwannee River Basin

~State's 12th comprehensive plan and stakeholder commitment promote action now~

TALLAHASSEE – Today in Live Oak, the Florida Department of Environmental Protection is holding the first stakeholder meeting to begin hammering out the Suwannee River Basin Management Action Plan. The plan will plot the course for restoring the Suwannee River and the unique spring systems that feed it, with activities throughout a watershed covering more than one million acres in Suwannee, Gilchrist, Levy, Dixie, Lafayette, and Madison counties.

Together with the recently adopted action plan for the nearby Santa Fe River Basin, the Suwannee basin management action plan will guide projects and activities to restore watersheds encompassing more than two million acres in the North Florida heartland.

The water quality restoration goals – or “total maximum daily load” – adopted for the Suwannee Basin require a 35 percent reduction in nitrogen concentrations. Reducing nutrients will cut down on the growth of algae and reinvigorate the river and springs. The plan now underway will lay out targeted actions to reduce nutrients, an implementation schedule and the resources necessary to succeed.

“The Department has a sense of urgency to find the best solutions for each affected waterbody,” said DEP Secretary Herschel Vinyard. “The Department is focused on measurable progress in restoration. We want results. The Suwannee River initiative is a great example of what can be accomplished through state, local and private partnerships.”

Reducing nutrient discharges to the Suwannee River will improve water quality and habitat and sustain the fishing and recreation for which the area is justly famous. The plan will set forth a phased approach to implementing agricultural and urban best management practices, better stormwater infrastructure and management, and reusing treated wastewater for irrigation and other beneficial purposes rather than discharging it into the watershed. It also will call for ongoing water quality sampling that will allow stakeholders to continuously improve our understanding of pollutant sources and impacts, adjust strategies as needed and measure success.

The Suwannee River Partnership (www.suwannee.org) and its coalition of some 60 governments, businesses, and industries already have invested time, money, and good faith reducing nutrient levels in the Suwannee and its springs, paving the way for the plan. For example, the Department, in cooperation with the Suwannee River Water Management District, has underwritten nearly \$1 million for a

fertilization/irrigation retrofit project, with more funding anticipated for other identified needs. In addition, the Florida Department of Agriculture and Consumer Services teamed with the United States Department of Agriculture's Natural Resources Conservation Service to collectively invest more than \$20 million over the last seven years on a variety of best management practices for agricultural grower and producer water quality and water savings.

"Today marks an important beginning in our collective efforts to protect and restore the waters of the Suwannee Basin," said Ann Shortelle, Suwannee River Water Management District Executive Director. "We look forward to working with our stakeholders throughout the basin to improve water quality in the Suwannee River and springs."

"The Suwannee River Basin Management Action Plan represents the culmination of many years of coordinated effort to partner with all the regions' stakeholders to develop and implement programs to restore and protect the springs, the main channel of the river and its estuary," said Rich Budell, director of Office of Agricultural Water Policy. "The Florida Department of Agriculture and Consumer Services is committed to continuing that partnership with the SRWMD, DEP, the local agricultural community and many others as we embark on the next phase of assuring that the unique natural resources of this area are protected for generations to come."

When this restoration plan is finalized, the Department will have adopted a total of 12 basin management action plans, covering 100 waterbody segments. Nine additional restoration plans currently are in development covering 59 additional waterbody segments.

For more information about the Department's water quality protection and restoration programs visit: <http://www.dep.state.fl.us/water/watersheds/bmap.htm>.

DNR Secretary Chustz says Atchafalaya Basin Water Project Completed

December 26, 2012

Dog Leg Canal is in St. Mary Parish near Myette Point. Photo shows successful restoration of Dog Leg's sediment trap functionality. Photo by Charles Reulet, DNR Office of Coastal Management
Dredging work at Dog Leg Canal in the Atchafalaya Basin has been completed, announced officials with the state Department of Natural Resources (DNR) today. The project was a water maintenance project included in the department's Atchafalaya Basin Program.

Dog Leg Canal is located within the Attakapas Island Wildlife Management Area in St. Mary Parish. DNR Secretary Stephen Chustz said he was pleased to see the work completed within six weeks and according to construction specifications.

Comeaux Engineering and Consulting Co. of Broussard completed the work which now helps move freshwater from the Atchafalaya River into the swamp. One of several water quality projects that are in the plans to be constructed by DNR's Atchafalaya Basin Program, this project restores Dog Leg's sediment trap functionality at the cut, and will improve water quality off the east bank of the river in the area near Grand Lake. The total cost of the project was \$184,000.

This project was approved by the Atchafalaya Basin Technical Advisory Group, which consists of scientist from several state and federal resource agencies and LSU, who are required to certify that any water quality and water management project nominated will result in water management or water quality improvements that will enhance the wildlife, fisheries, or forest resources of the Atchafalaya Basin. Chairman of the Atchafalaya Research and Promotion Board Gerald Alexander said, "It's good to move

from conception to completion, every project is important as we work with our partners to improve conditions in the Basin.”

The Department of Wildlife and Fisheries manages the Attakapas Wildlife Management Area, a natural forested swampland teeming with a variety of animal and game habitat and fisheries. The Attakapas WMA is comprised of some 27,962 acres.

8,000 is a Mighty Good Number!

Atchafalaya Basin Clean-Sweep held Saturday ~ 3rd Annual Atchafalaya Clean-Sweep on Oct. 27

November 2, 2012

On Sat., October 27th, the Evangeline Area Council, Boy Scouts of America teamed with the state Department of Natural Resources (DNR) for this year’s volunteer and youth group clean-up event in areas located within the Atchafalaya Basin. Several popular boat launches and fishing spots were targeted by the Scouts and community volunteers to pick-up discarded trash that truly misrepresents a beloved place of nature and beauty in south Louisiana.

“The community and government partnership is what makes these efforts so meaningful and effective,” noted DNR Secretary Stephen Chustz. And here is the good news, over 60 people over the course of several hours on a pleasant fall weekend morning, collected nearly 8,000 lbs. of trash. That is retrieved, bagged, and removed! That is impressive – mighty good work!

The working crews trekked through the Whiskey Bay and Ramah boat launch areas and also along Bayou Amy in Henderson. “We believe our Scouts have a tremendous sense of pride for the land and water in the Atchafalaya and are eager to tackle litter abatement and do their part in making it a wonderful place for all to enjoy,” said the Evangeline Area Council’s Atchafalaya Program Coordinator Ben Pierce.

Local parish officials from Iberville and St. Martin parishes helped with supplies, transportation and coordination efforts. This was the 3rd Annual Atchafalaya Basin Sweep and every year the goal is to reach out further, involve more people in the spirit of community, and look-back at a clean, healthy and wholesome environment.

DNR staff participants included Don Haydel, David Fruge, Sara Krupa, and Sarah Duncan.

Louisiana Coastal Zone Boundary Maps Now Available

The 2012 Louisiana Coastal Zone Boundary maps with the revised boundary are now available from the Louisiana Department of Natural Resources' Office of Coastal Management (OCM). A limited number of those maps may be picked from OCM's home office located on the 10th Floor of the LaSalle Building at 617 North Third Street in downtown Baton Rouge. If you would like a map shipped to you, please provide either a Fed Ex or UPS account number and the method of shipment. If you have any questions about obtaining these maps, please contact Lea Ann Baker of OCM at (225) 342-7591 or 800-267-4019. More information on the new Louisiana Coastal Zone Boundary, including maps, can be viewed on the OCM website at the following link:

<http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=928>.

New Guidance for Louisiana Coastal Use Permit Process

OCM continues our efforts to update the Needs, Alternatives and Justification (NAJ) requirements for Coastal Use Permit applications. The updates are designed to outline what information the applicant should provide with the application, and the updates are geared towards project type in an effort to expedite the permitting process. OCM has recently approved the Pipelines, Oil & Gas Facility Development, Industrial Development, and Utility Development Guides, which are available now on our website. Click [here](#) to view the referenced NAJ guides as well as other helpful information about Coastal Use Permitting.

The Coastal Use Permit process is part of the Louisiana Coastal Resources Program (LCRP), which is an effort among Louisiana citizens, as well as state, federal and local advisory and regulatory agencies to preserve, restore, and enhance Louisiana's valuable coastal resources. The purpose of the Coastal Use Permit process is to make certain that any activity affecting the Coastal Zone, such as a project that involves either dredging or filling, is performed in accordance with guidelines established in the LCRP. The guidelines are designed so that development in the Coastal Zone can be accomplished with the greatest benefit and the least amount of damage.

Mississippi Coastal Cleanup Nets 2,053 Bags of Trash

More than 2,500 volunteers scoured Mississippi's beaches and waterways picking up marine debris at 68 designated cleanup sites Oct. 20 during the 24th annual Mississippi Coastal Cleanup, part of the International Coastal Cleanup—the world's largest volunteer effort to clean up the marine environment. During the 2012 Mississippi Coastal Cleanup, 2,545 volunteers picked up 2,053 bags of trash, including 164 bags of recyclables, along 199 miles of Coastal waterways in Hancock, Harrison and Jackson counties and the barrier islands. The cleanup is organized by the Mississippi Department of Marine Resources and Mississippi Marine Debris Task Force. The Mississippi Coastal Cleanup returned to the beaches and barrier islands and again expanded its reach through its partnership with Mississippi Power's Renew Our Rivers program, who cleaned two sites on the days leading up to Saturday's cleanup and removed more than 10 tons of debris. The Mississippi Coastal Cleanup recycling effort grew from four sites where volunteers collected recyclables during last year's cleanup to 15 sites this year. Volunteers who participated at these sites collected trash and filled 184 bags with recyclable items.

All told, 2,545 volunteers collected 54,680 pounds of trash including 184 tires—that's 27.3 tons of marine debris. This included items too large to fit in trash bags such as household appliances. Other items found were: An unopened safe in Gautier, a chandelier with bulbs on Petit Bois Island, kid's rocking horse, bed pan, dead deer, bowl with food in it, TV, dishwasher, full-size house door, sealed 55-gallon drum, tiki hut, plastic swimming pool, pillow, Swiffer sweeper, Mardi Gras beads, foam, curtain rod and silverware. The most peculiar item found was a sea turtle carcass simulator, a piece of scientific equipment belonging to the Institute of Marine Mammal Studies that had washed up on Deer Island.

During the International Coastal Cleanup, hundreds of thousands of people across the world spend three hours combing the beaches and waterways to pick up trash that pollutes our waters, harms marine life, hampers tourism and poses health risks to beach-goers. During last year's International Coastal Cleanup, more than 598,076 volunteers worldwide removed more than 9 million pounds of debris from the ocean, rivers, lakes and waterways.

"Trash is one of the biggest threats to the health of our oceans and waterways," said Lauren Thompson, state coordinator for the Mississippi Coastal Cleanup and public relations director for the Mississippi Department of Marine Resources. "It's here to stay unless we change our practices. Every piece of trash that is picked up during the Mississippi Coastal Cleanup should be a challenge for change."

The mission of the International Coastal Cleanup is to remove debris from shorelines, bayous, bays, rivers, waterways and beaches; collect valuable information on the amount and types of debris collected; educate people on the issue of Marine debris; and use the data collected to effect positive change. Volunteers clean beaches and collect information on what they find, using the International Coastal Cleanup Data Card, so that sources of marine debris can be targeted for education or pollution prevention campaigns. State coordinators mail the data cards to the Ocean Conservancy in Washington, D.C. where the data is tabulated. Over the years, data from the cleanups have been used to enact local, state, national, and even international legislation and agreements.

After the Mississippi Coastal Cleanup, the Coastal Conservation Association of Mississippi and RPM/Domino's Pizza treated 360 volunteers to pizza from 11 a.m. to 1 p.m. at Jones Park in Gulfport. Cabot Cheese, Chiquita Fresh LLC, and Coast Coca-Cola Bottling Co. also provided food and drink for the event.

In Jackson County, 650 volunteers received a free barbecue lunch of pulled pork and beef brisket and chips at the Estuarine Education Center at Mississippi Gulf Coast Community College in Gautier courtesy of The Shed Barbeque & Blues Joint. Coca-Cola Bottling Co., Consolidated provided bottled water for the lunch. In Hancock County, the Office of Congressman Steven Palazzo and the Bay St. Louis Rotary Club treated volunteers to hotdogs at a cookout held at the Washington St. Pavilion on the beach in Bay St. Louis. Volunteers, who cleaned the beach and filled out data cards, documenting what litters our shores and waterways, also received a re-usable fold-up lunch bag, compliments of Chevron Pascagoula Refinery.

"The great turnout today and the support that the Mississippi Department of Marine Resources has received from the Mississippi Marine Debris Task Force and our more than 80 sponsors sends a clear message: Mississippians do care about their coastal environment," Thompson said.

Clean Energy to Be Celebrated with Ribbon Cutting

BILOXI, Miss. – The Mississippi Department of Marine Resources (MDMR) will be holding a ribbon-cutting ceremony on Sept. 26 at 10 a.m. at Lynn Meadows Discovery Center, 246 Dolan Avenue, Gulfport, to unveil one of three clean energy demonstration projects on the Mississippi Gulf Coast. The Powering Renewal project, funded through a Coastal Impact Assistance Program (CIAP) grant, aims to raise awareness about everyday energy efficiency opportunities for residents, businesses and communities.

The clean energy demonstration project at Lynn Meadows Discovery Center are solar panels incorporated into larger-than-life steel-framed sunflowers. The other two projects are located at MDMR's Grand Bay National Estuarine Research Reserve (rooftop solar panels) in eastern Jackson County and at The University of Southern Mississippi Gulf Coast Research Laboratory (solar LED lighting) in Ocean Springs. All demonstration projects are designed to provide examples of clean energy technology in public places. The projects also provide real-time data on energy production and savings, which is displayed on monitors at Lynn Meadows Discovery Center and the Grand Bay National Estuarine Research Reserve.

"Through the Powering Renewal project, we not only hope to demonstrate the applicability of clean energy, but also want to educate and encourage everyone to think about ways to improve their energy use at home and at work," said MDMR Office of Coastal Management and Planning Director Tina Shumate.

"What an honor to be partnering with the Mississippi Department of Marine Resources on the solar sunflower project," said Cindy DeFrances, Executive Director at Lynn Meadows Discovery Center. "We are looking forward to sharing this energy educational opportunity with our many members and visitors."

The Powering Renewal project is funded with qualified outer continental shelf oil and gas revenues by the Coastal Impact Assistance Program, U.S. Fish and Wildlife Service and U.S. Department of the Interior through a grant award to the MDMR.

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.

Smart Yard, Healthy Gulf Campaign Benefits Local Waterways

Smart Yard, Healthy Gulf is a public education campaign from the Gulf of Mexico Alliance that is designed to reduce fertilizers entering local waters by helping people make responsible lawn fertilizer decisions. Excess nutrients, such as those found in fertilizers and other chemicals, are often the source of areas of low oxygen in coastal Mississippi waters as well as the Gulf of Mexico. These areas of low oxygen are called Hypoxic or Dead Zones.

The Smart Yard, Healthy Gulf campaign encourages homeowners to apply the proper amount of fertilizer at the proper time(s) of the growing season to keep lawns looking vibrant, but also to save money and keep the waters of coastal Mississippi resilient and healthy, including Gulf seafood.

To have a “Smart Yard”:

- Fertilize when grass is actively growing. In coastal Mississippi, mostly warm season grasses are grown that don’t need fertilizer in the fall, winter and early spring. Wait until late spring or summer. Summertime is the right time to fertilize warm season grasses along the northern Gulf of Mexico. Some grasses are able to stay beautifully green without fertilizer, so find out if your lawn is able to thrive without any at all.
- Talk to a local gardening volunteer expert, known as a Master Gardener. A Master Gardener can help you determine what type of lawn you have and how much and how often your lawn needs fertilizer if at all.

The Smart Yard, Healthy Gulf campaign website is a great source of background information as well as tips and guidelines. It can be accessed at <http://www.smartyardhealthygulf.com/>. The website contains an online tool to assist with determining when to fertilize and how much to use. Also, guidelines for lawn care can be found on the website. Homeowners who participate in the Smart Yard, Healthy Gulf campaign receive yard signs to help encourage others in the area to do the same.

About the Gulf of Mexico Alliance: The Gulf of Mexico Alliance recognizes that the economy and quality of life for citizens of the Gulf are linked to its ecological health. As the result of a shared vision for a healthy and resilient Gulf of Mexico region, the states of Alabama, Florida, Louisiana, Mississippi and Texas formalized the Alliance in 2004. A not-for-profit organization, the Alliance’s mission is to enhance the ecological and economic health of the Gulf region by encouraging collaboration among government agencies, businesses, education providers and non-governmental organizations. Priority issues addressed by the Alliance include water quality, habitat conservation, ecosystem assessment, nutrient impacts, community resilience and environmental education. The Alliance supports the creation of a parallel Mexican Gulf Alliance and strongly encourages the continued pursuit of collaboration among countries in the region.

Thousands of Spotted Seatrout Released into Waters of Bay St. Louis

Thousands of spotted seatrout fingerlings were released into the waters of St. Louis Bay, Merlin Necaize Boat Launch on the Wolf River and at the Cedar Point Boat Launch, Bay St. Louis in August 2012. The Seatrout Population Enhancement Cooperative (SPEC) is a partnership among the Mississippi Department of Marine Resources (MDMR), the University of Southern Mississippi Gulf Coast Research Laboratory (GCRL), and the Coastal Conservation Association (CCA) of Mississippi since 2005.

The fish were produced at GCRL's Thad Cochran Marine Aquaculture Center and, when roughly a month old, transferred to an aquaculture grow-out facility belonging to Aqua Green, LLC in Perkinston, Miss. While there, the fingerlings were tagged and were able to be weaned off of live feed. In 2006, MDMR and GCRL produced the first-ever captive spawned and reared Mississippi spotted seatrout in indoor, lowwater-use systems at GCRL's Cedar Point site in Ocean Springs. Additionally, 2006 saw the first-ever tagging and release of Mississippi spotted seatrout. The spotted seatrout is the most popular recreational catch in the Gulf of Mexico, and it is under considerable fishing pressure. As of the August release, a total of about 500,000 fingerlings have been released into Davis Bayou and Bay St. Louis.

AquaGreen is involved in the production of freshwater and marine finfish for food as well as for restoration purposes. Partnering with this private company made it possible to increase grow-out capabilities and share the burden of care for the fingerlings. This company is the only commercial inland producer of marine fish in the Gulf Coast region and employs recirculating aquaculture technologies coupled with novel wastewater management strategies. They produce a variety of finfish species to help in the restoration of coastal waters in Louisiana as well as Mississippi including spotted seatrout, red drum, cobia, southern flounder, Florida pompano and Atlantic croaker.

"We are honored to work with two excellent organizations to accomplish stock enhancement for future generations to come," Walter Boasso, president and CEO of AquaGreen said. "The future of longterm fisheries sustainability is in partnerships like this one between business, Gulf Coast Research Lab and the Mississippi Department of Marine Resources."

Loggerhead Turtles Nest on Coastal Preserves

Several loggerhead turtle nests were found on the Mississippi Coast this year including one nest on the recently restored beaches of the Deer Island Coastal Preserve and another in the Graveline Bayou Coastal Preserve. Loggerheads, named after their large heads, grow to an average 250 pounds in weight and an average 3 feet in length. Peak nesting occurs in June and July and usually at night. They typically lay about 100 eggs per nest and average about four nests per season.

The nest on Deer Island was highly successful with 121 of 128 eggs hatching out, nearly 95 percent. Seventeen of the hatchlings ended up in the Biloxi Small Craft Harbor, but were rescued by the Institute for Marine Mammal Studies and released south of the barrier islands. Unfortunately, the nest in Graveline Bayou Coastal Preserve was unsuccessful and none of the 109 eggs hatched out. However, this nest was the first reported for the summer in Mississippi and its discovery helped set forth a great response network of citizens, volunteers, and biologists to work on future nest sightings on the Mississippi Coast.

Beneficial Use Program Kicks Off with Deer Island Projects

The Mississippi Department of Marine Resources' Beneficial Use of Dredged Material program, in collaboration with the Port of Gulfport, is well on its way to completing the first major non-federal tidal marsh restoration project in the state. About 130,000 cubic yards of fine grained silts and clay dredged from the Port have been barged to Deer Island and pumped ashore to restore Katrina damage in a 50-acre marsh restoration site built by the Army Corps of Engineers, Mobile District, in 2003.

An additional 200,000 cubic yards of this Port material will be accommodated in a new 50-acre sister project constructed by the Port of Gulfport in July of this year and located immediately adjacent to the Corps project. Both beneficial use sites consist of containment or protection dikes that are pushed up from relatively coarse bottom sand around the perimeter of the project. Fine-grained dredged materials are then pumped behind the dikes and allowed to settle out. Normally, local marsh plants colonize the new material, but planting of marsh grasses may be conducted if needed to improve stability and enhance ecological functions.

Adopt-A-Beach Volunteers Cleanup 153 Tons of Trash

Sep 26, 2012

AUSTIN — More than 9,316 volunteers pitched in Saturday for the 26th Annual Texas General Land Office Adopt-A-Beach Fall Cleanup. The volunteers removed 153 tons of trash from 29 sites along 186 miles of Texas coast. "The turnout this year was amazing," said Texas Land Commissioner Jerry Patterson. "We have expanded our social media efforts reaching out through Facebook and other online media to reach people who really care about the Texas coast and who want to help keep it clean, and it seems to be working."

Volunteers reported finding a wide variety of odd items among the usual cigarette butts, plastic caps and lids, including a mixture of car parts, an intravenous fluid bag, a urinal, a crack pipe, a toilet, a dollar bill and a vial of blood. A few items from Mexico were reported including soda and detergent bottles and also a "Bievenidos a Mexico" sign found at the Padre Island National Seashore.

Since 1986, more than 439,000 Adopt-A-Beach volunteers have picked up more than 8,400 tons of trash from Texas beaches, some of it originating from as far away as Asia. 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 next coastwide cleanup will be the Spring Adopt-A-Beach effort scheduled for Saturday, April 20, 2013. The Texas General Land Office Adopt-A-Beach program is an all-volunteer effort to remove trash from Texas' shores. Coastal cleanups are held three times each year and the program's success is due to the hard work of volunteers, including local coordinators who work many unpaid hours publicizing the cleanups in coastal communities.

Adopt-A-Beach Volunteers Win National Award

AUSTIN — The Texas General Land Office's Adopt-A-Beach program does more than any other volunteer program in the nation to take care of public lands, according to the U.S. Department of Interior. Adopt-A-Beach will be recognized with the Take Pride in America Award for top corporate-sponsored event Oct. 11 in Washington, D.C. It is the third time the program has won the prize.

"Adopt-A-Beach volunteers work hard and really make a difference, from cleaning up trash that's deadly to fish and birds to improving Texas tourism," said Renee Tuggle, Adopt-A-Beach coordinator. "I can't think of any other effort that even comes close to the real world change this program and its volunteers bring about."

Texans may get involved by helping out with the Adopt-A-Beach Fall Cleanup Saturday, Sept. 22 all along the Texas coast. Adopt-A-Beach volunteers can register on-line at www.TexasAdoptABeach.org or at any of 28 check-in sites all along the Texas coast between 8:30 a.m. and 9 a.m. on Sept. 22.

The Texas General Land Office Adopt-A-Beach program began in the fall of 1986, when 2,800 volunteers picked up 124 tons of trash. Since then, it has grown into one of the most successful all-volunteer efforts in the nation. In 26 years, 430,000 Adopt-A-Beach volunteers have picked up more than 8,300 tons of trash from the Texas Gulf Coast. Shell Oil Company is the lead sponsor for the 26th Texas General Land Office Adopt-A-Beach Fall Cleanup. Other sponsors include Apache Corporation, AkzoNobel Surface Chemistry LLC, Cheniere Energy, Halliburton and the Ocean Conservancy.

For more information about how you can get involved, call 1-877-TXCOAST or visit our Web site at www.texasadoptabeach.org.

Hydrological Changes and Estuarine Dynamics Book

Author: Paul Montagna, Co-Authors: Terence Palmer and Jennifer Pollack

A new book titled "Hydrological Changes and Estuarine Dynamics" has been published by Springer in the "SpringerBriefs in Environmental Science" series as Volume 8 (2013). The book authored by Paul Montagna, endowed chair for Ecosystems and Modeling is co-authored by HRI Research Associate Terry Palmer and Texas A&M University- Corpus Christi Assistant Professor Jennifer Pollack. Dr. Montagna states "The book represents the culmination of about 25 years of working on freshwater inflow issues and we summarize why inflow is important to estuaries, case studies from around the world, and provide a guide to stakeholders and resource managers to make well-informed decisions". The book can be previewed at the following link <http://www.springer.com/life+sciences/>.

Special Radio Series- Gulf Matters: The Laguna Madre

This 10-part radio series "The Laguna Madre aired on KEDT-FM 90.3 at 8:04AM and 4:44PM weekdays last summer on Monday, August 29th. The 10 episodes sponsored by the Harte Research Institute for Gulf of Mexico Studies are 5-6 minutes long and will also air on KVRT-FM 90.7 in Victoria. "The Laguna Madre" explores the many attributes of this unique body of water on the South Texas coast through conversations with scientists, fisherman, birders, and boaters. The production is part of the HRI's ongoing outreach initiative "Gulf Matters," a series about the Gulf of Mexico. Read the [press release](#).

Click on the links below to listen to each episode. (.mp3)

- [August 29th, 2011: An Introduction](#)
- [August 30th, 2011: History and Geology](#)
- [August 31st, 2011: The Causeway](#)
- [September 1st, 2011: The ICW](#)
- [September 2nd, 2011: Seagrass](#)
- [September 5th, 2011: Fish](#)
- [September 6th, 2011: More Fish](#)
- [September 7th, 2011: Birds](#)
- [September 8th, 2011: Spoil Islands](#)
- [September 9th, 2011: The Economic Impact](#)

Other News

New Website launches – ConservationCorridor.org



Landscape corridors are among the most important conservation strategies in the face of global changes such as habitat fragmentation, habitat destruction, and climate change. We aim to bridge the science and practice of conservation corridors. Conservation Corridor will provide up-to-date findings from science that will inform applied conservation. The website will be used to highlight new innovations in applied conservation, with the goal of guiding the direction of applied science toward management needs.

Recently Released Report on Climate Change Impacts on Biodiversity, Ecosystems, and Ecosystem Services

Drs. Michelle Staudinger and Shawn Carter from the National Climate Change and Wildlife Science Center are members of the steering committee and writing team, which consists of over 60 contributors from federal agencies, academia, and NGOs, to the recently released “Biodiversity, Ecosystems and Ecosystem Services Technical input to the 2013 National Climate Assessment” report. The report consists of seven chapters that cover the latest research and findings on climate change impacts on biodiversity, ecosystems and ecosystem services and is a USGS contribution to the 2013 National Climate Assessment that is available on the U.S. Global Change Research Program website.

Climate Science Center Receives Funds for Projects

By Jana Smith
October 15, 2012

The South Central Climate Science Center—one of eight Department of Interior regional climate science centers nationwide—hosted by the University of Oklahoma, has received funding for seven projects totaling \$826,534. In addition to OU, the Center’s members are the U.S. Geological Survey, Texas Tech University, Oklahoma State University, the Chickasaw Nation, the Choctaw Nation of Oklahoma, Louisiana State University and NOAA’s Geophysical Fluid Dynamics Laboratory.

“This is a very exciting time for the South Central Climate Science Center,” said Center Director Kim Winton. “This our first set of projects to be funded. These cooperative agreements reaffirm that we have the right projects and scientists together to bring science and decision-making tools to federal, state, local and tribal resource managers.”

A full description of the projects funded by the South Central Climate Science Center and its members is available [online](#).

For more information about the South Central Climate Science Center, contact Center Director Kim Winton at kwinton@usgs.gov.

Gulf Region Research Call for Manuscripts



Gulf Region Research Call for Manuscripts

A Call for Manuscripts on Gulf of Mexico Natural History and Scientific and Restoration Aspects of the Deepwater Horizon Oil Spill ...

Scientists have been conducting research in the Gulf of Mexico and along its shores for many decades. Since the Deepwater Horizon oil rig exploded, research within the region has proliferated and taken on a sense of urgency as scientists seek to understand the region's baseline ecology relative to the historic spill's short- and long-term ecological consequences and the impacts of subsequent mitigation and restoration efforts in the region. What has the scientific community learned in the aftermath of the spill? There are many who would like to know.



The Southeastern Naturalist, a peer reviewed interdisciplinary scientific journal with a special focus on the southeastern United States, welcomes submissions of manuscripts relating to the natural history of the Gulf region and scientific and restoration aspects of the Deepwater Horizon oil spill. Articles will be included within within special sections of regular journal issues and in separate theme-focused special issues. The net result is a continuous online publication series which will serve as an encyclopedic resource for all who would like to learn about the natural history of the Gulf of Mexico and about the oil spill and followup mitigation and restoration efforts.



Manuscripts on the Gulf region may 1) present baseline data on the "pristine" natural history and ecology of the region's open and coastal waters and adjacent coastal habitats, 2) document the ecological consequences of the Deepwater Horizon oil spill and of mitigation efforts to deal with them, 3) document long-term ecological restoration efforts to restore the ecology of the region over time through sustained collaborative efforts, and/or 4) address long-term regional and global ecological consequences and implications of the oil spill. Manuscripts may focus on marine, estuarine, freshwater, and coastal habitats and their biota, as well as on oceanographic and biogeochemical aspects of the oil spill within the Gulf of Mexico.



[Instructions for Authors](#) are available. Inquiries about manuscript submissions are welcome. There is a target deadline of Friday, March 29, 2013 for submitting the next round of manuscripts.

office@eaglehill.us, Phone: 207-546-2821 Ext 2, Fax: 207-546-3042

[Eagle Hill Institute](#), PO Box 9, 59 Eagle Hill Road, Steuben, ME 04680-0009, United States



Landscape Conservation Cooperatives for the Gulf of Mexico Region

The following section provides information about activities, announcements, and events for the [Landscape Conservation Cooperatives](#) in the Gulf of Mexico region. Landscape Conservation Cooperatives are applied conservation science partnerships among federal agencies, regional organizations, states, tribes, NGOs, universities and other entities within a geographic area. They are designed to inform resource management decisions in an integrated fashion across landscapes at a broader scale than any individual partner's responsibility. The partnerships will consider landscape-scale stressors, including climate change, habitat fragmentation, invasive species, and water scarcity as it attempts to provide a vision for a landscape capable of sustaining healthy populations of fish, wildlife, plants and cultural resources.

Gulf LCCs Regional Updates:

The [Gulf Coast Vulnerability Assessment](#) (GCVA) [project work plan](#) is now available for your comments. The work plan identifies the project's goals, objectives, tasks, timeline, and team members. It has been reviewed by newly formed project teams, which provide critical expertise and guidance to the GCVA, and now the GCVA Steering Committee would like to hear from stakeholders and partners. The GCVA will enhance conservation and restoration planning and implementation by providing a better understanding of the effects of climate change, sea level rise, and land use change on Gulf of Mexico coastal ecosystems and their species. The GCVA will be led by the Gulf of Mexico Alliance, NOAA, Gulf of Mexico Landscape Conservation Cooperatives, and USGS Climate Science Centers. Stakeholder input will be an important component of the GCVA to ensure that its results are tailored to meet the needs of coastal resource managers, state and regional conservation planners, and the conservation partnerships of the Gulf Landscape Conservation Cooperatives. Please provide your comments to Laurie.Rounds@noaa.gov by January 7, 2013.

Peninsular Florida Landscape Conservation Cooperative



The [Peninsular Florida Landscape Conservation Cooperative](#) (PFLCC) is part of a national network of Landscape Conservation Cooperatives (LCCs). The PFLCC will complement Florida's Wildlife Action Plan and other landscape level conservation strategies to restore, manage, and conserve the biodiversity of the region in the face of both climate change and intense development pressure associated with a rapidly growing human population.

PFLCC Update:

On September 25-26, the PFLCC and the Southeast Region of the U.S. Fish and Wildlife Service brought together conservation practitioners for a workshop to help refine draft guidance that will be used to select species to design functional landscapes capable of supporting fish, wildlife and plants. About 50 people attended the workshop, held in St. Petersburg, Florida to learn about the Service's approach to Strategic Habitat Conservation for landscape-scale conservation and its connection to surrogate species and conservation targets. [Draft technical guidance](#) on selecting species for design of landscape-scale conservation was also presented and is being finalized by the USFWS. Workshop materials are available [online](#).

South Atlantic Landscape Conservation Cooperative



The [South Atlantic Landscape Conservation Cooperative](#) (SALCC) is part of a national network of Landscape Conservation Cooperatives. The SALCC crosses six states, from southern Virginia to northern Florida. The South Atlantic Landscape Conservation Cooperative is the leading forum in which the conservation community develops a shared vision of landscape sustainability, cooperates in its implementation, and collaborates in its refinement. The mission of the SALCC is to create a shared blueprint for landscape conservation actions that sustain natural and cultural resources. The SALCC publishes a monthly [newsletter](#) to share more information about the

Cooperative. You can also participate in [Third Thursday Web Forums](#) to share information about the activities of the SALCC.

SALCC Updates:

- **Natural Resource Indicators and Targets Update:** The SALCC Steering Committee approved the process for identifying shared natural resource indicators and measurable targets for the SALCC. There's more info on the process on the indicators page: <http://www.southatlanticlcc.org/page/indicators>. An indicator selection team is being formed to recommend a list of indicators and targets to the Steering Committee based on the approved criteria. An indicators revision team will also be formed to develop a process for evaluating and updating those indicators and targets. The list of indicators that are going to be evaluated based on the criteria in the process document is being finalized for the scoring process to begin in January. This list was developed from existing indicators and targets from natural resource plans mapped to the SALCC ecosystem types in the process. If you have expertise in particular taxa or ecosystems in the SALCC and would like to help, please contact Laurie.Rounds@noaa.gov. In February, the selection team will use the evaluation process to select its recommended set of indicators and targets for the Steering Committee. The Steering Committee will make its final decision in March.
- The South Atlantic LCC is developing a workshop to delve into how socioeconomic ideas, concepts, and science can further the mission of the LCC. A small committee has been formed to help guide the agenda, which will take place in spring of 2013. If you would like to be a part of the workshop development, please let Janet Cakir know by emailing her at janet_cakir@nps.gov (Please put in the subject line "interest in socioeconomics workshop"). Since socioeconomics is such an all-encompassing topic that could include anything from ecosystem services to economic development, below are some of the big-picture questions being refined to guide the workshop:
 - What are the market forces or outside interests that can be tapped into to further conservation of natural and cultural resources
 - How can those forces or outside interests be beneficial
 - What has the most potential to have the biggest benefit?
 - Where is the "low hanging fruit" and what is needed to take advantage of it?
 - What are the economic motivations or forces behind putting conservation on the ground?

Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative



[The Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative](#) (GCPO LCC) describes both a unique geographic region as well as a new kind of conservation partnership. It is part of a national network of Landscape Conservation Cooperatives (LCCs). LCCs are partnerships among federal agencies, regional organizations, states, tribes, NGOs, universities and others, all of whom leverage resources to define a common

vision for sustaining natural resources within a region. The GCPO LCC conducts research, develops tools that improve natural resource management, and conducts outreach. The goal is to focus coordinated action in support of shared conservation priorities across large connected areas, or landscapes. The GCPO LCC publishes a newsletter, the [GCPO Monitor](#), to share more information about the Cooperative.

GCPO LCC Updates:

- An important goal of the GCPO LCC is to provide data and tools to support landscape conservation through its Geomatics program. Several projects are now under the director of the new Geomatics Coordinator, Alexis Londo. You can read an update for the Conservation Planning Atlas and the Land Cover Database [online](#).
- On October 2-3, in Memphis, TN, and October 24-25, in Lafayette, LA, the USFWS hosted workshops on its Draft Technical Guidance on Selecting Species for Design of Landscape Scale Conservation in cooperation with the GCPO LCC. The purpose of the workshops was to introduce the approach of using surrogate species to Service employees and Service partners, as well as answer their questions and get their feedback on the purpose of the surrogate species approach, to define and design functional landscapes. Workshop materials are [online](#).
- The GCPO LCC held its fall Steering Committee meeting on Oct. 9. The Steering Committee approved the following preliminary recommendations from the Adaptation Science Management Team:
 - Pursue a modeling approach that incorporates scenario planning and explicitly ties projections to specific conservation decisions
 - Invest LCC science capacity and funding on characterizing response of hydrology and fragmentation to key drivers across GCPO landscape
 - Steering Committee endorses the Team's desire to use species endpoints to guide conservation design.
- The GCPOLCC hosted a webinar for the Adaptation Science Management Team in late November to provide an update, identify a timeline and next steps, and explore options for strengthening the ASMT communications with the broader GCPO community. Next steps between October and June include completing a work plan for the ASMT, developing conceptual models for additional habitats, and identifying priority habitats, desired conditions for those habitats, and the species that best reflect those conditions. The GCPO LCC is also developing a database of LCC members and their areas of expertise and interests to help expand a community of practice for the ASMT during implementation of its next steps. For more information, contact John_Tirpak@fws.gov.

Gulf Coast Prairie Landscape Conservation Cooperative



The [Gulf Coast Prairie Landscape Conservation Cooperative](#) (GCP LCC) is part of a national network of Landscape Conservation Cooperatives. The Gulf Coast Prairie encompasses portions of five states (Texas, Oklahoma, Louisiana, Mississippi, and Kansas) and four terrestrial ecoregions (Oaks and Prairies, Gulf Coast Prairie, Tamaulipan Brushlands, and Edwards Plateau). Eventually, it is envisioned to include portions of three Mexican states that share similar habitats (Tamaulipas, Nuevo Leon, and Coahuila). The GCP LCC consists of partnerships based on science, and brings information to on-the-ground strategic conservation efforts. The GCP LCC offers leadership to strengthen the effectiveness of conservation of wildlife populations and their habitats by providing the best available scientific information to inform management decisions. The GCP LCC publishes a [newsletter](#) to share more information about the Cooperative.

LCC publishes a [newsletter](#) to share more information about the Cooperative.

GCP LCC Updates:

- On December 12-13, the GCP LCC Science Team met in Galveston, Texas to refine and continue to implement the focal species selection process. The Science Team discussed the purpose of identifying focal species and developed the following purpose statement: Focal species will serve as a foundation for designing functional landscapes capable of supporting self-sustaining populations of priority species at desired levels. The selection process will ensure that focal species are representative of the suite of habitat that occur within the GCP LCC, of the known stressors to the GCP LCC, and of identified high-priority science needs. The Science Team will continue its efforts to apply [criteria](#) developed in June to develop a list of recommended focal species for the Steering Committee.
- In 2012, as part of the GCP LCC [Instream Flow project](#), a committee of aquatic experts from Oklahoma, Louisiana, and Texas was formed to develop flow-ecology hypotheses for their region. Using EPA Level III ecoregions, these experts examine existing ecological and hydrologic information to support these hypotheses. They will develop regional flow-ecology relationships to serve as support for state instream flow programs as well as identify research needs to fill information gaps. The process to determine regional hypotheses for ecological responses to flow alteration is being reviewed by committees of regional and topical issue experts via a series of webinars. The objective of this initial level of review is to ensure that the decisions made by this committee are scientifically credible and accurate. Once this level of review is complete, the regional flow-ecology hypotheses are reviewed by ecologists across the region to ensure that the relationships are accurate and representative of conditions in streams and rivers of the southeastern US. To view presentations and track their progress and products, go to [Flow-Ecology Hypotheses- Expert Review Process](#).

Other Sources of Information for the Gulf of Mexico Region

The following websites provide information about activities, announcements, and events in the Gulf of Mexico region.

[Restore the Gulf](#)

RestoretheGulf.gov is the official federal portal for the Deepwater BP oil spill response and recovery. This site provides the public with information on the response, current operations, news and updates, how to file a claim and obtain other assistance, and links to federal, state and local partners.

[NOAA Gulf Spill Restoration](#)

NOAA and [other federal and state agencies](#) are leading efforts to assess impacts to, and determine appropriate restoration for, Gulf resources injured by the Deepwater BP oil spill. We are in the process of identifying the types of restoration activities that will be appropriate to restore the natural resources impacted by the spill. This is a key step in the ongoing [Natural Resource Damage Assessment](#) for the spill. Through the process, you will have the chance to give us your feedback on what projects are important to restore the affected resources after the spill. You can make your voice heard by [submitting a project idea](#). You can also [view projects](#) that have been submitted for consideration. The restoration planning process involves many steps and includes input from scientists, experts, and the public. Restoration can take many years and requires the work of many dedicated people. NOAA will continue this work until the Gulf of Mexico is restored to its pre-spill condition. Learn more about NOAA's restoration projects in the Gulf using our interactive [Restoration Atlas](#).

[Gulf of Mexico Alliance](#)

[The Gulf of Mexico Alliance](#) is a partnership of the states of Alabama, Florida, Louisiana, Mississippi, and Texas, with the goal of significantly increasing regional collaboration to enhance the ecological and economic health of the Gulf of Mexico. See [Gulf of Mexico Alliance News and Events](#).

[Gulf of Mexico Research Initiative](#)

The mission of the Gulf of Mexico Research Initiative (GRI) is to improve society's ability to understand and mitigate the impacts of hydrocarbon pollution and stressors of the marine environment, with an emphasis on conditions found in the Gulf of Mexico. In addition, the knowledge accrued will be applied not only to resolve, but also to improve the long-term environmental health of the Gulf of Mexico.

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



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<http://www.coastalmanagement.noaa.gov/>

<http://coastalmanagement.noaa.gov/news/gomexnews.html>