

PROJECT FACT SHEET

CONTRACT TITLE: Analysis of Environmental Constraints on Extending Reserves in Current and Future Oil and Gas Reserves in Wetlands

DATE REVIEWED: 07/27/1994

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OBJECTIVE: To conduct an analysis of environmental constraints and development of alternative environmental management and mitigation options to moderate potential impacts of oil and gas operations in Louisiana wetland.

ID NUMBER: DE-FG22-93MT91004	CONTRACTOR: Louisiana State University
B & R CODE: AC1510100	ADDR: Basin Research Institute Room 208, Howe Russell Geology Com Baton Rouge, LA 70893
CONTRACT PERFORMANCE PERIOD: 10/01/1991 to 09/30/1994	CONTRACT PROJECT MANAGER:
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SCHEDULED MILESTONES:

- TASK 4 - Estimate Future Exploration Activity and Environmental Impacts - 5 months. (Complete)
- TASK 5 - Explore Methods to Reduce Environmental Impacts of Exploration - 7 months. (Complete)
- TASK 6 - Estimate Future Development, Production and Enhanced Recovery Activities - 7 months. (Complete)
- TASK 7 - Collect Reservoir Data on Ten Fields - 11 months. (in progress)
- TASK 8 - Conduct Industry of EOR Activity - 11 months. (in progress)
- TASK 9 - Explore methods to reduce environmental impacts of future development & Enhanced Recovery Activities - 7 months. (in process)

FUNDING (1000'S)	DOE	OTHER	CONTRACTOR	TOTAL
PRIOR FISCAL YRS	400	0	0	400
FISCAL YR 1994	0	0	0	0
FUTURE FUNDS	0	0	0	0
TOTAL EST'D FUNDS	400	0	0	400

PROJECT DESCRIPTION: Project activities include the formation of a Technical Review Committee to guide the research. Ten fields have been selected, three with existing enhanced recovery activities to evaluate possible surface effects of EOR activities. An industry survey is being conducted of future drilling, production, and EOR activity planning in south Louisiana; alternative management and mitigation options to moderate potential impacts of increased operations is being developed; and a draft report will be prepared containing conclusions about future trends for exploration and production activities in wetland areas and new applicable drilling or access technologies. Conclusions will then be presented, after peer reviews, to DOE and the results will be published in an environmental or oil and gas journal. Technology transfer will include presentations and poster sessions at local and national conventions or meetings.

PRESENT STATUS: 1. All relevant field data available on the ten fields from the state office of conservation has been collected and are currently being placed in a geographic information system. 2. Required topographical maps and aerial photographs are being condensed to form overlays of the three control fields. 3. The GIS system will be used to create time-lapse scenarios showing the impacts of development on the various wetland habitats. 4. Field operators were contacted for study data and meetings, however response was poor and so an alternate method of estimating future activity involving econometric modeling was used. Two models were created one for north and south Louisiana. Estimates of future field size and wetland locations were obtained. 5. An overview of wetland habitats has been completed. 6. An overview of the present permitting system was complete but, because of changes that occurred in January 1994 a review of this material to re-update it is presently underway. 7. Alternative access methods and new drilling technologies have been evaluated for their utility in addressing the wetland problem. 8. Technology transfer of results occurred at the Gulf Coast Geological Society meeting in Shreveport and at the DOE workshop held in conjunction with LIOGA's annual meeting.

ACCOMPLISHMENTS: Identification of the problems that exist for oil and gas operations in wetland areas and recognition of approaches that will minimize impacts allowing operators to make environmentally conscious decisions on drilling, production, and enhanced recovery techniques. Presentation of a road map of the present wetland permitting system in Louisiana.

BACKGROUND: Louisiana's wetland areas produce about 66% of the oil and gas in the state. Production of these reserves is becoming increasingly limited as concern for wetland loss motivates more stringent environmental regulations. The nation needs both the oil and gas and the wetland-based renewable resources present in south Louisiana and other wetland areas of the United States.