

MMS and Florida

U.S. Department of the Interior ~ Minerals Management Service Summer 2003

MISSION: The Minerals Management Service manages the minerals resources on the Outer Continental Shelf and Federal and Indian minerals revenues to enhance public and trust benefits, promote responsible use, and realize fair value.

From 1986 through FY 2002 the following monies have been distributed to the State of Florida from OCS funds—approximately:

- \$ 111.4 million for Land and Water Conservation Fund State Grants
- \$ 711.2 million for Land and Water Conservation Fund Federal acquisitions
- \$ 15.8 million for Historic Preservation Fund Grants
- \$2.4 million from section 8(g) OCS Lands Act Amendments funds (since 1986)

I. Ongoing MMS Relationships with the State of Florida

Environmental Studies Research Efforts

MMS's extensive and constantly-evolving Environmental Studies Program (ESP) supplies the scientific and technical information needed to determine which offshore areas are acceptable for leasing, as well as predicting, assessing, and managing the potential impact of OCS activities on the marine, coastal and human environments. Since the inception of the ESP in 1973, more than \$733 million has been directed towards diverse areas of study including physical, chemical, and biological oceanography; atmospheric studies; marine mammal, fisheries, turtle and seabird studies; and studies of the sociology and economic factors and impacts related to OCS and marine mineral activities. Through fiscal year 2002, the MMS ESP has spent about \$200 million in the Gulf of Mexico and more than \$300 million in Florida's Gulf and Atlantic waters combined.

With regard to socioeconomic studies, a study entitled *Effects on Local Human Communities of OCS Mineral Extraction in Frontier Areas* will be available in 2004. This study updates baseline information from the Florida Panhandle coastal areas and examines how OCS activity in new areas may affect them.

Several institutions within the State of Florida have conducted research for MMS.

MMS entered into a cooperative agreement with the University of South Florida entitled *Northeastern Gulf of Mexico Physical Oceanography Program: Eddy Monitoring and Remote Sensing Study* in the amount of \$600 thousand. The study investigated the use of satellite imagery to monitor eddies that form from the Loop Current. Eddies significantly affect the circulation of surface waters in the Gulf of Mexico. The final report was completed in late 2001.

In 2000, MMS entered into a cooperative agreement with Florida State University to perform a Study of Intermediate Depth (900 m) and Surface Velocity Fields in the Gulf of Mexico Using Existing and Still Working PALACE Floating Observations. This two-year study is important for understanding deep currents which MMS will use for predicting the movement of deep spills and performing associated risk assessments for NEPA documents.

Cooperative Research Efforts

Gulf of Mexico Region Oil Spill Program: The purpose of the Oil Spill Program (OSP) is to ensure that the MMS is provided with the specialized expert knowledge and capabilities required to adequately fulfill its responsibilities in carrying out the oil spill prevention, planning and natural resource protection mandated by Federal law. The OSP's actions and recommendations may significantly affect the course of action taken by potentially responsible parties. Establishes and/or amends MMS policies, and contributes to the overall ability and readiness of the oil and gas industry in the Gulf of Mexico to respond to oil spills. The OSP is highly specialized, and serves as the MMS technical authority providing professional review of offshore oil spill prevention, containment, and cleanup matters.

Owners and operators of oil and/or gas facilities located seaward of the coastline are required to maintain a high level of spill response preparedness through annual training and drills. The MMS has the responsibility of verifying the subject training and exercises, and the administration of the unannounced oil spill drill program. The OSP conducts approximately 20 drills in the region each fiscal year. The drill scenarios range from well blowouts to vessel collisions and pipeline breaks. The responses required during the drill include equipment deployment and tabletop command post exercises.

One of the recent unannounced oil spill drills was attended by the Bureau Chief for the Florida Bureau of Emergency Response. The drill scenario included an uncontrolled blowout in the Central Planning Area, flowing at a rate of 120 bbl/hr.

Interagency Agreement with the U.S. Geological Survey's (USGS) Center for Coastal Geology (located in Florida): In 1996, MMS entered into an agreement to conduct a study entitled, *Eddy Operational Remote Sensing Study*. This study collected and processed satellite data to produce images and data on the position of the Loop Current (located offshore Florida), eddies, and other major ocean circulation features. Images and data are being made available through the Internet in near-real time for use by other MMS-funded studies in the Gulf of Mexico. By providing these satellite images, MMS was able to identify the Red Tide that

occurred in the West Florida Shelf region. The State expressed its gratitude for MMS's help since this area is a big fishery resource area and the images were able to show what effects the Red Tide had on the resource. The study was completed in 2001.

The USGS Florida Caribbean Science Center (FCSC) located in Gainesville, is also conducting a study for MMS, *Offshore Data Search and Synthesis on Highly Migratory Fish Species in the Gulf of Mexico and the Effects of Large Fish Attracting Devices (FAD's) Located world-wide on such Species.*" In 2001, the FCSC also initiated a major multiyear field study in response to information needs identified by MMS. The study, "*Structure, Function, and Biological/Physical Coupling of Deep Reef Communities in the Northeastern Gulf of Mexico*" will continue through 2004.

Interagency Agreement with the USGS for Seafloor Mapping: During 2001, MMS cosponsored a high resolution multi-beam mapping survey of approximately 4,000 square kilometers of the northwest Florida continental shelf and slope. This project produced highly detailed map images with associated bathymetric data for hard-bottom habitats and other seafloor features such as sand waves and furrows in water depths of 50 to 150 meters.

Collection of Air Emissions Data: The MMS is engaged in a program to collect emission data from OCS activities on the entire Gulf of Mexico. The data may be used by the State of Florida in photochemical and visibility modeling in support of their air quality planning efforts in relation to the Federal ozone standard and the Regional Haze Rules.

Collection of Meteorological Data: MMS is initiating a program to collect meteorological data for the Breton National Wildlife Refuge, the St. Marks Wildlife Refuge, and the Chassahowitzka Wildlife Refuge, all of which are Federal Class I air quality area. The data may be used by the State of Florida in visibility modeling in support of their air quality planning efforts in relation to the Federal Regional Haze Rules.

MMS's Marine Buoy Interagency Agreement with NOAA: Through this agreement, winds, waves, and other meteorological measurements made over several years in Gulf waters have helped enhance local weather forecasting and support air quality studies in Florida, Texas, Louisiana, Mississippi, and Alabama.

Technology Assessment and Research Program

The Technology Assessment and Research (TA&R) Program supports research associated with operational safety and pollution prevention as well as oilspill response and cleanup capabilities. The program was established in the 1970's to ensure that industry operations on the OCS incorporated the use of the Best Available and Safest Technologies (BAST) subsequently required through the 1978 OCSLA amendments. The program is comprised of two functional research activities: Operational Safety and Engineering Research (OSER) and Oil Spill Response Research (OSRR).

The program operates through contracts with universities, private firms, and government

laboratories to assess safety-related technologies and to perform necessary applied research. Participation in jointly funded projects with industry, other Federal and States agencies, and international regulatory organizations has become the primary funding mechanism, in view of the overlap of issues and challenges, as well as a broader recognition that participation in these joint projects is the most effective and efficient means to leverage available funds. Since its inception, the program has funded nearly 500 research projects addressing the broad scope of operations, equipment, and technologies employed in offshore oil and natural gas exploration, development, production, and transportation activities.

Although specific funding levels attributable to individual states are indeterminable because of the various fund sharing arrangements utilized in the program, TA&R Projects of particular interest to Florida include:

Offshore Technology Research Center (OTRC) B This is a joint venture between Texas A&M University and the University of Texas and receives funding from more than 25 companies, the State of Texas, and additional Federal and state agencies. The MMS and OTRC initiated a cooperative agreement which focuses a portion of the OTRC resources upon specific activities associated with the MMS Regulatory Program. In addition, the cooperative agreement provides for an expanded level of participation in certain joint industry projects conducted by OTRC as well as an enhanced level of support for broad-based research conducted through the OTRC with future applications to deepwater oil and natural gas operations in the Gulf of Mexico. During the past five years, the MMS has funded approximately 60 projects and workshops at OTRC focusing on specific areas such as deepwater structures, risers and moorings, materials, seafloor engineering and subsea equipment. In addition the TA&R program has held numerous workshops addressing a range of technical issues associated with offshore oil and gas activities.

Other Research of Interest

Atlas of Gulf of Mexico Gas and Oil Sands: The *Offshore Atlas* makes publicly available a systematic compilation of Gulf of Mexico reserves, production and geologic data within a playdefined framework, with the goal of assisting industry to more efficiently discover and develop hydrocarbon resources. This information also will be useful to Federal and State government decision-makers. The atlas (published in September 2001) is an all-digital publication and consists of a report and various data files. This study details 65 established plays that contain reserves across the Gulf of Mexico OCS. These 65 plays, comprising 10,235 sands in 1,042 fields, contain proved and unproved reserves totaling approximately 168 trillion cubic feet of gas and 15 billion barrels of oil, or a combined total of 45 billion barrels of oil equivalent.

MMS 2000 Assessment of Conventionally Recoverable Hydrocarbon Resources of the Gulf of Mexico and Atlantic Outer Continental Shelf: The MMS 2000 Assessment makes publicly available a systematic assessment of Gulf of Mexico and Atlantic conventionally recoverable hydrocarbon resources, reserves, production and geologic data within a play-defined framework, with a goal of assisting industry to more efficiently discover and develop hydrocarbon resources. This information also will be useful to Federal and State government decision-makers. The assessment (published in October 2001) is an all-digital publication and consists of a report and various data files. This study forecasts that over half of the oil and natural gas total endowment

of the Gulf of Mexico remains to be discovered, with mean undiscovered resources of 192 trillion cubic feet of gas and 37 billion barrels of oil, or a combined total of 71 billion barrels of oil equivalent.

Center for Marine Resources and Environmental Technology: Congress has appropriated funds through the MMS budget for marine mineral research in the Gulf of Mexico. These funds have been earmarked for the Center for Marine Resources and Environmental Technology (CMRET) at the University of Mississippi, which specializes in developing new technologies for evaluating and producing marine minerals. Current research is focused on monitoring methane hydrate deposits in the deep waters of the Gulf of Mexico. MMS provides contractual services and oversees the program through a steering committee. Funding for the CMRET since FY 1998 has totaled over \$2.7 million.

Other Cooperative Efforts with the State of Florida

MMS Cooperative Agreement with the State of Florida to Evaluate Sand Resources: At the request of the Department of Environmental Protection and Florida Geological Survey, MMS initiated a Federal/State partnership in 1994 to study potential OCS sand resources in a 550 square mile area from 3 to 8 miles offshore Florida's central-Atlantic coast, for possible use in shore protection projects. Over 58 miles of sandy beaches are eroding along this 90-mile stretch of coastline.

Now in it's fifth phase of study, MMS has provided approximately \$576,000 in funding for this effort, and the State has provided a similar amount of funding and in-kind services. Broad-based geological and geophysical data have been collected and analyzed across the entire study area. Additional site-specific data have now been collected and analyzed to help determine the thickness and lateral extent of potential sand features.

OCS Sand Conveyed to Date: In 1995, MMS negotiated a noncompetitive lease with the City of Jacksonville, in Duval County, Florida to obtain the use of 1.24 million cubic yards of Federal sand to nourish seven miles of beaches from Atlantic Beach to Jacksonville Beach.

In July 2000, MMS negotiated a lease with Brevard County Florida for the use of up to 4.5 million cubic yards of Federal sand. The project involves restoration of 9.4 miles of shoreline extending from the south jetty at Canaveral Harbor to the northern limit of Patrick Air Force Base.

In December 2000, the MMS and the U.S. Department of the Air Force 45th Civil Engineer Squadron at Patrick Air Force Base, Florida, signed a Memorandum of Agreement to provide 600,000 cubic yards of Federal OCS sand for use in the construction of a shoreline protection project as part of the Brevard County Shore Protection Project. The base will use the sand to provide shore protection from storm surges, high wave conditions, and beach erosion control for facilities and island evacuation routes along the 3.1 miles of Atlantic shoreline portion of the Base.

Recent Requests for OCS Sand: In December 2000, Brevard County requested that MMS provide an additional 2.8 million cubic yards of Federal OCS sand for the South Reach Portion of the Brevard County Shore Protection Project. On August 30, 2001 the MMS amended its lease with Brevard County to include this area. The South Reach segment involves restoration of 3.4 miles of shoreline encompassing the Towns of Indialantic and Melbourne Beach, Florida. Concurrently, MMS and the USACE signed an amended MOA regarding the use of OCS sand, gravel, and shell resources to continue its project with the County. The project began in the Spring of 2002.

Memorandum of Agreement with Florida State University: The State of Florida is looking towards the OCS as a source of high-quality sand for its present and future beach nourishment/restoration needs. A memorandum of understanding (MOA) between the MMS, the Florida Department of Environmental Protection, and the Florida State University signed in March 2001 establishes a mechanism by which the three parties can form a Florida Coastal Marine Institute (FCMI) to support high-quality scientific research and research training regarding the location and quality of OCS sand and gravel resources on the Florida OCS, and the environmental implications of extracting these resources relative to the coastal and marine waters offshore Florida. At this time, ongoing funding for the FCMI has not been firmly established.

Environmental Initiatives to Support Sand Projects

MMS has or is conducting environmental studies offshore Florida. Funding for these studies totals approximately \$1.1million

West Florida Shelf Benthic Repopulation Study: In 1995, MMS completed a study off the State's west coast examining the extent of repopulation of benthic organisms and the possible physical changes in areas that had undergone dredging. Through coordination with the US Army Corps of Engineers (USACE) and a Cooperative Agreement with the University of South Florida, sites offshore the Tampa/St. Petersburg area were selected for study. Sand dredged from these sites was used to restore several beach areas off the West Coast of Florida. The report concluded that no effects directly attributable to dredging were evident.

East Florida Shelf Benthic Repopulation Study: In 1996, MMS provided 1.24 million cubic yards of federal sand to Duval County for a beach construction project in Jacksonville. A term of the 1995 lease agreement was a requirement for a study to determine how quickly marine organisms recolonize the area after dredging. The USACE agreed to fund a small-scale study that examined the effects of the dredging operation on organisms living within surface layers of the seabed within the lease area. Results indicated changes that have occurred are due to natural seasonal variations and are not a result of the dredging operation.

Environmental Surveys of Potential Borrow Areas on the East Florida Shelf and the Environmental Implications of Sand Removal for Coastal and Beach Restoration: The MMS has been working with the State of Florida, and specifically, the Florida Geological Survey (FGS) to characterize the beach nourishment potential of sands found in Federal waters off the east coast of Florida. This includes Federal waters out to eight miles offshore of south Brevard, Indian River, St. Lucie, and Martin Counties.

Other Environmental Initiatives

Underwater Archaeological Sites: The Florida State Historic Preservation Office requested that MMS provide technical support to conduct a high-resolution side scan sonar survey in Pensacola Bay Florida, the site of a 1559 Spanish shipwreck. In June 1997, a cooperative study effort took place. Side scan surveying recorded 13 additional targets and provided positioning for each of them. State divers plan to individually evaluate these targets.

Artificial Reefs: MMS helps facilitate artificial reef development through the acquisition of retired oil and gas platforms for use as artificial reefs. To date, over 151 petroleum structures have been converted to permanent reefs in the Gulf of Mexico—the State of Florida currently has 4 permitted artificial reef sites.

On the West Coast of Florida, 3 sites exist--an Exxon structure offshore Franklin County (1979); a Tenneco structure off Escambia County (1982); and a Chevron structure southeast of Pensacola (1993). On the East Coast of Florida, two platform structures providing more than 100,000 square feet of surface area were donated by Tenneco through a cooperative effort with the State of Florida and Dade and Broward counties.

In 1997, MMS divers participated with divers from Florida's DEP, Santa Rosa County, and the University of West Florida in a study to evaluate the relative impacts of Hurricanes Erin and Opal on certain artificial reefs materials, and to determine which types of reefs were moved and which experienced the most damage. The platform sites appeared to be unaffected, but a significant number of other artificial reef sites were either destroyed or moved.

Meeting with Florida Coastal Zone Management Staff: MMS continues to work with the State to streamline and improve interagency CZM processes and to improve MMS/State working relationships. Using the State consultation agreements, MMS will ensure that all required information is complete and included in the public information copy OCS plans that are being reviewed. The State of Florida revised its prior policy to require Federal consistency review of geological and geophysical permits in lieu of a notification only process. In addition, MMS issued NTL No. 2002-G15 on December 20, 2002, entitled "Coastal Zone Management Program Requirements for OCS ROW Pipeline Applications" which addresses the State of Florida's request to review all OCS ROW pipeline applications.

II. Major Issues of Interest to the State of Florida

Eastern Gulf of Mexico Sale 181 (2001): During the timeframe covered by the OCS 5-Year Program for 1997-2002, one lease sale was held in the Eastern Gulf of Mexico (Sale 181, December 2001). The eventual sale area was located more than 100 miles off the coast of Alabama, and included 233 unleased blocks (1.34 million acres). No areas offshore Florida were offered for lease. The reduction of the sale area from 1033 blocks to 233 was announced by MMS on July 2, 2001. Sale 181 was held on December 5, 2001, in New Orleans, Louisiana. 95 blocks received bids, with high bids totaling \$340 million. All bids were subsequently accepted by MMS after evaluation.

Status of Exploration Activities in the Eastern Gulf of Mexico: The MMS has received twelve exploration plans (EP's) for leases that resulted from Eastern Gulf Sale 181, held in December 2001. Five of the EP's have received coastal zone management consistency certification from affected states and have been approved. Companies that submitted EP's included Marathon (2 Plans--DeSoto Canyon 445 and 489; and DeSoto Canyon Blocks 490, 491, and 535), Anadarko (4 Plans--Lloyd Ridge Blocks 5, 6, 49, and 50; Lloyd Ridge Blocks 315, 316, 359, and 360; Lloyd Ridge Blocks 265 and 309; and Lloyd Ridge Blocks 47, 91 and 135), Shell (2 Plans--Desoto Canyon Block 269 and Lloyd Ridge Block 399), Ocean Energy (1 Plan--DeSoto Canyon Block 180 and 244), Amerada Hess (1 Plan--DeSoto Canyon Block 620) and Kerr McGee (1 Plan—DeSoto Canyon Blocks 226 and 270).

Two exploration plans were received on leases issued prior to Sale 181, but within that sale area. Marathon has drilled an exploration well on its DeSoto Canyon Block 927 lease (Barracuda) and Shell has had its EP approved for the Red Dawg (DeSoto Canyon Blocks 622 and 666) project.

Anadarko finished drilling (PA) its No. 1 well on Lloyd Ridge Block 360 in May 2003. Upon leaving this site the rig commenced drilling Anadarko's No. 1 well on Lloyd Ridge Block 50.

Eastern Gulf of Mexico Lease Sale 189 (2003): Two lease sales in the Eastern Gulf of Mexico Planning Area are scheduled under the OCS 5-Year Program for 2002-2007. Under the current 1.5 million acre configuration, lease sales 189 and 197 would be held in 2003 and 2005, respectively. The proposed sale area lies more than 100 miles offshore Alabama and Florida. Of the 256 blocks located in the proposed Sale 189 area, 118 blocks are currently under lease. Upcoming Dates of Interest: Final EIS to the Public—June 2003; Proposed Notice of Sale—July 2003; Final Notice of Sale—October 2003; Sale Date--December 2003

OCS 5-Year Program for 2002-2007: As part of the OCS 5-Year Program covering the timeframe 2002-2007, there are two lease sales proposed that are of interest to the State of Florida—they are located in the Eastern Gulf—one sale is scheduled in 2003 and the other in 2005. However, the area to be offered for potential leasing during 2002-2007 in the Eastern Gulf is limited to an area located more than 100 miles offshore Florida and Alabama.

OCS Leasing Restrictions: Most of the OCS offshore Florida is subject to restrictions on new oil and gas leasing. On June 12, 1998, President Clinton withdrew from leasing until 2012 those areas under congressional moratorium pursuant to the FY 1998 Department of the Interior's Appropriations Act (sections 108-111 of Public Law 105-83) and withdrew permanently all areas designated as National Marine Sanctuaries. In addition, annual congressional moratoria were continued for FY 2002 and 2003 with the support of the Administration, and the President's FY 2004 budget proposes to extend that moratorium for another year.

Florida areas placed off limits to new OCS leasing through both congressional moratoria and administrative withdrawal include: the Atlantic coast of Florida; the Florida Keys National Marine Sanctuary; and the Eastern Gulf of Mexico Planning Area, except for the Sale 181 area. It should be noted that Congressional and Administrative OCS restrictions only affect new

leasing—not existing leases.

Status of Chevron Destin Dome 56 Settlement (Offshore Pensacola, Florida): In July 2002, the Department of the Interior entered into a settlement agreement with Chevron, Conoco, and Murphy, concerning their leases in the 11 block Destin Dome 56 Unit located in federal waters offshore in the Eastern Gulf of Mexico. The settlement provided for the relinquishment of seven of the nine leases in the Destin Dome Block 56 Unit by the lessees in return for \$115 million dollars. This action was completed in late July 2002. Also as part of the settlement, the lessees would then pay Exxon/Mobil and Samedan an undisclosed amount of money to relinquish two of their leases (which were not part of the litigation but part of the Unit). This action was completed, and as of October 1, 2002, nine of the 11 leases in the Destin Dome Unit have been relinquished back to the Federal government.

The settlement allowed Murphy to retain the two remaining leases in the Unit, with the leases being held by a series of directed suspensions until 2012, the first of which was approved on August 14, 2002. Under the settlement agreement, Murphy has agreed not to submit a development plan for them before 2012, when current oil and gas leasing moratoria expire. After 2012, as per the terms of the settlement agreement, the leases cannot be developed unless both the Federal government and the State of Florida agree.

Status of Gulf of Mexico OCS Deep Water Activities: Leasing activity in the deepwater Gulf of Mexico steadily increased in the early 1990's and exploded in 1996 due, in part, incentives introduced in the Deep Water Royalty Relief Act of 1995 (DWRRA). During the period mandated by DWRRA, i.e. 1996 through 2000, over 4,500 new leases were issued in water depths greater than 200 meters in the Gulf of Mexico OCS, with a majority of these located in water depths greater than 800 meters. From 2000 to 2001, deepwater oil production was up 25 percent—to 930,000 barrels per day; deepwater gas production was up nearly 20 percent—to 3.2 billion cubic feet per day. Beginning in 2001, MMS used its discretionary authority to continue to provide upfront royalty suspension incentives. Incentives were provided for new deep water leases issued in 800 meters of water or greater. Also, for 2002 and 2003 Central and Western Gulf of Mexico lease sales, MMS has expanded the upfront royalty suspension incentives offered in 2001 by including royalty holidays for new leases issued in water depths of greater than 400 meters.

AES "Ocean Express" Pipeline Project: On February 15, 2002, AES submitted a right –ofway pipeline application to this office for a 24-inch gas pipeline that will originate from LNG regasification facilities in the Bahamas across the Atlantic to South Florida. The preferred alternative is a landfall in the Ft. Lauderdale area, where the gas will be delivered to a power plant. The proposed shore approach may be revised as result of objections from the Navy. The pipeline will have a capacity of 787 million cubic feet per day. The Federal Energy Regulatory Commission is the lead agency for this permit, and an EIS is being prepared. The MMS is a cooperating agency, and will take the lead in the review of the offshore-related impacts.

OCS Impact Assistance: OCS impact assistance legislation was passed as part of the Department of Commerce's Fiscal Year 2001 Appropriations Act (Title IX, P.L. 106-553); however, it is subject to annual appropriations. To date, the program has only been funded in

