

**LA Sand Management Working Group
14 May 2003**

**Lindy Boggs International Center
University of New Orleans
Research and Technology Park
New Orleans, Louisiana**

Agenda

09:00

- I. Introductions, Housekeeping Items, Review of Agenda
- II. Establishment of the Louisiana Sand Management Working Group (LA-SMWG):
Intent and Purpose, Role of Members, Discussion of Authorities, Responsibilities, Rules of Order, etc.
- III. Discussion and Adoption of Charter for Group (Mission Statement, Activities, Etc.);
Agreement on Final Language
- IV. Review and Discussion of MMS Policies and Procedures for Leasing OCS Sand (Non-Competitive Leasing System, Lease Terms, Conditions, etc.)

10:30 Break

- V. Issues for Discussion and Identification of Tasks (Resource-Related Issues)
 - A. Development of Reliable Sand Volume Inventory and Resource Locations for Offshore Louisiana – What is Known and What Needs to be Accomplished for the Federal OCS Area

12:00 Lunch

13:00

- B. Identification of Projects Within the Foreseeable Future that Will Require Federal Sand and Development of Database on Volumes/Schedule
- C. Development of a System for Establishing Project Priorities
- D. Discussion of Multiple-Use Issues Relative to Areas of Identified Sand Resources

14:00 Break

- VI. Issues for Discussion and Identification of Tasks (Environmental Issues)
 - A. NEPA (including required consultations)
 - B. Studies (review on on-going/planned studies; ID new information needs)
 - C. Technology-related Issue Studies (review on-going/planned studies; ID new data needs)
 - D. Monitoring Requirements and Needs (review of MMS Monitoring Protocols)

VII. Action Items

- A. Assignments
- B. Schedules
- C. Deliverables

VIII. Wrap-up, Summary, and Adjourn

Minutes

Initial Items (I – IV):

- Meeting started with introductions of all participants.
- Review of the agenda, group purpose.
- Discussion of issues having to do with the Federal Advisory Committee Act (FACA).
- Presentation on the MMS role in the use of Federal sand for coastal restoration projects (Renee Orr, Chief, MMS Leasing Division).
- No comments were offered on the draft charter. It appears that all participants are satisfied with the charter's language.

Item V. A. Resource Issues:

- Need both very specific and regional projects. Sand bodies are complex, thus need tighter spacing of data. Even with the recent test, got into mud. Working with USGS, compiling available information. Converting analog into digital data. Will allow for better planning. He talked about areas that were not topographic highs that may have good sand (Sandy Point, Raccoon Point). These are likely to be the priority areas for dredging over the next 10 years. There is an on-going modest effort to digitize existing data, gap-closure program. Then, they will recommend priorities for additional mapping. Not just in federal waters, but also in state waters.
- Key problem: Where is the material that is needed for each project?
- Need a good base map for planning. Need a group to lead or coordinate this process. Not just Ship Shoal.
- Much of the older data don't have enough resolution for identifying sand resources. Need closely spaced vibracores.
- There are three phases of investigation associated with engineering projects:
 1. Overview, regional analysis
 2. Preliminary plan (verify sources within general areas)
 3. Detailed engineering plan for construction

We are presently in the 2nd phase in Louisiana.

- MMS can assist in the preliminary phase, in identifying the resource itself; whereas the sponsor level is responsible for the more detailed analysis.

- Have knowledge right now of where the location of the existing data and the data gaps are known.
- Data Needs:
Good, high-resolution bathymetry is a significant data gap. Need it for modeling, fisheries studies, seabed mapping. Need to find out what the next NOAA update of bathymetry is scheduled.

Sediment volumes/quality

Infrastructure

- Sediment quality requirements vary by use: back bay marsh building can use finer, muddier sand component, whereas barrier island construction may require coarser material. But, is the coarser material just for barrier islands?
- The big driver in the Terrebonne Parish/Houma area is the hurricane levee. One concept is that MMS could set up a “sand station” that is being fed by continuous dredging where users would stop at to get the sand they need. Dedicated dredging company could get a long-term lease for providing different kinds of sediment to a range of projects.
- MMS does have authority to make decisions on suitability or priority of sand use; however the Agency would prefer consensus on these decisions.
- Need, in addition to the volume needed, the sediment quality/characteristics needed for specific projects.
- Talked about the MMS/LA Co-op.
- The state/local sponsors are in triage for some projects with immediate needs. But also need long-term study plan. MMS provides small amount of funds through the Co-ops, for more regional, framework analyses to get a general idea of where the resources might be.
- MARP: Mapping of Aggregate Resources Program is a USGS program. Has been selected by the USGS as one of their priority projects. (Note: This is a joint MMS/USGS/State effort in North Carolina).
- Need to bring in other sand uses, not just barrier island work.
LCA: there is a framework development team that might be a source of matching funds. Could be an activity after the report is out for review.

Item V. B: Identification of Projects/Sand Volumes Required/Project Schedules

- LCA document will outline the projects, sediment needs. When the LCA document goes out for review, we will have a better sense of what projects are likely.

- CWPPRA projects are mostly state waters, but at least three may use OCS sand.
- The Barrier Shoreline Feasibility Study identified sand needs for barrier island projects.

Item V. C: Establishment of Priorities for Sand Use

- A big issue is the conflict with O&G infrastructure. Presently, we only have some idea of the limitations for the Ship Shoal area. Offshore the Barataria Basin, details concerning the conflicts with infrastructure are sketchy. What management alternatives are there to reduce the density of O&G infrastructure, such as moving relict pipelines or avoiding the placement of pipelines through known sand resource areas?
- Wave field impacts; oil and gas industry has not paid much attention to Ship Shoal, in their design for wave heights, other hazards, etc. Industry might also be interested in being involved in funding some of the studies, since they would benefit from the restoration projects (i.e., barrier island restoration might protect O&G infrastructure in bays).
- Resource use issue: is the Houma hurricane levee project the best use of 10 million cubic yards of good sand from Ship Shoal? Ship Shoal is an excellent match for the barrier islands in terms of grain size. Why use it for the levee base? Sand for the levee could come from another source, but only if it involved a small increase in costs. There is a big political commitment to the construction of the levee, which is an \$800 million project. However, there may be parts of Ship Shoal that are of lesser quality sand that would still be suitable for use in the levee project.
- Everyone acknowledged the potential problem with cumulative impacts, so we should now start considering the best use of the resource. There was discussion about what authorities exist and what process could be implemented to establish a “best-use” policy. It was noted that a broader public would have to be involved, since these are the people most interested in public works projects.
- There is a need to identify the trade-offs. Ranking system for the benefits to compare the costs! Especially where there are no reasonable economic alternatives.

Item V. D: Multiple Use Issues

- It may be possible to mine the accretional, northern edge of Ship Shoal; this portion of the shoal is actively migrating landward and accumulating sediment. Thus, it may be possible to dredge the shoal without affecting the height of the shoal. This kind of area could be identified as a priority for use.
- There are relict accumulations of sand on the Louisiana shelf. Sometimes these accumulations are muddier than previously thought. Active bathymetry would assist in

identifying these processes, as well as improve our ability to predict changes in the shoal/wave pattern as a result of dredging.

- Multiple use issues also include the value of the sand resource to other interests, particularly commercial. There is a concern that mining Ship Shoal might affect commercial and recreational fisheries. But, it is acknowledged that even the fisheries folks are aware there are potential positive benefits of barrier island and coastal restoration, including the protection of nursery areas.
- The question was raised whether it was feasible (legally and economically) to have abandoned pipelines removed from areas with quality sand, to increase access to the sand. Companies only have to remove abandoned pipelines if they become a hazard to navigation.
- What is the accuracy and completeness of the existing data on pipelines and other infrastructure? MMS has locations for all pipelines, primarily “as built” maps submitted by the operators and keeps track of pipeline footage removed, as well as the tracks of proposed and active pipelines. It was not clear how far back the digitized map database extends, in terms of digitization of hand-drawn maps.
- DNR has a process to evaluate sites for proposed O&G facilities in state waters/lands, to determine if there is a better location. It was asked whether MMS could require industry to avoid leasing areas within Ship Shoal, or follow established corridors for pipelines. Another possibility is to use directional drilling. Perhaps we can change the mindset that the sand resources should be protected while letting the oil and gas resources be exploited. Currently industry has to avoid archaeological sites, magnetic anomalies, biological features. Are any of these requirements applicable to existing leases?
- MMS commented that oil and gas leases do not exclude the leasing of the surface sediments; and a sand lease site could be issued on an existing oil and gas lease. Presently, MMS issues leases for specific projects, for a specific period of time that are non-renewable. A new lease would be required for maintenance dredging, say 10 years later. So, the sand lease would not preclude other uses/leases of the site.
- MMS cannot give sole access to a sand resource for 50 years. There was discussion about whether the LCA was a different kind of “project” that was comprehensive in nature. Also, MMS must consider new projects that might be identified. One problem in the issuance of a lease for 50 years is the assessment of long-term, cumulative impacts.

Item VI: Environmental Issues

- The concept of standardized stipulations for OCS sand and gravel was discussed. There may be different ones for ESA vs. EFH. The ESA folks would have to be involved in the process.

- For EFH, there are species of concern within topographic features. Ship Shoal is certainly EFH, but not identified as one of particular concern. A programmatic EIS could be used to address large-scale removal of sand from Ship Shoal. The biggest limitation is knowing what the effects are from sand removal (such as effects on spawning habitats) and changes in elevation. Studies involving impacts to East Coast shoals may not be applicable to the Gulf region.
- MMS is planning on a multi-disciplinary study of Ship Shoal beginning in Fiscal Year 2005.
- The long-term environmental effects are the big unknown. In the short term, the smaller volumes being planned for removal in the immediate future are of lesser concern. Cumulative impacts and the consequences of large-scale changes in habitats needs to be better understood.
- Richard Coudry from LSU talked about importance of the reliance of the shrimp fishery on the bottom habitat and menhaden as prey for marine mammals and sharks which school on Ship Shoal. The scale of sediment volume removal vs. the habitat should be addressed in any programmatic EIS. For MMS' planned study effort of the benthic resources of Ship Shoal, it was recommended that control areas be established so impacts can be compared over time.
- For projected wave modeling work, it was suggested that the study be conducted in a probabilistic manner, rather than running a few specific scenarios.
- EPA/ACOE meet with dredgers regularly (monthly Dredgers Forum) to discuss dredging methods for pulling material from the river for wetland restoration. This is different than the dredging technology review being funded by MMS, which should be awarded in late June/July.

RECOMMENDATIONS AND FOLLOW-ON TASKS

Initial Items (I – IV):

- The FACA issue needs to be resolved prior to the next planned meeting.
- All documents associated with activities of the group should be made available on the MMS website.
- The draft charter as written should be considered final.

Resource Issues:

- More resource work is needed, however, future work will hinge on the USGS/UNO work geared towards compiling existing information. The group should discuss potential future work after such a compilation is completed.
- MMS and the Louisiana Department of Natural Resources should agree on a MOU for a revived cooperative agreement which would involve the collection of additional geological and geophysical data and information offshore Louisiana.
- MMS has a repository of O&G data submitted by industry in support of oil and has leasing and production. Much of this information is no longer proprietary and may be disclosed by MMS. This information needs to be assessed in terms of its applicability towards providing geological and geophysical resource information, as well as environmental information.

Identification of Projects and Projected Sand Needs:

- The Barrier Island Project Managers should submit lists of sand needs (initial and maintenance) for distribution to the group. This can be used as an initial step towards identifying project needs for OCS sand. See data submitted to date in Table 1.

Establishment of Project Priorities:

- There is a lot of sediment offshore Louisiana. Prioritization is more of a long-term issue and not so much for the smaller, immediate projects. As an initial step, reliable long-term estimates are needed; following that a system for project prioritization should be considered.

Multiple Use Issues:

- The projected siting of pipelines and infrastructure within potential sand borrow sites should be considered to avoid the preclusion of sand areas from use.
- We need to have a better understanding of what is in the MMS database in terms of the accuracy and completeness of O&G infrastructure data for the Louisiana OCS.
- The oil and gas industry needs to be involved in these multiple-use issues as there are infrastructure benefits as a consequence of barrier island restoration. The industry might be interested in working with MMS on ideas to make sure that the sand is available where

needed, as well as providing geological and geophysical data collected during their hazard surveys of their lease areas, some of which is proprietary. (Suggestions: Ed Lanbrow from Shell might be a good first contact. Bill Streever at BP has been involved in the LCA. Sydney Coffee at the Governor's Office would be a good contact about her work with Jack Caldwell in involving the Feds in the Louisiana restoration work.)

Environmental Issues:

- For future meetings, consider technical presentations on key MMS and other study results. It would be advantageous for members of the LA SMWG to interact with the researchers directly on their study results.
- MMS should have the LA SMWG review and refine the study objectives of the planned FY05 Ship Shoal environmental study.

Table 1. Projected sand requirements in Louisiana (as of May 31, 2003)

Project	Quantity (yd³) (Projected Source)	Date	Comments
New Cut Dune Marsh Restoration (TE-37)	1,200,000 (Ship Shoal)	January 2004 at earliest	In-place quantity
Ship Shoal Whiskey Island West Flank (TE-47)	1,700,000 (Ship Shoal)	January 2004 at earliest	In-place quantity. A detailed survey has not been conducted and there has been erosion from two storms in 2002
Pass Chaland to Grand Bayou Pass and Pelican Island (BA-35)	2,000,000 Maximum (Ship Shoal)	Spring/summer 2005 (est.)	Planning geotechnical survey in spring 2003 in the Sandy Point area
Barataria Basin Barrier Shoreline Restoration Feasibility Study Projects			
Headland	10,290,000 (Ship Shoal)	2007	2,000,000 yd ³ every 10 years for 40 years
West Grand Terre	2,000,000 (Quatre Bayou ebb-tidal delta 2 mi offshore)	2008	1,000,000 yd ³ every 10 years for 40 years
East Grand Terre	11,000,000 (Quatre Bayou ebb-tidal delta 2 mi offshore)	2008	
Ronquille	11,000,000 (Gulf of Mexico 5 mi offshore)	2009	
Shell Island	5,000,000 (Miss. River)	2007	
Scofield	11,430,000 (Sandy Point Sand Body 2.5 mi offshore)	2010	
Total Sand Needs	55,620,000 (initial); 12,000,000 (future); total = 67,620,000 yd ³		
Total OCS Sand Needs	26,190,000 (initial); 8,000,000 (future); total = 34,190,000 yd ³		

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KEY TO AFFILIATIONS:

FG: FEDERAL GOVERNMENT

SG: STATE GOVERNMENT

LG: LOCAL GOVERNMENT

A: ACADEMIA

D: DREDGING INDUSTRY

PC: PRIVATE CONSULTANT

CG: CITIZEN'S GROUP