FISHERIES MANAGEMENT IN THE GULF OF MEXICO

With the passage of the Fishery Conservation and Management Act of 1976 (FCMA), the United States began a new era of fishery conservation, management, and production. Nationwide planning for fisheries within 200 miles of U.S. shores was to protect valuable resources and make the resources available to domestic fishermen to the fullest extent of their capabilities.

Four years after it took effect, it is clear the FCMA has brought major changes to foreign and domestic fishing. The Regional Fishery Management Councils, which are responsible for implementing the FCMA, have developed numerous fishery management plans which consider not only the conservation needs of the resource but also commercial, recreational, environmental, and consumer needs in determining the "optimum yield" of each fishery. State marine fisheries managers and their staffs have become more active and more effective and have generally worked in partnership with other states, the federal government, and the regional agencies.

Yet, with all of these improvements, with the increased concern over conservation, and with comprehensive management plans, many commercial fishermen continue to experience hard economic times. This has been especially true in the Gulf Coast area.

This issue of the WATER LOG provides a general review of fisheries management in the Gulf of Mexico, including a look at the work of the Gulf of Mexico Fishery Management Council and the various state fisheries management programs. The legal and administrative tools available to fisheries managers are more sophisticated and powerful than ever. The concept of marine fisheries management is relatively new and it will take more time to evaluate the effectiveness of existing programs, but with public support and participation, fisheries managers should be able to assure fisheries resources availability for this and future generations.

THE GULF OF MEXICO FISHERIES MANAGEMENT COUNCIL

The Fishery Conservation and Management Act of 1976 delegated to the Secretary of Commerce regulatory power over U.S. marine fisheries within the area designated as the Fishery Conservation Zone—generally, the waters within 200 nautical miles of the coastline. The Act established eight regional Fishery Management Councils with threshold management responsibility over those fisheries within their region of jurisdiction. The primary function of these councils is the preparation and maintenance of Fishery Management Plans for those fisheries for which they are responsible.

The Gulf of Mexico Fishery Management Council is responsible for fisheries management in the waters off the coasts of the states of Texas, Louisiana, Mississippi, Alabama, and Florida (West Coast). Fishery management plans developed by the Gulf Council are designed to prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery.

The membership of the Gulf Council reflects the living marine resource expertise and interests of the several constituent states from which the membership is drawn. There are seventeen (17) voting members, eleven (11) of whom are appointed by the Secretary of Commerce from a list of qualified individuals submitted by the Governor of each constituent state. The Governors submit the names of three qualified individuals for each vacancy and the Secretary makes the final choice. Each state is entitled to one obligatory seat and the remaining appointments are made on an at-large basis. The duration of each appointment is three years, and approximately one-third of the Council's appointed members' terms lapse each year.

In addition to the eleven (11) appointed voting members, there are six (6) voting members who occupy permanent seats on the Council. These include the Regional Director of the National Marine Fisheries Service and each of the constituent state's principal official with marine fishery management responsibility, as designated by the Governor.

There are also a number of non-voting Council members who represent federal interests in the area. Among these are the Regional Director of the U.S. Fish and Wildlife Service for the Gulf Coast area, the Commander of the Eighth Coast Guard District in New Orleans, the Executive Director of the Gulf States Marine Fisheries Commission and a representative of the Department of State.

The Council maintains a Scientific and Statistical Committee (SSC) which assists in the specification, collection, and evaluation of statistical, biological, ecological, economic, social and other scientific information relevant to the development of fishery management plans. SSC members are appointed by the Council and represent various disciplines, including natural and social scientists knowledgeable in fisheries matters.

The Council is also authorized to establish advisory panels to assist it in meeting its responsibilities under the FCMA. These panels are appointed by the Council and are generally comprised of people most affected by, or interested in, council matters.

The Executive Director of the Gulf of Mexico Fishery Management Council is Wayne E. Swingle. The principal office is at 881, 5401 W. Kennedy Blvd., Tampa, Florida 33609. Phone (813) 228-2815.
GULF COUNCIL'S SHRIMP MANAGEMENT PLAN IS APPROVED

The Secretary of Commerce recently approved the fishery management plan for the shrimp fishery of the Gulf of Mexico prepared by the Gulf of Mexico Fisheries Management Council. The fishery to be managed under this plan is the nation's most valuable in terms of revenue generated and includes six species of shrimp: brown (Peneaus aztecus), white (Peneaus setiferus), pink (Peneaus duorarum), seabob (Niphonius koyeri), rock (Stic yonica brevicruci) and royal red (Hymenopenaeus robustus).

OBJECTIVES: The main purpose of the FMP is to encourage harvest of larger and more valuable shrimp through area closure. Selective area closure will allow shrimp to attain larger size without the interference of harvesting. The FMP provides for permanent closure of an area of the Fishery Conservation Zone (FCZ) off Florida as a nursery ground for juvenile shrimp and a seasonal closure of the FCZ off Texas in conjunction with the closing of the territorial sea. The FMP also sets limits for certain species. The limit on brown, white, pink, rock, and seabob shrimp is all that can be taken each year during open season in open area with existing gear, while there is a 177.8 metric ton (tats) limit on royal red shrimp. The FMP encourages the establishment by the states of shrimp hatcheries as nursery grounds to increase territorial waters and encourages states to adopt procedures to allow joint management of shrimp fisheries with other states and the National Marine Fisheries Service (NMFS). As a collateral purpose, the FMP seeks to reduce the mortality of sea turtles caused by shrimping.

FMP JURISDICTIONAL LIMITS: The FMP will be enforced in the Fisheries Conservation Zone which extends from the seaward boundary of each state (three nautical miles from the Coast of Mississippi) to a point 200 miles from shore. The FMP does not attempt to limit harvest of shrimp in waters inside the territorial waters; that is, landward of the Fisheries Conservation Zone.

REGULATORY MEASURES: The FMP regulatory measures concern Mississippi and Alabama include: (1) legal size of shrimp, and catch limits: Size limit is 68 whole shrimp to the pound. Bait shrimpers are not subject to size limitation. There is no catch limit. (2) Licensing: Licensing is to be based on vessel length. Bait shrimp and interlake vessels will pay additional annual fees while no gear license is required. (3) Season: The season opens the first Wednesday in June depending upon shrimp size of a sample catch, and usually runs from the second or third week in June until the following April 30, unless declared otherwise. (4) Restricted Waters: Commercial shrimping is forbidden within one-half mile of the mainland from the Mississippi-Alabama line west to Bayou Caddy, off Gulf Island National Seashore, and in all bays except two pipeline ditches in Hancock County.

ENFORCEMENT: The regulations imposed by the FMP will be enforced by any commissioned officer of the United States Coast Guard or any Coast Guard personnel acting under direction of such officer; any certified enforcement officer or special agent of National Marine Fisheries Service (NMFS), or any officer designated by the head of a federal or state agency which has entered into agreement with the Secretary and the Commandant of the Coast Guard. Enforcement will be carried out by authorized officers through boarding and inspection of vessels and equipment.

PENALTIES: Any person or vessel found in violation of the regulations shall be subject to: (in ascending order) issuance of a citation by the enforcing officer, assessment of a civil money penalty, or for certain violations, indictment for violation of the vessel and cargo and criminal prosecution of the owner or operator.

VESSEL PERMITS AND FEES: No vessel permit is required for shrimp except royal red shrimp in the Texas closure.

RECORDS AND REPORTING: Owner-operators of shrimp vessels, shrimp dealers, and shrimp processors will all be required to report certain data to NMFS, including: vessel identification, area and depth of catch and days fished, type of gear used, and date shrimp landed, kinds and quantity of incidental catch and any other biological, social or economic information. The Center Director of the NMFS may require all or part of the fisherman to report such data. The number of fishermen selected, the reporting interval and duration are to be determined by the director.

VESSEL IDENTIFICATION: An elaborate system of vessel identification will be required, including display of official numbers in a visible place consisting of black arabic numerals in a contrasting color to the background.

William B. Carter

AMERICAN FISHERIES PROMOTION ACT

In December, 1980, Congress passed and President Carter signed the American Fisheries Promotion Act (AFPA). The act was originally introduced in the spring of 1980 by Rep. John Breaux (D., La.), and its passage followed a year-long series of negotiations and compromises between House and Senate Committees.

The AFPA is designed to assist the U.S. fishing industry through a variety of means. The act amends three existing laws, the Saltstetl-Kennedy Act, Title Xi of the Merchant Marine Act of 1936, and the Fishery Conservation and Management Act of 1976. (The title of this last act was amended by the AFPA and has been renamed the Magnuson Fishery Conservation and Management Act in honor of former Senator Warren Magnuson.) The AFPA contains seven "major components."

The first noteworthy aspect of the act is that it will make available, until October 1, 1982, "emergency assistance loans" to financially troubled owners or operators of fishing vessels. These loans are administered by the Secretary of Commerce and carry the same interest rate as those made under the Emergency Agricultural Credit Act of 1978. The loans can be made for the following purposes: (1) to avoid default on a fishing vessel mortgage guaranteed under Title XI, (2) to avoid default on a fishing vessel mortgage not so guaranteed, and (3) to cover operating losses. If the Secretary determines that there will be sufficient funds to cover the anticipated need for group (1), loans may be made to group (2); likewise, if the Secretary determines that there will be sufficient funds for both groups (1) & (2), loans may be made to group (3). These loans are available only to those "owners or operators who, in the judgement of the Secretary, have substantial experience and proven ability in the management and financing of fishing operations." Secondly, Title XI mortgage guarantees are extended to the owners of "fishing facilities" and "fishing vessels" engaged in high-risk ventures. Essentially, seafood processors are entitled to mortgage insurance on loans for the "construction, reconstruction, or reconditioning" of any structure used for processing or distributing fish products (this includes storage areas), or the land on which such a structure is built or equipment used to unload, process, hold, or distribute fish or fish products. Additionally, a mortgage on a fish processing vessel can also be guaranteed if such vessel is U.S. built. No minimum principal is required as a condition of eligibility for a guarantee if it is to be used for reconstruction or reconditioning, but this does not include "routine minor repair or maintenance." It should also be noted that those guarantees are available for "financing or refinancing, including reimbursement of obligations for expenditures previously made.

To encourage research and development, the AFPA establishes a grant program designed to assist persons engaged in research or development of "any aspect" of U.S. Fisheries. This program is administered by the Secretary of Commerce. To receive a grant, the applicant must show that he is financially and technically able to see the project through. The grant must cover at least 50% of the projected cost. If the recipient and the government are to share costs, the recipient may give his "best and final offer" and "in-kind contributions," including personal services, use of personal or real property, or some other contribution that the Secretary deems to be of value to the project.

A principal goal of the act is promotion of U.S. fishery exports. To assist in increasing exports, the Secretary is to appoint at least 6 officers who will be designated as Fishery Trade Officers. These officers will be chosen for their experience in the fishing industry and will serve abroad in diplomatic fashion. Three diplomatic missions, Brussels, Rome, and Tokyo, are listed in the act as definite posts; the remainder are to be chosen by the Secretary.

All of the above aspects of the AFPA attempt to shore up the weakened U.S. fishery. Congress also focused on the source of much of the pressure on the industry—foreign fishing in the U.S. fishery conservation zone. To fund the ambitious fishery assistance program, the act requires an increase in the permit fees paid by foreign fishing vessels.

The increase in permit fees was needed for two reasons—to pay for temporary assistance to the U.S. industry and to reimburse the federal government for costs attributable to foreign fishing. U.S. taxpayers have been footing 80% of the costs of the FCMA. Under the new system, foreign vessels will be required to pay fees that reflect their share of the total catch taken from the fishery conservation zone.

(Continued on page 5)
GULF STATES MARINE FISHERIES COMMISSION

by Larry B. Simpson

Each state within the Gulf Region is a member of the Gulf States Marine Fisheries Commission. Though not possessed of regulatory powers like the Regional Councils, the Commission serves a very important function as advisor to state fishery management agencies. The following summary of the Commission's activities was prepared by Larry B. Simpson, Assistant to the Director, Gulf States Marine Fisheries Commission.

HISTORY

In May, 1946, under the sponsorship of the Council of State Governments, and with the aid of the already successful Atlantic States Marine Fisheries Commission, an Exploratory Interoastal Conference was held in Washington, D.C. This Conference was composed of official representatives of fourteen coastal states, and out of it, among other things, came a firm decision that a compact of the Gulf Coast States could contribute much toward the development and better utilization of the fisheries of the Gulf of Mexico.

Several preliminary conferences by representatives of the Gulf Coast States were held before the final draft of a compact was perfected at a meeting in New Orleans on April 11, 1947. It was immediately recommended to the separate Gulf Coast States and to Congress. It was approved by the 81st Congress on May 19, 1949 and signed by the member states on July 15, 1949.

A great many people gave their talents to the formation of this important agreement, including former Governor Price Daniel of Texas, who was at that time the Attorney General of Texas with a special interest in state ownership of tidelands. The guiding hand of the Council of State Governments, and more specifically, the extraordinary talents of Herbert Wissee, can also be said to be responsible for this organization.

ORGANIZATION

The Commission is composed of three members from each of the five Gulf States. The head of the marine fisheries department of each state is the ex-officio member, the second is a member of the legislature, and the third, a citizen who shall have a knowledge of and interest in the marine fisheries. All are appointed by the Governors of each state. The offices of Chairman and Vice-chairman of the Commission are rotated annually between the states.

Regular meetings of the Commission are held twice each year on the third Thursday and Friday of March and October. Called or special meetings of the Commission and its committees are held as needed. The regular meetings are rotated between the States in order that Commission members may become familiar with the fisheries and coastal areas of the entire Gulf.

FUNCTIONS

In executing this Compact, the member states relinquished none of their rights or their responsibilities to regulate their own fisheries. The Commission is given power only to recommend to the Governor and legislatures of the States action on programs helpful to the management of the fishery. The basis for such recommendations comes from studies made by experts employed by the several states and by the United States agency with marine responsibility, now the National Marine Fisheries Service. The Commission is also authorized to consult with and advise the proper administrative agencies of the member states regarding fishery conservation problems. In addition, the Commission advises and testifies before the U.S. Congress on legislation and marine policy that affects the Gulf States.

One of the most important functions of the Commission is to serve as a forum for the discussion of various problems and programs of marine management, industry, research, etc., and to develop a coordinated Gulf policy to address them for the betterment of the resource and all who are concerned.

Since the 1970's the Commission has had the responsibility of administrative support and coordination of the Gulf States Marine Fisheries Management Program. This program was designed to develop management plans for transboundary stocks that migrate freely through State and Federal boundaries.

The GSFFM Board consists of two GSMFC Commissioners from each of the five Gulf States. These are the resource agency head and the legislative Commissioner. The Board meets during the regular meetings of the Commission and at such special meetings as necessary. Like the Commission, the Board has no regulatory authority over the States in the management of the marine fisheries, but enjoys the power only to recommend to the governors and the legislatures of the states action they feel is helpful to the management of fisheries that are transboundary stocks.

Management plans for shrimp and menhaden and a profile which could be the basis for a future management plan for red drum and spotted sea trout have been produced.

The S/F Program's shrimp plan was used as a reference in the development of the Gulf of Mexico Fishery Management Council's management plan for shrimp. The Council's plan, which has taken the place of the S/F plan was developed under P.L. 94-286, the so called 200 Mile Limit Law and addressed the shrimp fishery in a regulatory and more indepth mode outside the States' jurisdiction as well as throughout the animal's range.

The Menhaden Management Plan developed under the S/F program still serves as the basis for management in that fishery. The States have adopted the recommended season openings and closures that are included in the plan. Monitoring of the fishery is continuing and needed changes in the plan will be addressed if necessary.

RECENT ACTIVITIES/MEETINGS

The recent meetings of the Commission have for the most part centered around the synthesis of the State of knowledge about some of the species of marine fishes which mainly occur inside States' territorial seas. These were the red drum and spotted sea trout, the Spanish and king mackerel, and the blue crab.

The mechanism used to distribute this information was the publication of the proceedings of the meetings at which the scientists presented their papers. The blue crab proceedings are still in press. Other meetings have dealt with the problems of pollution in the marine environment resulting from dredge and fill, thermal and chemical addition, etc. A discussion of the new S/F program looked to coordinate the agencies involved in marine work (CZM, Sea Grant, NOAA/NMFS, and the States). The last meeting held in Brownsville, Texas, March 8-10 centered around the discussion of a Concept of Limited Entry and how that would affect the shrimp industry. Plans are to publish the proceedings of this workshop.

The Commission is continually trying to address the current topics and problems of the marine fisheries and their environment to develop and policy that will result in the best and highest use of the resources of the Gulf of Mexico for all the citizens of the Gulf Coast and the entire United States.

RECENT LEGISLATION

The 1981 session of the Mississippi Legislature passed several bills which are important to coastal residents.

* MISS. CODE ANN. 649-5.23, which gives the Mississippi Commission Wildlife Conservation authority to establish the boundary between fresh and salt water, was amended by Senate Bill No. 2709, introduced by Senator Louis Fortenberry of Pascagoula. The amendment prohibits the Commission from designating any of the waters within Pascagoula's city limits as fresh water. This will enable fishermen to fish from the Pascagoula pier without a freshwater fishing license. The old boundary was the Highway 90 bridge.

* House Bill No. 1020 authorized the Governor to enter into a compact with Louisiana to establish an interstate commission "for the purpose of studying the feasibility of rapid rail transit service between the two states". The commission will have authority to accept gifts and to seek grants and loans. According to an official with the State Energy and Transportation Board, the study will focus on passenger rail service and commuter service between New Orleans and the Mississippi Gulf Coast.

* The 1981 Legislature produced two significant bills in the area of solid and hazardous waste disposal. House Bill No. 1482 authorized municipalities to buy, own and lease "projects" to promote the efficient handling of solid and hazardous wastes. House Bill No. 841 transferred responsibilities for administering the Solid Waste Disposal Law and the hazardous waste program from the State Board of Health to the Mississippi Commission on Natural Resources.
OPINION

BUREAU OF MARINE RESOURCES: FRIEND OR FOE OF DEER ISLAND?

With Mississippi's Coastal Program (MCP) entering its seventh month of implementation, a controversy has arisen which will test the program's ability to effectively control coastal development. The proposed development of Deer Island by Florida realtor John Stockton presents a perfect opportunity for the Mississippi Bureau of Marine Resources (BMR or the Bureau) to assert its jurisdiction under federal and state law to prevent the destruction of the natural beauty and productivity of the island.

Surrounded by the Mississippi Sound and only 100 yards from the coastline at its nearest point, this barrier island serves the coast as an important buffer zone for hurricane protection. The island is inhabited by a wide variety of wildlife, including ospreys, alligators, raccoons, muskrats, brown pelicans, snowy plovers, American oyster catchers, Gulf Salt marsh snakes, and nutria. The U.S. Fish and Wildlife Service has designated the island as a "Unique Ecosystem" because of the alligator and brown pelican populations.

The development efforts already underway have destroyed underbrush that contributes to the island's natural beauty, serves as wildlife habitat, and prevents erosion. We believe that it is past time for BMR to carry out national and state coastal policies which call for careful planning and development. By asserting its regulatory jurisdiction over the development of Deer Island.

An examination of Mississippi's Wetlands Law (Miss. Code Ann. §§49-27-1, et seq.) lends support to the above assertion. Coastal Wetlands are defined at §§49-27-5 as "all publicly owned lands subject to the ebb and flood of the tide, ..., the water in the creek, ..., the water in the bay, ..., or any coastal wetlands," (emphasis added). Through its choice of words, the legislature recognized the interrelation and interdependence that is present in nature and did not seek to limit the protection to the "wetlands" alone, but extended it to all factors that go towards producing the environmental unit which sustains the wetlands. Not only is this the stated policy of the Wetlands Law, but §§57-15-6, which enabled the Mississippi Commission on Water Conservation (MCWC) to prepare and implement the MCP, required that the plan employ the wetlands policy as an objective during both the creation and administration of the program.

According to the MCP, the BMR is charged with the responsibility of protecting those resources which lie seaward of the high tide line (MCP I-3-4). But, judging from the Bureaus's recent inaction, it is apparent that they do not perceive an affirmative role for the BMR in regulating activities conducted landward of the high tide line, even though such activities might have an undesirable effect on the seaward resources. Basically, their interpretation is correct but must be tempered by the following considerations.

The Bureau's principal management tool is the coastal wetlands permit program. A permit is required from BMR in order to conduct any "regulated activity" which "shall affect any coastal wetlands," Permit applicants must provide BMR with substantial information regarding the planned project, including a description of any public benefit to be derived from the project and its environmental impact upon the coastal wetlands. Any interested person is entitled to object to issuance of a permit and to request a public hearing. It is through this carefully designed system which allows for public participation and ensures that all issues are fully discussed, that BMR is supposed to implement the public policy of wetlands protection and carefully controlled coastal development.

By stripping portions of the island of its protective covering, the developers of Deer Island have engaged in activity which should be subject to regulation under the coastal wetlands permit program. Section 49-27-5 of the Wetlands Law states that the dumping, filling or depositing of any soil, either directly or indirectly, on or in any coastal wetlands" (emphasis added) is a "regulated activity" and, thus, subject to the usual permitting process of §49-27-9. The legal ramifications of "indirect filling" were the subject of a December 14, 1976 opinion of the Mississippi Attorney General. The gist of the opinion was that if a landowner acted in an "affirmative manner" to cause an artificial erosion into the coastal wetlands", the activity was a regulated activity within the jurisdiction of the Mississippi Marine Resources Council (now the MCWC) which could act through the BMR to control the upland activity.

Subsequent to the rendering of this opinion, the Wetlands Law was amended and now reflects the Attorney General's interpretation. As originally enacted, §49-27-9 required that permits be secured for regulated activities conducted "upon any coastal wetlands," but this language was deleted as a result of a 1979 amendment. The section now reads:

No regulated activity shall affect any coastal wetlands without a permit unless excluded in section 49-27-7. Any person proposing to construct or cause to be constructed a regulated activity upon any coastal wetlands shall file an application for a permit...

The MCP takes note of the above opinion and amendment and lists certain activities which might result in indirect filling, one of which is "clearing land in a way that exposes sand or sub soils into coastal wetlands." (MCP III-4). This is exactly the type of activity currently taking place on Deer Island.

The federal Coastal Zone Management Act, which was the impetus behind the MCP, also provides ample evidence that Congress intended for state coastal management agencies such as BMR to take an active role in planning development in the coastal area, on both land and water. In section 302 of the Act (16 U.S.C. §1452), Congress specifically found that "...the key to more effective protection and use of land and water resources of the coastal zone is to encourage states to exercise their full authority." This exercise of full authority includes the management of not only wetlands, but also "shorelands whose use has a direct and significant impact on coastal waters."

The expansion of national coastal policies in the 1980 amendments to the CZMA further indicates Congress's intent that state coastal programs control the development of coastal islands such as Deer Island. Section 303 of the amendments (16 U.S.C. §1452) declares it to be national policy that state programs should provide for the protection of natural resources such as beaches, barrier islands and dunes. Any development should be closely examined in order to minimize the loss of land and property caused by improper development in flood prone, storm surge, and erosion prone areas and by the destruction of natural protective features such as beaches, dunes, wetlands and barrier islands." Additionally, coastal programs are to encourage the development of special management areas (SMAs) providing for, among other things, "improved protection of life and property in hazardous areas."

Because of its proximity to Biloxi, probability of development, and "enormous potential for public recreation, research and education" Deer Island was designated as an SMA in the MCP. SMAs' areas which, by virtue of their particular nature, require "affirmative management efforts" as well as the usual regulation given the coastal zone as a whole. The MCP sets forth three types of SMA's: specific industrial and port areas, shorefront access areas, and urban waterfronts. Deer Island falls into the second category. In all, the program designates 19 SMA's and work is currently in progress on two of these: the Moss Point Industrial Park and the Pascagoula Waterfront. Unfortunately, work on an SMA plan for Deer Island is neither completed nor underway and even though the MCP addresses the island in greater length and with more specificity than any of the other 18 designated areas.

The MCP states that the preliminary Deer Island Management Plan, which was developed by the City of Biloxi through the Deer Island Study Committee, would provide...
The Coastal Zone Management Act of 1972 (CZMA) was reauthorized and significantly amended by Congress in October 1980. Known as the Coastal Zone Management Improvement Act (CZMIA), the legislation made four major changes to CZMA.

First, the national coastal policies of section 303 (16 U.S.C. §1451) were expanded and clarified to provide more specific directives to the states in making coastal planning decisions. State coastal programs must at least provide for:

1. natural resource protection,
2. prevention of improper development in areas where severe storms and flooding pose serious threats to life and property (particularly by preventing the destruction of natural protective features such as barrier islands),
3. redevelopment of deteriorating urban waterfronts and ports,
4. effective and simplified intergovernmental and public cooperation in the coastal management decision-making process,
5. preparation of special area management plans specifically balancing the protection of life, property and resources with reasonable economic growth,
6. public access to beaches, and
7. the preservation and restoration of the aesthetic and cultural features of the coast.

State coastal programs will be evaluated in terms of how well these objectives are being met.

The second major change is found in section 306 (16 U.S.C. §1455) which states that coastal implementation and management grant monies awarded to states must be used for activities that will result in "significant improvement" towards meeting the new section 303 objectives mentioned above. If a participating state has not made "satisfactory progress" in this area by 9/30/84, it will not be eligible for resource management improvement grants under new section 306A (16 U.S.C. §1455A). A state with an approved coastal program which is making satisfactory progress towards meeting section 303 objectives may apply for grants to assist in:

1. preserving or restoring specific coastal areas which have significant cultural, recreational or aesthetic values or which contain at least one coastal resource of national significance,
2. redevelopment of deteriorating urban waterfronts and ports, and
3. providing public access to beaches. Regulations specifying what constitutes "significant improvement" and directing how the grant program is to be administered (including a new grant allotment formula) were scheduled to be promulgated late April, 1981, but have not appeared to date.

The third major change is in section 312 (16 U.S.C. §1455) which provides for the review of the performance of states with approved coastal programs. Under this section, the Secretary of Commerce is empowered to reduce or withdraw any financial assistance and/or disapprove a state's coastal program if he finds that the state is not adhering to its coastal program or to the terms of any grant funds under section 306, and/or if the coastal state is not making "significant improvement" toward the coastal objectives discussed above. This review is to be made following public hearings which provide for both oral and written comments and is to include a written, detailed report of the findings. Regulations implementing this section were also expected to be issued in late April, 1981, but have not been yet published.

The fourth major change is the addition of section 12 (16 U.S.C. §1463(a)) to the Act. Under this section, any final rule promulgated by the Secretary must be submitted to both Houses of Congress before it can become effective. The proposed final rule will become effective as written following 60 days of continuous session of Congress from the date the rule is submitted, unless both Houses adopt a concurrent resolution disapproving the rule.

The impact of the CZMIA cannot be determined until final rules interpreting such terms as "significant improvement" and "satisfactory progress" are promulgated. It seems clear that the changes will allow the federal government to closely scrutinize the coastal planning decisions of the participating states, hopefully resulting in more balanced coastal management at the state level. The section 12 requirement that the Secretary submit all final rules pursuant to the CZMIA to both Houses of Congress for final approval is an indication that Congress is concerned with maintaining greater control over coastal management, perhaps resulting from the recent attention given offshore exploration and development.

More than anything else, the current budget debates in Congress will determine the future of coastal zone management. The Reagan Administration has consistently opposed continued funding of the CZMIA and seems intent on dismantling the federal program. If Congress makes the funds available, CZMIA, with its emphasis on intergovernmental cooperation and improvement of state management programs, could result in state programs which are so successful that state legislatures will find it difficult to eliminate the programs—even in these times of budget austerity.

Casey Jamia

American Fisheries Promotion Act Continued

Any management program is only as effective as the enforcement scheme that backs it up. Many people believe that the original FCMA plan fell woefully short in that respect. Both the Coast Guard and the National Marine Fisheries Service enforcers were spread too thin. To supplement this coverage, the AFPA requires that all foreign vessels, with a few well taken exceptions, carry U.S. observers. While on-board, the observers are to carry out all "functions" necessary to the implementation of the FCMA.

The act will also require a "phase-out" of foreign fishing in the fishery conservation zone. During 1981, the amount of fish taken by foreign vessels will be reduced by 15%; during subsequent years, the rate of the reduction will be "linked" to the size of the U.S. harvest during the previous year. Having arrived at the size of the total foreign catch, the Secretary of Commerce is to confer with the Secretary of State in allocating such catch among the various nations. Their decisions are to be based, in part, on past cooperation with U.S. export and management plans, the domestic needs of the foreign nation, and the extent to which the foreign nation has traditionally utilized a fishery.

*The views expressed in OPINION are solely those of the authors and do not necessarily reflect those of any of the sponsors of the Water Log, including the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Mississippi-Alabama Sea Grant Consortium, or the Mississippi Sea Grant Legal Program.*
FEDERAL POLICY ON BARRIER ISLANDS

The current controversy over the development of Deer Island brings into question the nature and extent of the federal government's policy toward conservation. In 1978, according to a publication by the Department of Interior, the federal government is pursuing two conflicting courses of action:


On the one hand, development is encouraged through development grants and loan programs which do not discriminate between development on barrier islands and development in more environmentally sensitive areas. In effect, the federal government subsidizes and assists developers in achieving results which would not otherwise be possible because of financial pressures. On the other hand, the government also attempts to protect certain islands through the actions of the National Park Service (NPS) and the Office of Coastal Zone Management (CCZM).

Government subsidies to barrier island development are vast in nature and large in amount. Generally, the programs can be categorized by focusing on five aspects of barrier island development: access, water supply, wastewater management, disaster assistance, and flood insurance.

- Two agencies of the Department of Transportation (DOT), the U.S. Coast Guard and the Federal Highway Administration (FHWA), play an important role in providing access to barrier islands. The Coast Guard was made a part of DOT on April 1, 1967. Under the DOT Act of 1966, the authority to issue permits for construction of bridges across navigable waters was transferred from the Corps of Engineers to the Coast Guard. The FHWA was also made a part of DOT. The major role of this agency is to provide federal assistance for road construction. Recently, added emphasis has been placed upon solving the problem of deteriorating bridges.

In most instances, the construction of a bridge is an absolute prerequisite to any development of large scale, but the cost of bridges is so high as to be prohibitive. Without the assistance of the federal government, local governments and private developers would be unable to provide access. The new Dauphin Island bridge provides an excellent example. The original bridge was constructed at a cost of $1 million per mile, but the current construction will exceed $10 million per mile. This will amount to, according to one writer's estimate, a subsidy of $50,000 for each of the pre-Hurricane Frederic housing units on Dauphin Island. Transferring such costs from the government to the private sector would definitely dampen future development.

- In the area of supplying potable water, the government has provided assistance through a variety of measures ranging from the sale of excess property to the approval of disaster relief funds. Somewhere between those two extremes is the grant and loan program established under the Consolidated Farm and Rural Development Act and administered by the Farmer's Home Administration (FHFA). Over a period of the last three fiscal years, the FHFA has dispersed in excess of $26 million in grants and loans to barrier island communities. This amount, over 80% was to be used for water and waste treatment facilities.

Federal wastewater programs do not lend assistance during the initial development of barrier island communities. These programs are designed to aid only existing communities. Barrier island communities often grow rapidly, however, and the federal government is soon called upon to fund an independent wastewater system. The Environmental Protection Agency (EPA) is, perhaps, one of the largest funders of wastewater projects. EPA derives its authority in this area from the Federal Water Pollution Control Act Amendments of 1972. Under the law, EPA is authorized to distribute grants for the planning and construction of wastewater treatment plants. These grants can cover from 75% to 85% of the capital costs, with the remainder provided by the grant applicant and/or the state.

As all residents of low-lying coastal regions are aware, hurricanes and tropical storms present a yearly danger to life and property. Nowhere is the destructive force of these storms more apparent than on barrier islands. When disaster strikes, however, the federal government is there to bail the residents out.

In the wake of a disaster, it is the job of the Federal Emergency Management Agency (FEMA) to provide aid "in expediting the rendering of aid, assistance and emergency services [and] to alleviate the suffering and damage which results from such disasters". FEMA's authority stems from the Disaster Relief Act of 1974.

Another federal agency providing vital assistance to barrier island residents is the Federal Insurance Administration (FIA). The FIA obtains its primary authority from the National Flood Insurance Act of 1968. The FIA makes flood insurance "available nationwide on an equitable basis" and works to "reduce the potential for future damage in identified flood hazard areas". Property owners are able to obtain flood insurance at a lower than normal actuarial rate through what is, in effect, a government subsidy.

All of these programs operate to subsidize the development of barrier islands. The estimated costs of pursuing these pre-development programs range from a low estimate, based on development of uplands alone, of $4.13 billion to a high of $11.2 billion, which contains the development of both uplands and wetlands. At the same time the government is spending huge sums on barrier island development, some federal agencies are actively trying to limit development on certain islands.

The National Park Service (NPS) administers federal owned coastal property including "nine national seashores, one national recreation area, one national monument and one national park." These units are regulated with two goals in mind: "long term protection and preservation . . . and . . . recreational opportunities consistent with preservation". While other agencies allow and even subsidize unsound development, the NPS has reappraised its own activities on barrier islands.

The new "Management Policy for Shoreline Processes" points to "a new direction for shoreline planning and management that takes into consideration the dynamics of barrier island geology and shoreline stability. If the NPS is to achieve these aims, it will have to coordinate with the other agencies involved in barrier island development. Federal involvement on a large scale is required to prevent the natural processes of erosion and deposition. In effect, the NPS has recognized the futility of attempting to overcome the dynamic processes of barrier islands. Instead of altering the processes to fit its plans, the Park Service will now alter its plans to fit the processes: new facilities will not be located in areas subject to flooding or erosion unless the necessary conditions are met. In effect, the NPS will be setting aside lands for the protection of the most valuable coastal resources. The study will be completed and published in August, 1981. If you would like a copy, please contact the Sea Grant Legal Program at the University of Mississippi Law Center."
The Mississippi Department of Wildlife Conservation (MDC), Bureau of Marine Resources (BMR), is the agency responsible for the management and supervision of the marine and estuarine fisheries within the state’s territorial waters. The Commission on Wildlife Conservation, which consists of one member from each of Mississippi’s five (5) Congressional Districts, has been designated the authority to promulgate ordinances, not covered by State Statute, which would regulate the marine fisheries resources of Mississippi. Regulatory decisions are made by the CWC utilizing recommendations from BMR’s Fisheries Management Division, as well as industry and other institutions interested in fisheries research, development, and management.

Fisheries management has been described as a combination of science and art. The scientific portion of a capable fisheries manager’s background is the foundation, but the artistry, or decision-making, is what sets managers apart. Initially, the fisheries biologist must have the scientific educational training in order to interpret the significance of biological data needed to make wise management decisions. In addition, the fisheries manager must have the ability, which comes only with experience, to integrate other nonbiological variables into those decisions to attain the optimum yield concept of fisheries management.

Biological, economic, social, and political considerations are all involved in making wise management decisions utilizing the optimum yield method. Biological concerns are, by far, the most important when regulating a fishery. In order to attain proper management, the best and most recent biological data must be considered. Life history and stock assessment studies such as growth, fecundity (number of eggs produced), age at maturity, age and size composition of the catch, recruitment into the catch, yield of the stocks and other such pertinent data are necessary to provide the very best management practices possible. However, up to date data on those species of fin and shellfish which need to be managed are not always readily available. In 1977, the Bureau of Marine Resources and its predecessor (Mississippi Marine Conservation Commission) have allocated P.L. 88-309 (Commercial Fisheries Research and Development Act) and P.L. 88-304 (Anadromous Fish Act) funds for research to fill some of the gaps in needed data. The Anadromous Fish Act monies have funded Striped Bass Restoration Projects and resulted in the rejuvenation of a viable sport fishery for striped bass. Commercial Fisheries Research and Development Act funds have culminated in necessary baseline studies such as the Gulf of Mexico Estuarine Inventory and Study for Mississippi, the Pensedal Shrimp and Crab Studies and the ongoing Fisheries Monitoring and Assessment Project. In addition, BMR recently conducted a Shrimp Monitoring Program with the Gulf Coast Research Laboratory of Ocean Springs. The purpose of this program was to determine a minimum opening date for the 1981 shrimp season.

An outline of the Shrimp Monitoring Program may aid in understanding the procedures followed by fisheries biologists when making recommendations for management within a fishery. The sequencing is the sequence of events which led to the decision by the CWC to set June 9 as the opening day of Mississippi’s 1981 brown shrimp season.

Routine samples for post larval shrimp were taken from bay areas and analyzed for growth rates. This analysis was then used to determine an advantageous starting date for the intensive sampling for juvenile growth rates. Weekly day and night trawl samples were then taken on the shrimp grounds across the state waters of Mississippi Sound. Night surveys were made because of the brown shrimp’s nocturnal habits. Night samples were collected as were the day’s, to obtain a mean size of the shrimp for that week. Prediction equations were calculated and updated with each ensuing week’s sampling results. A mean predicted date of June 3 with a variance of four days (May 31 to June 7) resulted from the sampling data (38 shrimp pound). Since larger shrimp are more valuable than smaller ones, the later date of June 7 would be an optimum date for the opening based upon biological and economic parameters.

Also, social and political considerations must be weighed. The Biloxi Blessing of the Fleet took place on June 7, thus making that date a poor choice to open the season. The following day was also not acceptable since fishermen would need a day to remove decorations and obtain fuel, ice before opening day (social considerations). Also, since the fishing pressure of Mississippi and Alabama desires that their seasons open simultaneously, fisheries biologists from Mississippi conferred with those in Alabama and determined that June 9 was the optimum date for both areas (social and political considerations). Since the same opening date for the neighboring states would simplify enforcement problems near the state boundary, fisheries managers felt they had completed their tasks and needed only to make recommendations to the decision makers. The Mississippi Commission on Wildlife Conservation, the BMR counterpart in Alabama, agreed that June 9 was an optimum opening date. Fishermen and all others concerned with the shrimp industry appeared generally pleased with the opening. Variables of fisheries management decisions do not always fall into place as easily as they did this year. In fact this year’s events were pleasant exceptions for all persons involved.

The Oyster Rehabilitation and Revitalization Plan is another large-scale fisheries management program conducted by BMR. This plan is a joint effort of the Fisheries Management Division of BMR, the Oyster Management Section of the Gulf Coast Research Laboratory, and the Shellfish Sanitation Division of the Mississippi State Board of Health. The Oyster Program, as it is sometime called, consists of three basic parts: (1) waterbottom leasing for oyster farming by private individuals, (2) transplanting of oyster depuration, and (3) construction and stabilization of oyster reefs.

Residents of Mississippi may apply for a lease from five (5) to one hundred (100) acres of waterbottoms for the purpose of oyster farming operations. The bottoms which are to be farmed must be certified as suitable for oyster reefs by fisheries biologists. Two types of oyster relaying operations are allowed, these are on-bottom and off-bottom. Off-bottom methods include the relaying of oysters from closed (polluted) reefs, placing the shellfish in containers and allowing them to depurate in leased areas. Someone has the expertise and the capital to invest, the off-bottom method can be quite profitable.

The transfer of oysters to public reefs is another important part of the Oyster Program. BMR relays oysters from closed areas to open public reefs using the vessel Conservationist. Oysters are dredged, transported to the desired area and distributed with fire hoses. After fifteen (15) days of purification, they are checked for pollution by Board of Health personnel. If clean, they are released for harvest by BMR and the Board of Health.

The final portion of BMR’s Oyster Program deals with the planting of oyster and clam shells to stabilize existing reefs and to create new ones in areas deemed suitable by BMR biologists and oyster biologists from the Gulf Coast Research Laboratory. The work is usually contracted out, but some shell is planted by BMR vessels. All the shell planting is done under the direction of biologists cognizant of the bottom types of the area. Past efforts may give coast oystermen reason to rejoice over some newly-created reefs as early as this winter.

Another major fisheries management project which the Fisheries Management Division plans to begin in the near future is that of collecting and analyzing statistical data on the amount of fish and shellfish landed. The Landings Statistics Program will be a cooperative effort involving BMR and the National Marine Fisheries Service. This project should provide an even better data base with which to manage our fisheries resources.

With the expansion of these existing programs and the addition of new programs aimed at recreational statistics, migration of fishes and marine, the Bureau hopes to gain increased knowledge of the valuable marine resources of Mississippi. In turn the Bureau hopes to share this knowledge with other researchers, processors, fishermen and others to bring about greater understanding and conservation of these fish and shellfish.
WATER LOG

This newsletter is a quarterly publication reporting on the activities of the Mississippi-Alabama Sea Grant Consortium and on issues and events affecting the Mississippi-Alabama coastal area. The purpose of the newsletter is to increase public awareness of coastal problems and issues.

If you would like to receive future issues of the Water Log free of charge, please send your name and address to: Sea Grant Legal Program, University of Mississippi Law Center, University, Mississippi 38677. We welcome suggestions for topics you would like to see covered in the Water Log.

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NOTES

Dr. James I. Jones, Director of the Mississippi-Alabama Sea Grant Consortium, is taking a sabbatical leave to study subarctic environments during June, July, and August, 1981. Dr. Jones' studies in British Columbia, the Yukon Territory and Alaska will supplement his previous work on subtropical ecosystems. During Dr. Jones' absence, Stanley Hecker, Associate Director for Programs, will serve as Acting Director of the Consortium.

The Mississippi Sea Grant Legal Program and the Office of Marine Law at the University of Alabama are planning a joint workshop for Gulf Coast boat owners and coastal boat operators. The workshop will include a review of registration, licensing and operating requirements, as well as information on liability for personal injury and property damage resulting from accidents. The workshop will be held some time in August, 1981. If you would like further information, please contact the Mississippi Sea Grant Legal Program at the University of Mississippi Law Center, Phone (601) 232-7361 (ext. 518).

Work continues on the 1982 Mississippi-Alabama Sea Grant Consortium program proposal to be submitted to the National Office of Sea Grant. The Consortium will conduct a "Retreat" for principal investigators in Biloxi, Mississippi, Sept. 14-16, to review individual program proposals. The formal site visit by the Office of Sea Grant is scheduled for October 12-14 at the University of Mississippi Law Center in Oxford, Mississippi.

The next issue of the Water Log will include:
...A review of port management in the Gulf of Mexico.
...An update on legislative initiatives relative to ports and port management.
...An analysis of jurisdictional boundaries for marine transportation regulation.