The NewsRoom

Release #3078

Date: September 20, 2004

Small Federal Agency Plays Large Role in Managing Oceans

The Minerals Management Service is the nation's ocean resources expert charged with overseeing nearly 2 billion ocean acres. MMS works to provide a secure energy future for Americans while protecting the environment. MMS's efforts include finding better ways to ensure safe operations for the thousands of offshore oil and gas platforms, to conducting essential environmental studies using cutting edge technology.

There are nearly 4,000 offshore oil and gas platforms operating in the Gulf of Mexico. To the west, 23 platforms operate in Federal waters off the coast of Central California, and to the north, there is growing energy industry interest in Alaskan offshore waters.

In addition to providing access to critical energy and other mineral resources needed for the nation's economic well-being, MMS also collects and disburses around \$6 billion a year in mineral revenues--\$135 billion since 1982.

With all that activity, the MMS has, for the past 22 years, helped provide America with domestic offshore energy while ensuring safe operations for people and the environment. And it has done so with stringent regulation of this vital offshore industry.

To be successful, MMS keeps pace with a rapidly changing industry, and frequently evaluates and streamlines its operations. Working with experts from around the world, MMS plays a vital role in studying and protecting the ocean environment.

Domestic Offshore Energy

Much has been written about the need for new sources of oil and natural gas to fuel our economy and heat and cool our homes. Prices and demand are on the rise, but domestic production is lagging behind demand, thus increasing dependency on foreign oil and gas.

Offshore oil production now accounts for about 30 percent of total domestic production – more than double what it was just 12 years ago. And experts estimate it may increase to as much as 40 percent by 2010.

With national security interests in mind, MMS is aggressively leading the way, with industry, to help find new domestic deposits of oil and natural gas in the Gulf of Mexico and off Alaska.

Director Johnnie Burton said, "With an eye on the future, we are not only actively involved in finding needed energy for the American people but are also considering alternative sources of energy, like harnessing energy from offshore wind farms, and looking at ways to extract natural gas from deepwater methane hydrates."

Deepwater Exploration

Energy exploration in deep water is perhaps the most significant area of innovation in energy exploration. Now in its ninth year of expansion, deepwater oil and gas development in the Gulf of Mexico is a workhorse for U.S. domestic oil and gas production. Ocean oil production rose 535 percent between 1995 and 2002, and deepwater gas production rose 620 percent over those same years.

In 1990, about four percent of the oil and less than one percent of the natural gas produced on the Gulf's outer continental shelf (OCS) was from those deeper regions. By the end of 2003, more than 60 percent of the Gulf's oil production and 23 percent of its natural gas came from that area. Production potential from deepwater resources is estimated to be 49.5 billion barrels of oil equivalent.

If current trends continue, by 2006, as much as 77 percent of daily oil production in the gulf and 26 percent of daily gas production could come from the deep water regions.

Environmental Protection

Jacques Cousteau once said, "The future of civilization depends on water. You have the duty to convince people."

MMS has a long tradition in keeping a watchful eye on the marine environment. For years the agency has funded important studies to gain a better understanding of that environment in order to make safe and responsible leasing decisions.

MMS' Offshore Energy and Minerals Management (OEMM) program is responsible for all phases of mineral resource management on the OCS. Under this umbrella is the Environmental Studies Program, which provides the scientific information necessary to make sound decisions pertaining to our ocean role. The program's activities:

- provide information to predict and manage the impacts of OCS oil and gas activities on the human, marine, and coastal environments.
- look at impacts on marine organisms that may result from chronic low-level pollution or large spills associated with OCS production.
- monitor human, marine and coastal environments to report on any significant changes in the quality and productivity of these environments.

"Our scientists coordinate oceanographic research involving underwater archaeology, ocean currents, sea ice conditions in Alaska, deep-sea chemosynthetic communities, marine mammals, and the potential use of retired offshore platforms as sites for harvesting marine bioproducts," says Jim Kendall, Chief Scientist for the agency.

MMS funds or co-funds long-term monitoring studies, like the Bowhead Whale Aerial Survey Project in Alaska, and monitoring the health of the East and West Flower Garden Banks in the Gulf of Mexico.

MMS works with National Oceanic and Atmospheric Administration Fisheries and the U.S. Fish and Wildlife Service to ensure that offshore operations do not jeopardize threatened or endangered species such as marine mammals.

Any actions MMS permits, funds, or carries out are done in consultation with those agencies and in compliance with the Endangered Species Act and the Marine Mammal Protection Act.

Turning to another area that directly affects MMS's ocean role, the agency's Technology Assessment and Research Program supports research on operational safety, pollution prevention, and oil spill response and clean-up.

"The contributions of this program along with our environmental studies arm have been essential in helping us write regulations that mandate safety systems that ensure a safe workplace and protect the environment." says Tom Readinger, associate director for MMS. "Our reviews of new technology are thorough, ensuring that offshore operators use the best and safest available technology."

A Leader in Ocean Science – a Role in Discovery

At the Smithsonian's Museum of Natural History, diligent staff catalogue and store millions of specimens sent to them by MMS supported scientists. Many of the research projects that MMS supports involve the collection of organisms, ranging from tiny shrimp to fist-sized mollusks. The reason: Before exploratory drilling in new "frontier areas" begins, MMS must determine if unique or fragile communities live in the areas, and if these

communities could be harmed by offshore oil and natural gas development.

"The importance of this collection, and why we rely so much on MMS," said Cheryl Bright of the Smithsonian, "is that the collection serves as a valuable research tool. As the agency goes further into deeper waters, new and existing organisms are being discovered. These specimens are of great importance to future scientific studies, particularly when doing comparative analyses."

Gathered by grab samplers, remotely operated vehicles, or manually by SCUBA divers, the creatures are separated from the sediment, identified, and preserved. Once at the Smithsonian, the specimens are placed in jars of alcohol, catalogued, and shelved for future research and reference.

"The telling aspect of all this work," Kendall says, "is that the agency must be a leader in ocean science to be a leader as a regulatory agency."

Along with the agency's regulatory arm, is an ocean science program that has funded over \$650 million in environmental studies over the last 20 years, and about \$17 million for its Technology Assessment and Research Program.

The agency's research activities have funded significant findings in marine research on marine mammal distribution, abundance, and behavior and the potential effects of human activity on their habitat. The agency prepares essential environmental assessments and impact statements, and works with coastal universities to gather needed scientific information used to make responsible offshore leasing decisions.

Using leading edge technology, MMS has been involved, directly or indirectly, with new discoveries of marine species, underwater archaeological sites and sunken ships.

In the summer of 2001, MMS archaeologists were tabbed to verify the remains of a German U-Boat discovered in the Gulf of Mexico under the auspices of British Petroleum and Shell Oil during one of their seafloor surveys prior to construction of a pipeline.

MMS funded studies identified several whale and dolphin species previously thought not to occur in the Gulf of Mexico. Both melon-headed whales and Fraser's dolphins were unknown in the Gulf prior to the studies. An international research effort supported by MMS is studying the effects of seismic noise on whales, namely sperm whales, which reside in some areas of the Gulf.

Navigating north to Alaska, long-term monitoring of the bowhead whale and its importance to Inupiat culture has garnered needed information to protect the only known whale that lives exclusively in the Arctic.

These are but a few examples of how the MMS scientific arm reaches far, wide and deep to get the best science to make the most informed resource development decisions.

Coastal Erosion Assistance

Coastal areas account for less than 10 percent of America's land area, but are home to half the population, and 40 percent of new commercial and residential development. The population explosion is only part of the new environmental stresses being put on the nation's coastal areas, which are under constant assault from the elements. Proactive management and coastal restoration efforts like the MMS beach renourishment partnership program are critical to stabilizing these receding shorelines.

About 20,000 acres of coastal wetlands disappear every year in the United States. Louisiana alone has lost half a million acres of wetlands since the 1950s.

In many coastal cities, sand resources are no longer readily available onshore or in nearshore waters. So States have been forced to go farther offshore to find alternative sand sources.

MMS collects and provides geologic and environmental information, developed through partnerships with

fourteen coastal States, to identify and make available sand deposits in Federal waters suitable for beach nourishment and wetlands protection projects. Information collected in conjunction with these efforts assists the MMS in making future decisions relative to the possible leasing of these deposits.

Operational Safety

For years, MMS has worked to advance the safety of offshore operations worldwide. Off U.S. shores, the agency is required, under the OCS Lands Act, to conduct annual and unannounced inspections of all oil and gas operations on the OCS. The Act also requires MMS and the U.S. Coast Guard to investigate major accidents that might include deaths, major fires and spills.

In 2003 alone, MMS inspectors conducted over 23,000 inspections. MMS is developing a system to identify higher risk facilities and activities that will allow the agency to improve the efficient use of inspection resources.

After September 11, 2001, the agency developed guidelines to enhance existing protective measures. Titled the OEMM Threat and Advisory Guidelines for OCS Operations, these guidelines form the foundation for offshore security systems that improve response during crisis in accordance with the threat levels established by Homeland Security.

In the complex world of managing oil and gas exploration and development on the nation's OCS, MMS is carrying out its mission by employing the best scientists, funding far reaching studies, and ensuring that the highest safety standards are met so that America gets its needed energy.

"We are convinced that offshore oil and gas development, supported by a strong federal regulatory system, will continue to play an important role in securing a safe and dependable energy supply for our nation," said Burton.

The Minerals Management Service is the federal agency in the U.S. Department of the Interior that manages the nation's oil, natural gas, and other mineral resources on the federal outer continental shelf. The agency also collects, accounts for, and disburses mineral revenues from federal and American Indian leases. MMS disbursed more than \$8 billion in fiscal year 2003 and more than \$135 billion since the agency was created in 1982. Nearly \$1 billion from those revenues go into the Land and Water Conservation Fund annually for the acquisition and development of state and federal park and recreation lands.

Relevant Web Sites:

MMS Main Website
MMS Sand and Gravel Program
Environmental Research Program

Media Contacts:

Curtis Carey 202-208-3985

MMS: Securing Ocean Energy & Economic Value for America
U.S. Department of the Interior