

CONTINENTAL SHELF SESSION

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*Chairman — George A. Shell, Regional Manager
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New York State Plans for Offshore Oil¹

ALBERT C. JENSEN² and GREGORY SOVAS³
*Outer Continental Shelf Study Program
New York State Department of Environmental Conservation*

INTRODUCTION

The prospect of exploratory and production drilling for petroleum off the East Coast has aroused a great deal of concern, particularly in the northeastern states. Citizen—and sometimes official—reaction has varied depending on the interests of the affected coastal states. Because the Atlantic Ocean is a frontier area for oil and gas leasing, these states have been extremely concerned with all aspects of the program of the federal government.

To evaluate and plan for the onshore physical, social, and economic impacts of the proposed federal oil and gas leasing program on the Outer Continental Shelf (OCS), New York State is engaged in a study with a grant under the Coastal Zone Management (CZM) Act of 1972 (Section 305), as amended. The study is necessary because the State's Marine District is located between two possible petroleum provinces—the Georges Bank Trough to the east and the Baltimore Canyon Trough to the south (Fig. 1).

The OCS study will provide basic and essential marine resource data for designated critical areas. These data will provide background for determining management programs and legislation and for designating permissible and prohibited uses for defined CZM boundaries. Completion of the OCS study program will help provide guidance and advice to the State's Governor and legislature.

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²Building 40, State University of New York, Stony Brook 11794.

³50 Wolf Road, Albany 12233.

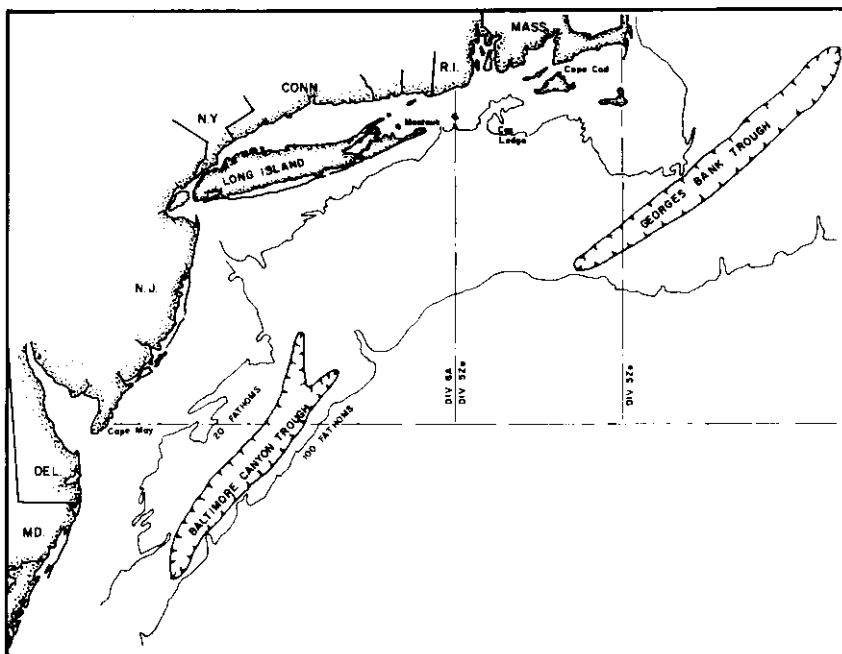


Fig. 1. Part of the Middle Atlantic Bight and Georges Banks areas showing the position of New York's Marine District in relation to the North Atlantic and Mid-Atlantic oil provinces.

THE COASTAL ZONE AND MARINE RESOURCES

As the possibility of petroleum operations on the OCS approached certainty, there appeared a number of conflicting reports speculating on the effects of such operations on New York's coastal marine environment and its resources. It is well to briefly review this environment to keep the rest of this report in proper context.

Beaches and Wetlands

The general coastline (not including the Great Lakes) of New York State measures 204 km but the tidal shoreline measures 2,977 km (National Oceanic and Atmospheric Administration, 1972). The shoreline features a great number of excellent and well-used bathing beaches including the world-famous Coney Island Beach and Rockaway Beach of New York City. These beaches often provide the only saltwater recreation for many residents of the inner city. Farther out on Long Island—Nassau and Suffolk⁴ counties—there are many more beaches operated by local municipalities, the counties, and by the New

⁴Long Island consists of the counties of Kings (Brooklyn), Queens, Nassau, and Suffolk. Kings and Queens counties are part of New York City. Suffolk County is the largest of the four in area.

York State Office of Parks and Recreation. The visitor-days recorded at these beaches number well in the millions during an average season. The largest of the beaches are in Jones Beach State Park (976 ha) and Robert Moses State Park (405 ha). A Federally-operated beach is located in Fire Island National Seashore which includes 567 ha (Ryan and Kenney, 1972).

During the summer of 1976, a mass of floating sewage solids fetched up on many of these beaches following a period of sustained southwest winds (NYS Environment, 1976a, 1976b). Although the solids were quickly cleaned up, official, temporary closure of the beaches and the attendant publicity caused an estimated \$15 to \$25 million loss to the recreation industry in a 5-week period. Critics of OCS petroleum operations fear that spilled oil will similarly affect the beaches.

The marine wetlands of the coastal zone have been greatly reduced by what is euphemistically called "development." O'Connor and Terry (1972) clearly described the destruction of marine wetlands in Nassau and Suffolk counties. They stated that there are 8660 ha of marine wetlands in the two counties but that 1781 ha "disappeared" in the period between 1964 and the time of their report. The wetlands were dredged or filled for marinas, a variety of businesses, and dwellings. Many valuable organisms use marine wetlands as spawning, nursery, and feeding areas and destruction of the wetlands reduces the abundance of the organisms.

Marine Fisheries

The domestic effort in New York's marine fisheries is made up of a declining commercial segment and a rapidly rising recreational segment (Jensen, in press). Commercial landings at New York ports in 1948 were 58,821 tons and by 1954 were 62,041 tons. However, they since have declined steadily and in 1975 amounted only to 16,818 tons. The major exception to this trend is the fishery for the hard clam (*Mercenaria mercenaria*), the bulk of which takes place in Great South Bay. Indeed, New York supplies more than 50% of the hard clams harvested in the United States (58.5% in 1975). With the exception of oysters (*Crassostrea virginica*), the shellfish industry depends on wild stocks. However, oysters, and more recently clams and other shellfish, are being produced in a developing aquaculture industry.

The population of recreational fishermen has boomed since World War II and their catches of many species far exceeds that of commercial fishermen. A survey made by the National Marine Fisheries Service (Ridgely and Deuel, 1975) reported that nearly 3 million persons participated in marine recreational fishing in New York's waters during the period June 1973-June 1974.

In 1975, the commercial fisheries were worth about \$28 million (ex-vessel); the hard clam fishery alone was worth \$14 million, ex-vessel, and has been estimated to be worth at least \$100 million retail. It is calculated that the recreational fishermen who fished in New York's marine waters contributed nearly \$400 million to the local economy in the June 1973-June 1974 period. The relationships between New York's commercial and recreational fisheries and OCS activities have been reviewed elsewhere (Jensen, 1974b, 1976).

THE OCS PLANNING STUDY

The proposed plans of the U.S. Department of the Interior to lease frontier areas in the Atlantic Ocean (Fig. 2) present a new set of problems for the coastal states. Many of the states have questioned the desirability of proceeding with the lease sales in advance of sufficient coastal planning under the CZM Act. The most pressing concern of the coastal states is that they do not have sufficient information about the possible costs and benefits of such a program to make decisions on how to plan effectively. Further, they are concerned that they do not have a role in any of the significant decisions beyond their coastal waters that could ultimately affect them. States also have voiced concern with the lack of integrated federal environmental programs designed to answer management questions. Many states fear that the conflicting uses of the marine environment and the land resources of the coastal zone have not been adequately assessed. Finally, almost all coastal states are concerned with the lack of provision for compensation by the federal government in the event that a state is adversely affected. The compensation issue has been alleviated somewhat by promulgation of the Coastal Zone Management Act Amendments of 1976. However, the provisions are directed to state and local governments, not to individuals whose livelihood is dependent on the wise use of coastal resources.

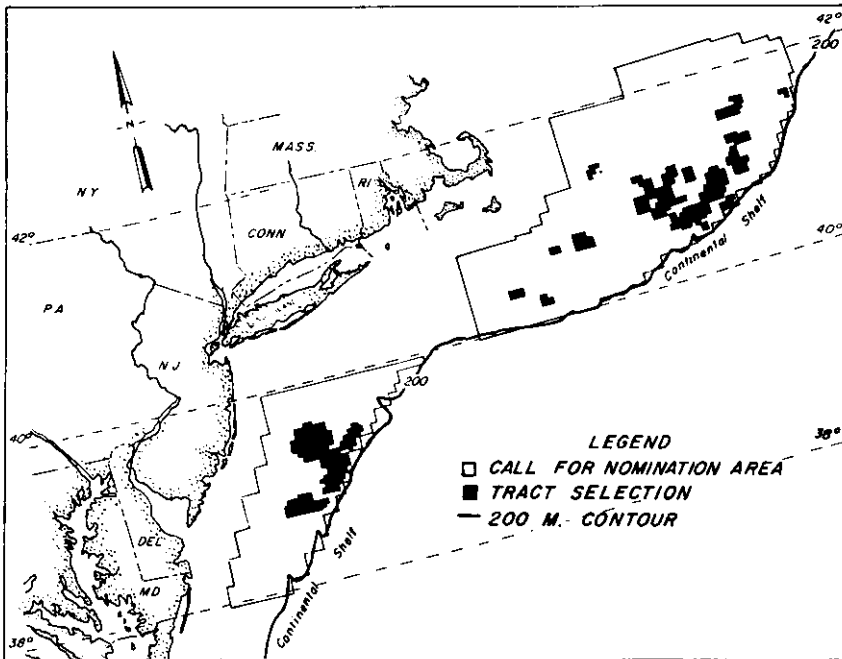


Fig. 2. The proposed oil and gas leasing areas in the North Atlantic and Mid-Atlantic OCS frontier areas. (Based on a chart drawn by B. Kaler.)

To be certain that the federal government becomes aware of its concerns, New York State embarked on a program that involves several regional and in-state institutions. The regional institutions provide forums in which to discuss common problems and to speak out with a unified voice. The in-state arrangements provide sources for information and data with which to establish state policies and positions.

Mid-Atlantic Governors Coastal Resources Council (MAGCRC)

The policy positions of each of the member states differ on some issues but MAGCRC has helped the states in dealing with OCS problems. It has been extremely effective in making its views known and has helped secure funds from sources that may not have been available to individual states. For example, through MAGCRC, the Mid-Atlantic States received a grant from the Federal Energy Administration to compare and evaluate existing studies in the region, to assess the applicability of the studies to the states, and to identify additional study needs.

New England River Basins Commission (NERBC)

New York State had long been actively working with NERBC in the intensive, multi-discipline Long Island Sound Study. Lately, we have participated in the NERBC-OCS Task Force with reference to the North Atlantic or Georges Bank area. NERBC is making a Resources and Land Inventory investigation aimed toward developing a number of regional work programs. An ad hoc policy group of state representatives, similar to MAGCRC, has emerged out of NERBC.

Coastal Zone Management Act (CZM)

New York State has extensive legal authority and regulatory functions to protect its valuable coastal areas. The programs for the marine region include the Long Island Wetlands Act and portions of the Environmental Bond Act of 1972 which provided funds for the purchase of valuable tidal wetlands. With the passage of the federal CZM Act of 1972, the state embarked on a comprehensive program that would enable New York to develop a well-founded land use management plan for the coastal region.

The New York State Department of State (DOS) is the designated agency for managing the CZM program. Ultimate decisions in the management of the program and supervision of subcontracts rest with DOS. The New York State Department of Environmental Conservation (DEC) is a subcontractor to DOS for the performance of various work elements. However, DEC is the lead agency for OCS matters. The major responsibility of DEC is natural resource inventory and analysis. The inventories include tidal and freshwater wetlands, flood plain management and protection, significant fish and wildlife habitats, critical areas, water quality, and water supply. Analysis of the inventory data will make it possible to define permissible land and water uses and to designate areas of particular concern and areas for preservation or restoration. Priorities of use also will be recommended.

Outer Continental Shelf (OCS) Study Program

The OCS Study Program is supplemental to New York State's ongoing CZM program. Work activities were designed to develop a State response to OCS related impacts and enable the State to fully integrate OCS-related concerns into the CZM activities. The OCS program is designed to:

1. Determine the probable physical, social, and economic effects on the State's coastal zone of OCS leasing, exploration, production, and eventual shut-down;
2. Make appropriate plans to account for potential land and water use impacts from OCS activities and include them within the terms of the State's management program; and
3. Provide policy guidance and advice to the Governor and State legislature.

The OCS program includes participation by key state agencies having direct interest in OCS activities. The agencies include:

1. Department of State (DOS) – the designated lead agency on CZM and related matters;
2. Department of Environmental Conservation (DEC) – key agency for technical studies especially living marine resources;
3. Economic Development Board (EDB) – recently created agency responsible for economic development policy formulation and related matters;
4. Office of Parks and Recreation (OPR) – key concerns relative to impacts on recreational values; and
5. Education Department (ED) – involves participation by the New York State Geologist's Office.

The study program is being carried out in coordination and cooperation with other State agencies including the State Energy Policy Office, Energy Research and Development Authority, the Public Service Commission, the Office of General Services and the Department of Transportation. Regional bodies such as the Port Authority of New York and New Jersey, the Interstate Sanitation Commission, and the Tri-State Planning Commission will be asked to participate. (The Port Authority recently undertook a study to identify sites within the Port of New York and New Jersey that could serve as OCS support bases.)

There also are a number of planning and regulatory programs within DEC that relate closely to OCS. The Division of Pure Waters has responsibility for oil spill liability and clean up as well as water quality programs. Tidal wetlands programs, State Environmental Quality Review Act regulations, and Protection of Water regulatory programs bear on the OCS program.

In recognition of the need to work closely with local governmental interests, the program also provides for direct participation by the Nassau-Suffolk Regional Planning Board and the New York City Planning Commission. The jurisdictional coverage of these two agencies includes the major portion of the State's marine shoreline areas which may be impacted by OCS activities.

Other agencies and institutions may be expected to participate in the OCS Study Program by providing pertinent materials from expert individuals and

contributing to specific tasks. Academic institutions, research laboratories, and, especially, the New York Sea Grant Institute are expected to fill these roles.

Results of the OCS Study Program

The present paper is in the nature of a progress report inasmuch as the OCS Study Program has not yet completed the first full year of activities. However, some tangible products have resulted from the study.

Work to date includes the assembling of a "living" bibliography of pertinent OCS-marine biology documents. The bibliography is annotated and incorporates over 70 references. New entries are constantly being added, hence the term, "living." The original documents are stored at Stony Brook along with a 110-volume library on marine topics, especially in the fields of fisheries, oceanography, and geology. Because the Stony Brook office is in the center of New York's marine activities, the library serves as a prime source of reference material for the study. A complementary library of technical documents is maintained in the Albany office as reference material for the CZM-OCS program.

A major effort of the study is the production of maps and charts (several of which have been completed) which identify and delineate property ownership and jurisdictional responsibility for underwater lands in the coastal zone that would be affected by OCS related activities. Jurisdictional control may be municipal (i.e., state, county, township, or incorporated village), institutional, or private. Identification of ownership is made by title search and field survey. The maps and charts include documentation tabulating and identifying the ownership. There also is support documentation such as citations of law, statutes, and regulations.

We completed a manuscript that reviews the state's marine fisheries for the period 1948-1975. It describes the fluctuations in landings for the major species of fish and shellfish and also describes the changes in effort required to make those landings. The manuscript will serve as baseline data to evaluate any future changes in landings or effort. It will be up-dated periodically and a draft will be prepared for publication in the DEC periodical, *New York Fish and Game Journal*.

Other benefits have been secured by New York as a result of the OCS Study Program. For example, for the first time, we have secured release of confidential information from the exploratory COST wells drilled in 1976 on the OCS near the Baltimore Canyon Trough and Georges Bank. And we have been instrumental in causing the inclusion of amendments to the stipulations in the OCS Operating Orders to obtain information on onshore processes.

Competing Users on the OCS

At the 28th annual meeting of the Gulf and Caribbean Fisheries Institute, Dr. Roland F. Smith presented a paper in which he listed and described eight competing (and sometimes conflicting) uses of the ocean (Smith, 1976). The uses included, for example, foreign fishing, recreation, submarine cables, and offshore oil and gas developments. Of the latter, he pointed out (p. 31) that it is

possible for the oil industry and the fishing industry to work together in mutual trust to the benefit of both groups. "However," he warned, "every possible effort must be made to eliminate or reduce the conditions that can lead to confrontation." Such conditions include haphazard and rapid onshore development of support facilities, excessive and costly competition for labor and services, and other social and economic impacts locally.

One of our continuing concerns is the split jurisdiction among federal agencies on such matters as oil spills, warning devices on rigs and platforms, permits, and coordination with the states. A possible cause for concern is that the weather conditions in the North and Mid-Atlantic areas may be more severe than those in the Gulf of Mexico. Thus, national standards for lighting and sounding devices on offshore structures may not be appropriate for the North and Mid-Atlantic. We have discussed these matters with the U.S. Coast Guard with the hope that the possibility of collisions of vessels—especially fishing vessels—with offshore structures may be avoided.

Five years ago, speaking before this institute, Mr. J.R. Jackson, Jr., of the Humble Oil and Refining Company, posed the questions, "Can coastal states have tourism and fishing and oil? Or will one drive out another?" (Jackson, 1972). He answered the questions by stating that there is no need for either-or decisions but that the decisions must be based on the simple premise that land areas and coastal zones are natural resources and we must plan wisely for their use. In essence, that is the principal aim of the Outer Continental Shelf Study Program in New York State's Coastal Zone Management Program.

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