ACCESS NUMBER: CT3-10

STUDY TITLE: Socioeconomic Factors Relating to the Area Adjacent to and Including the OCS from Brownsville, Texas to the Point 24°N Lat, 81°W Long (Gulf of Mexico)

REPORT TITLE: Environmental and Socio Economic Baseline on the Gulf of Mexico Coastal Zone and Outer Continental Shelf, Volume III: Socio-Economic Inventory and Analysis of the Gulf of Mexico Region

CONTRACT NUMBER: BLM 03550-CT3-10

SPONSORING OCS REGION: Washington

APPLICABLE PLANNING AREAS: Eastern Gulf of Mexico; Central Gulf of Mexico; Western Gulf of Mexico

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PROJECT MANAGER: Not available

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KEY WORDS: Eastern Gulf; Central Gulf; Western Gulf; Texas; Louisiana; Alabama; Mississippi; Florida; baseline; literature review; socioeconomics; socioeconomic characterization; employment; commercial fishing; tourism; forestry; development; coastal zone; archeology; air quality; agriculture; Headquarters

BACKGROUND: In 1970, the National Oceanographic Data Center published a multi-volume bibliography entitled Cooperative Investigations of the Caribbean and Adjacent Regions (CICAR), which cited all of the scientific investigations previously conducted in Caribbean and Gulf of Mexico waters. In terms of socio-economic summaries, several major studies were completed in 1973 which evaluated various aspects of deepwater ports and/or future lease sales in the Gulf of Mexico. In light of heightened interest in offshore oil and gas exploration and development in various portions of this region, the Bureau of Land Management identified a need to supplement the extensive environmental and socio-economic references through the identification and addition of recent publications. References were also needed in several other relevant categories not previously summarized. A compilation of recent and current research being conducted in the Gulf of Mexico was required. Finally, presentation of recent socio-economic data was necessary within a format conducive to the evaluation of proposed or anticipated future development.

OBJECTIVES: (1) To upgrade and update existing annotated bibliographies pertaining to environmental processes and conditions within the Gulf of Mexico; (2) to present this bibliographic compilation in several usable forms to assure user utility; (3) to compile a listing of recent and current research applicable to environmental processes and conditions in the Gulf of Mexico; and (4) to identify and compile recent socio-economic data for the study area, and present these data in summary narrative, tabular, and map form.

DESCRIPTION: The geographic extent of this study was bounded on the east by a straight line drawn from Brownsville, Texas offshore to the point at 24°N Lat, 81°W Long, excluding the Campeche Escarpment, and including all coastal counties and parishes either adjacent to the coastline or containing bay/estuary systems and coastal wetlands on the Gulf of Mexico. New citations were identified by a literature search. Bibliographic material of a socio-economic nature applicable to the study area was identified, compiled, and analyzed (Volume III). Current census data and various public and private reports were also utilized to describe the study area. Summary data, including summary narratives, table, maps, were presented within one of six major topic headings, including demography; industrial and commercial activity; petroleum industry; land use, ownership, and regulation: significant archaeological/historical sites; pollution; and transportation systems. Each of 73 coastal counties or parishes within Alabama (2 countries), Florida (25), Louisiana (24), Mississippi (3), and Texas (19) were subsequently characterized (relative one another) on the basis of 21 separate parameters. These parameters included population size, population density, urban versus rural population, median income levels, educational attainment, job skills, unemployment, commercial fishing, tourism, port activities, ship building, heavy manufacturing, industrial/chemical minerals, building materials, forests, mineral industries, area size, land development, intensity of archaeological/historical sites, intensity of water pollution, and intensity of air pollution.

SIGNIFICANT CONCLUSIONS: Volume III contains recent socio-economic data grouped into six general categories and presented in a format which is conducive to evaluations of various proposed or anticipated developments in the Gulf of Mexico. Supporting narratives, maps, and tables have been used to summarize relevant socio-economic information for each county or parish evaluated. The Gulf of Mexico coastal region represents and area of varied socio-economic patterns, ranging from low-density, rural undeveloped centers. Median income and educations levels vary, usually in direct relationship to the degree of urbanization. Although a majority of the region has been classified as rural because of its low density, both blue and white collar workers were predominant in all but one of the 73 counties and parishes evaluated. The unemployment rate was relatively low as compared to other sections of the country. Commercial fishing represents a significant industry along the coast, while economic activities related to recreation and tourism were very important on the Gulf coast of Florida. A tabular summary of the dominant socio-economic characteristics of the Gulf of Mexico coastal region was presented, wherein 21 parameters and the dominant characteristic in each parameter were noted for each of 73 counties and parishes.

STUDY RESULTS: The degree of urbanization and the population density amongst the 73 coastal counties and parishes evaluated varied considerably. In general, highly urbanized areas also had highest population densities. The urban segment of the population ranged from 15.1% (Sarasota County, Florida) to 99.7% (Orleans Parish, Louisiana) (median: 51.7%). Population density per square mile ranged from 0.5 persons (Kenedy County, Texas) to 2,895 persons (Orleans Parish, Louisiana). An apparent positive correlation exists between median school years completed and median income. A considerable variance was noted in educational attainment levels, ranging from 5.5 years (Kenedy County, Texas) to 12.4 years (Okasloosa and Sarasota Counties, Florida). Median income levels also varied widely, ranging from $4,156 (Willacy County, Texas) to $10,435 (Brazoria County, Texas). In general, the heavily populated counties and those with pockets of dense urban concentration had a higher ration of white collar workers to total workers. These urbanized counties also tended to have higher unemployment rates. Noteworthy exceptions included the heavily populated and highly urbanized counties of Harris, Texas and Jefferson, Louisiana, with low unemployment rates of 2.7% and 3.3%, respectively. Almost all Gulf coastal states experienced significant population growth during the previous decade (1960-70). Growth rates within the State Economic Areas encompassing the coastal counties under study ranted from <10% to >45%. On a county by county basis, however, growth rates between 1960-70 ranging from -23.3% (Kenedy County, Texas) to 141.5% (Collins County, Florida).

Commercial fishing activity in the Gulf of Mexico, historically, has occurred in shallow, nearshore waters, with deepwater fishing (25-100 fathoms on offshore banks) in search of snappers and groupers. The importance of Gulf coast fishing has increased significantly since 1940. Three major problems face the commercial fishing industry in this region, including (1) maintenance of commercial fishery stocks; (2) conflicts between commercial fisherman, and foreign fishing interests; and (3) alteration of estuarine waters and the possible elimination of spawning and forage areas. All of the coastal states and a significant number of individual counties or parishes represent tourism and recreation centers, particularly those located in Florida. Tourism and recreational activities have a profound economic impact at the local and county level through resident employment and visitor spending.

The ports within Texas, Louisiana, and Florida handled the most tonnage among the states evaluated, with port activities less likely to have a significant impact on the economies of Alabama and Mississippi. Seven major heavy manufacturing industry categories exist within the Gulf coast region, including textile mill products; paper and allied products; chemical and allied products; chemical and allied products; petroleum and coal products; primary metal industries; machinery (except electrical); and transportation equipment. Existing oil and gas fields and pipelines are most heavily concentrated along the coast between Nueces County, Texas to Lake Ponchartrain, Louisiana. The areas of highest concentrations of refineries and petro-chemical plants correspond with locations of oil and gas fields and pipelines.

The Gulf of Mexico coastal region encompasses an area of 63,136 square miles, of which nearly 4% is urban. Urban areas contain >70% of the population of the coastal

zone. Forty percent of the land area of the coastal region is allotted to agricultural uses. The Gulf of Mexico coastal area, including the barrier beaches, contains numerous sites of archaeological and historical significance. Limited water pollution data were available for Alabama, Louisiana, and Mississippi, while Florida and Texas have extensive water quality data available. Areas of heaviest water pollution occur near major urban centers or near areas of concentrated petrochemical industries. In general, air quality in the study area is good, while population and industrial-chemical centers represent isolated problem areas.

STUDY PRODUCTS: Environment Consultants, Inc. 1974. Environmental and Socio Economic Baseline on the Gulf of Mexico Coastal Zone and Outer Continental Shelf. Vol. III, Socio-Economic Inventory and Analysis of the Gulf of Mexico Region. A final report for the U.S. Department of the Interior, Bureau of Land Management, Washington, D.C. NTIS No. PB80-202856. Contract No. 03550-CT3-10. xiii + 246 pp. + 18 fold-out figures.

Complete set, Vols. I-III - NTIS No. PB80-202823.