



MMS and Texas

*U.S. Department of the Interior ~ Minerals Management Service
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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.

In Fiscal Year 2002, MMS distributed to the State of Texas approximately:

- \$ 7.3 million from Federal Offshore lands
- \$ 1.7 million from Federal onshore production

From 1968 through FY 2002, the following monies have been distributed to the State of Texas from OCS funds—approximately:

- \$ 151.6 million for Land and Water Conservation Fund State Grants
- \$ 260.2 million for Land and Water Conservation Fund Federal acquisitions
- \$ 17.1 million for Historic Preservation Fund Grants
- \$ 736.7 million from section 8(g) OCS Lands Act Amendment funds (since 1986)

In addition, there are approximately 529 producing leases and 1,182 non-producing Federal and Indian leases lying within the State of Texas.

I. Ongoing MMS Relationships with the State of Texas

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; fisheries, marine mammal, turtle and seabird studies; and studies of the sociology and economic factors and impacts related to OCS and marine mineral activities. To date, the MMS ESP has spent about \$200 million in the Gulf of

Mexico.

Texas A&M University (TAMU): The Oceanography program at TAMU has played a major role in the collection of scientific information for MMS.

- TAMU recently completed a major study of deep water chemosynthetic communities titled *Stability and Change in Gulf of Mexico Chemosynthetic Communities*.
- TAMU entered into a 3-year, 6.2 million dollar cooperative agreement to study the acoustic effects of seismic activities on Sperm Whales.
- TAMU recently completed a multi-million-dollar, multi-year study of chemical oceanography and hydrography in the northeast Gulf of Mexico. This program provides essential information with respect to development activities in the eastern Gulf.
- TAMU completed major component of the MMS deepwater research initiative in 2001. They gathered and analyzed available deepwater physical oceanographic data to support current resource management activities. This information will be critical in the design of future field and modeling studies.
- TAMU is currently conducting another deepwater research component, the *Study of Physical Processes in the Slope and Rise Using Numerical Models* which will run through 2003.
- TAMU is conducting a multi-year multi-million dollar study of deepwater benthic communities. The study is examining community structure in the entire northern Gulf of Mexico and is working with Mexican scientists to compare species identifications for consistency in scientific information.

University of Houston: In 2001, a cooperative agreement was entered into with the University of Houston for \$367,000 to study the degradation of synthetic-based drilling mud in the Gulf of Mexico.

University of Texas: A completed study *Socioeconomic and Environmental Issues Analysis of OCS Activity in the Western GOM*, looks at public concerns associated with OCS oil and gas activities and is being conducted by the University of Texas.

Other socioeconomic studies include:

- *Assessment of Historical, Social, and Economic Impacts of OCS Development on Gulf Coast Communities* contains a case study analysis of coastal Texas and was published in 2001.
- *The Dynamics of the Oil and Gas Industry* examined the implications of recent changes to the organization of the industry for onshore social and economic effects. The report

was published in early 2003.

In May of 2002, the Environmental Studies Program sponsored a workshop titled: *Workshop on Deepwater Environmental Studies Strategy: A Five-year Follow-up and Planning for the Future*. During the workshop, the state of knowledge of the deep Gulf of Mexico and the effects from the development was discussed. The MMS has already funded \$20 million dollars worth of studies. The workshop proceedings will aid in determining any remaining knowledge gaps.

Oil Spill Research

An MMS/TAMU/LSU project will install two additional buoys in the Texas Automated Buoy system off of Texas and Louisiana that will provide data for real-time use in oil spill tracking and response.

To help Texas and Louisiana with their OPA90 oil spill contingency planning reviews, the MMS summarized all current data concerning facilities located within 30 km of the coast.

TAMU completed a large field program to study circulation patterns of the entire Louisiana-Texas OCS “*The Louisiana-Texas Shelf Circulation and Transport Processes Program*” (LATEX, 1998)

Cooperative Research Efforts

Gulf Of Mexico Region Oil Spill Program (OSP): The purpose of the 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. 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.

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

MMS Agreement with the U.S. Geological Survey's Biological Resources Division (BRD) National Wetlands Research Center: The purpose of this agreement is to investigate the impacts on coastal wetlands from OCS pipeline canals: *Assessment of Changes to Coastal Habitats related to OCS-related Pipelines, Pipeline Canals, Navigation Canals, and Mitigation Activities in the Western and Central Planning Areas of the Gulf of Mexico*. In addition to documenting these impacts, the effectiveness of existing pipeline mitigation and possible new techniques are being studied. The study area includes Texas, Louisiana, Mississippi, and Alabama. A final report is expected by the end of 2003.

Technology Assessment and Research Program

The Technology Assessment and Research (TA&R) 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 TA&R 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 Texas 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

Flower Garden Banks National Marine Sanctuary: MMS, in cooperation with the NOAA National Marine Sanctuaries Program, has continued a long term monitoring of environmental conditions at the Flower Garden Banks National Marine Sanctuary. This monitoring effort is consistent with previous year's efforts to evaluate coral reef diversity, growth rates, long-term changes in individual coral colonies, accretionary growth, and general community health.

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 play-defined framework, with the goal of assisting gas and oil companies to more efficiently discover and develop hydrocarbon resources in the Gulf of Mexico. 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.

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 the goal of assisting gas and oil companies 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.

Collection of Air Emissions Data: MMS is engaged in a program to collect emission data from OCS activities on the entire Gulf of Mexico. The data will be used by the State of Texas 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, a Federal Class I air quality area. The data will be used by the State of Texas in visibility modeling in support of their air quality planning efforts in relation to the Federal Regional Haze Rules.

Underwater Archaeological Sites: MMS is conducting side-scan sonar survey in the High Island Area to monitor compliance by the oil and gas industry with MMS requirements to avoid potential archaeological sites.

Shipwreck Investigation: MMS conducted investigations in 1997 and 1998 of a shipwreck 50 miles off Galveston identified as the 1846 wreck of the side-wheel steamship "New York." The "New York" was one of the first vessels to establish regular trade between New York, New Orleans, and Galveston during the Republic of Texas (1836-1845).

MMS Cooperative Agreement with the National Park Service and other contributing agencies: The purpose of this agreement was to study a technique for quantitatively documenting trash on beaches and the sources of such trash: *Monitoring of Marine Debris at the Padre Island National Seashore*. The study was designed to document the effectiveness of Marpol Annex V regulations to limit the amount of plastics being dumped at sea. The initial study continued for a period of two years from 1994 to 1996.

Other Cooperative Efforts with the State of Texas

State/Federal Cooperative Hydrocarbon Development: The MMS Gulf of Mexico Region has established an ongoing liaison with certain coastal states, including Texas, to proactively monitor offshore areas of mutual interest along the State/Federal boundary. The goal of this initiative is to share geologic data and information early and to work in a cooperative manner on potential issues of concern so that oil and gas resources in the area can be explored/developed in an efficient manner.

Section 205 Cooperative Audit Agreement: Under the Federal Oil and Gas Royalty Management Act, MMS has had a 205 agreement with the State of Texas since 1990 to conduct audits of Federal OCS section 8(g) leases located offshore Texas. This effort was being funded in FY 2002 at approximately \$172,000—to date, the State has received about \$1.5 million to perform these audits.

Sand and Gravel Cooperative Agreement: Since 1991, the Texas Bureau of Economic Geology and MMS studied the engineering and geologic parameters of OCS sand offshore Texas for use in beach restoration and hurricane protection purposes. These offshore sand areas include Heald and Sabine Banks. The cooperative work also accomplished an initial assessment of the feasibility of using that material for beach restoration and hurricane protection projects along the coast near Galveston. In 1997, the cooperative work shifted to focus on the identification of sand resources offshore of Padre Island. These resources, if identified and evaluated, could be used for possible beach restoration and hurricane protection projects for areas along the southeastern Texas coast. In early 2001, the MMS began a new cooperative effort with the State of Texas through the Bureau of Economic Geology focused on developing a user-friendly GIS focused on the sand resources of the Heald and Sabine Banks located offshore of southeastern Texas coast and the areas of beach erosion hazards along the Texas coast. The goal is to provide coastal managers, engineers, and the public with information on sand resources in Federal waters that may be available to address erosion problems.

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. MMS is working with the State of Texas on artificial reef development—specifically, MMS is facilitating the acquisition of

retired platforms for use as artificial reefs. Additionally:

- The MMS Dive Team is assisting the State of Texas in monitoring and documenting the success of platform reefs as artificial habitat.
- The MMS has funded a study of the economic impact of recreational fishing and diving associated with OCS structures.

Meeting with Texas 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. MMS continues to monitor the implementation of Texas' identified CZM required necessary data and information into the OCS Plan review process. Using the State consultation agreements, MMS will ensure that all required information is complete and included in the public information copy of the plan.

II. Major Issues of Interest to the State of Texas

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.

OCS 5-Year Program for 2002-2007: The OCS 5-Year Program covering 2002-2007 became effective in July 2002. It proposes one lease sale annually for the Western Gulf of Mexico planning area (for a total of 5 sales). This is the planning area located adjacent to the State's coastal waters. MMS will continue to consult extensively with the State prior to holding sales in the Western Gulf.

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, the program is subject to annual appropriations and has only been funded for one year (FY 2001). The State of Texas received approximately \$26.5 million from this program at the end of FY 2001. No monies were appropriated during FY 2002 or FY 2003, and the Administration did not propose to fund the program in FY 2004.

Royalty-in-Kind Programs: Beginning in 1998, MMS commenced a series of royalty-in-kind (RIK) pilots to test and evaluate the viability of taking production in-kind (as opposed to in-value) and selling it through a competitive bid process. The pilots are—1) a Gulf of Mexico OCS oil pilot; 2) a Gulf of Mexico natural gas pilot; and 3) a Wyoming oil pilot. More recently, MMS also began another pilot—a Strategic Petroleum Reserve (SPR) oil pilot (see highlights below for more information). With respect to the natural gas pilot, currently about 350,000 mmbtu per day of royalty natural gas is being disposed of through competitive sales. This pilot has been merged with the Texas 8(g) pilot that MMS operated from 1999-2001. With respect to the Gulf oil pilot, up until April 2002, MMS was taking about 50,000 barrels per day of royalty oil under contracts awarded by MMS through competitive sale. With expiration of the contracts on March 31, MMS committed the volumes to the SPR initiative, with deliveries beginning April 1, 2002.

Administration Initiative to Use Gulf of Mexico Oil to Fill the Strategic Petroleum Reserve: In late 2001, President Bush announced an initiative to fill the remaining capacity of the Strategic Petroleum Reserve (SPR) utilizing Federal RIK oil. Approximately 120 million barrels of this RIK oil from the Gulf of Mexico will be used to support the SPR fill. The fill began in April 2002 and is estimated to be completed in December 2004, with contract closeouts and reconciliation's completed by June 2005.

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