

**Study Title:** Design of a Monitoring Protocol/Plan for Environmentally Sound Management and Development of Federal Offshore Borrow Areas Along the United States East and Gulf of Mexico Coasts

**Report Title:** Examination of Regional Management Strategies for Federal Offshore Borrow Areas Along the United States East and Gulf of Mexico Coasts

**Contract Number:** 14-35-0001-31051

**Sponsoring OCS Region:** Headquarters – International Activities and Marine Minerals Division

**Applicable Planning Areas:** East and Gulf of Mexico Coasts

**Completion Date of Report:** October 2001

**Costs:** FY 2000: Year 1 Effort Costs: \$25,000 (Year 2 Effort due for completion in. 2002)

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**Key Words:** sand resources, OCS, planning, management, East Coast, Gulf of Mexico

**Background:** The Minerals Management Service (MMS) International Activities and Marine Minerals Division (INTERMAR) is charged with environmentally responsible management of Federal Outer Continental Shelf (OCS) sand and gravel resources, that is, those resources lying seaward of the State/Federal boundary. As the demand for sand for shoreline protection increases, OCS sand and gravel will become an increasingly important resource. Between 1995 and September 2001, MMS conveyed over 14,600,000 cubic yards of OCS sand for ten projects. MMS's mission is to make timely, streamlined, and environmentally sound and fiscally responsible decisions to access OCS sand resources. To support their mission, they have formed cooperative agreements with ten States to identify and evaluate OCS sand resources as potential sources for future beach nourishment projects. As of 2001, MMS has provided \$4.6 million in funding to support geological and geophysical studies to identify and quantify OCS sand sources. MMS has also taken an active role in identifying the potential environmental impacts of dredging OCS sand by conducting baseline studies of selected OCS regions and funding research on specific areas of concern.

**Objectives:** Now, in the early stages of resource utilization, is the time to establish the mechanisms for long-term management of this resource. MMS identified the need to formulate options and recommendations for including Federal, State, and local governments and other stakeholders in an overall planning process to manage the Federal offshore borrow sites in an environmentally responsible and cost-effective manner over the long term. MMS undertook this project to the feasibility of a regional sand management approach to improve coordination among the relevant regional parties, organizations, and agencies with interest in the use of OCS sand resources for beach and coastal restoration. Important objectives of the MMS program were the demonstrated cost savings and value added benefits that can be achieved through regional management. This work was part of a larger project that also included development of field monitoring systems to evaluate the physical and biological impacts of using Federal offshore borrow areas on a long-term basis. The monitoring protocols are presented in a separate report.

**Description:** The first step of the process to determine the feasibility of a regional management strategy was to identify two areas where pilot studies could be conducted to solicit input from

stakeholders on how to best achieve the above objectives. The two areas would represent different physical and biological settings, technical issues, environmental concerns, interested parties, and agency policies on the issues. Texas and New Jersey were selected. Key agencies and staff in each area were identified and contacted to discuss their perspectives on what kind of management strategies would be most appropriate. The next step was to conduct a one-day workshop in each State and identify the key issues and concerns about use of OCS sand resources. All of the information obtained from discussions with MMS staff, agency representatives, and at the workshops was formulated into a set of recommendations and a framework for managing OCS sand resources.

The goals of OCS sand management were identified as follows:

- Avoid or minimize the environmental impacts to OCS sand borrow sites that may represent long-term sources of sand for coastal communities.
- Reduce the time and costs to efficiently access OCS borrow sites.
- Promote coordination among beach nourishment/coastal restoration projects to maximize cost-effectiveness.
- Allow for adaptive management, learning from past projects to better manage future projects.
- Evaluate the current process for planning, implementing, and coordinating beach nourishment projects, and identify problem areas. Set priorities for working on problems.

**Study Results:** Recommendations to achieve these goals are summarized below.

1. Regional management of sand resources is feasible and essential to the MMS goals for managing OCS sand resources in a cost-effective and environmentally sound manner.

There are many serious issues associated with dredging of OCS sand that must be addressed. Other Federal agencies, States, and local governments clearly look to MMS to provide leadership and guidance on both policy and technical issues.

2. Generally, the "region" should consist of a single State.

States differ in the types of beach erosion problems, approaches to solve them, amount of data available, level of state involvement and commitment, etc. It would be an added level of difficulty to try to engage more than one state in the process. The exception will be for borrow sites that straddle state lines, and these sites would have to be handled on a case-by-case basis.

3. Regional management efforts should start in those States that can provide a strong State Lead AND have already identified a need for OCS sand resources.

MMS is limited by the small size of the INTERMAR division. A strong State lead is essential to the success of the planning process.

4. MMS should build on existing geological "Task Forces" in each State, letting them evolve into a State/MMS Sand Management Task Force.

MMS has been very successful with their cooperative geological studies and these groups can be the basis for expanded responsibilities of a Sand Management Task Force (SMTF). The relationship between the Sand Management Task Force and the USACE Regional Sediment (RSM) Program will have to be addressed in each region, depending on the stage of development of each. The MMS objectives for cost effectiveness and efficiency, in particular, match closely with those of the RSM.

5. MMS should expand its role in sponsoring and co-sponsoring workshops and developing synthesis documents and guidelines on technical and policy issues for managing offshore sand resources.

This effort would build on MMS' focus on information transfer and peer-reviewed publications with parallel efforts to generate and disseminate in a timely manner non-peered-reviewed technical documents that represent current approaches, guidelines, policies, findings, etc.

6. MMS should become the clearinghouse for studies and findings on environmental impacts associated with offshore dredging relative to OCS/Federal borrow areas and use its web site to better disseminate this knowledge.

A well-designed and regularly updated web site could achieve many of the MMS objectives, in terms of providing value-added benefits through sharing of information and findings among states. The MMS INTERMAR web site should become the best site for getting the most current, technical and policy information on offshore sand and gravel resources.

7. MMS should continue to play a lead role in the design and funding of long-term monitoring studies.

Without funds to support long-term monitoring of potential impacts, MMS will not be able to meet its responsibility to ensure that the OCS sand use does not adversely affect the marine and human environments. This lack of funds is a critical gap in the overall program. Monitoring costs need to be shared among the beneficiaries of the sand (State and local government sponsor), the managers of the resource (MMS), and other Federal agencies with an interest in the results of a monitoring effort.

An implementation plan was prepared, with the recommendation that the State of New Jersey be the site of the first Sand Management Task Force (SMTF). Working with the State, a draft charter for the SMTF should be prepared and presented at the first meeting. In addition, MMS should identify those States where formation of a SMTF is feasible at this time, and identify potential members in each State. MMS should participate in all of the initial meetings and offer as much support as possible during the initial activities of each task force. At the end of the first year, MMS should evaluate the effectiveness of the SMTFs, individually and as a group, and make recommendations for how the process should be improved. MMS should also evaluate its funding needs to provide sufficient support to SMTFs in terms of staffing, travel, contractor support, and funding of specific studies. Year 2 of the project is to assist MMS by investigating the various potential SMTFs, querying potential members, and suggesting the compositions of the various groups for the priority states.

**Study Products:** Research Planning, Inc., Baird & Associates Ltd., and Applied Marine Sciences, Inc., 2001. Examination of Regional Management Strategies for Federal Offshore Borrow Areas Along the United States East and Gulf of Mexico Coasts. U.S. Department of the Interior, Minerals Management Service, International Activities and Marine Minerals Division (INTERMAR), Herndon, VA. OCS Report MMS 2001-090, 23 pp. + appendices.