

**A COOPERATIVE DATA PROGRAM  
FOR  
RECREATIONAL FISHERIES  
IN THE GULF OF MEXICO**



Prepared for the United States Congress  
by the  
Gulf States Marine  
Fisheries Commission

April 1998

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## Executive Summary

This report is provided to the United States Congress, specifically the Appropriations Committees of the Senate and House of Representatives, in response to Report #105-405, which is entitled *Making Appropriations for the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies for the Fiscal Year Ending September 30, 1998, and for Other Purposes*. Funding in the amount of \$750 thousand will be used by the Gulf States Marine Fisheries Commission to:

- enhance the current recreational data collection program in the Fisheries Information Network for the Gulf of Mexico;
- consult with the States, the Gulf of Mexico Fishery Management Council, National Marine Fisheries Service, the Gulf and South Atlantic Fishery Development Foundation, and other affected interest groups to:
  - implement this enhanced data collection program,
  - complete a transition that will commence a cooperative program with all the Gulf States;
- provide a report to the Committees on Appropriations by April 1, 1998 that will:
  - define the roles of the respective partners in the cooperative program,
  - provide costs associated with transitioning to a new system of data collection, analysis, and access.

The Gulf States Marine Fisheries Commission, formed through legislation of its member states and the United States Congress in 1949, has been developing aspects of a state-federal cooperative program for the collection and management of recreational and commercial fishery data in the Gulf of Mexico region since 1987. The establishment of the Southeast Recreational Fisheries Information Network (RecFIN) in 1993, and the subsequent establishment of the Commercial Fisheries Information Network (ComFIN), represents major progress toward the establishment of fully operational data collection and management activities, shared among the States, the Gulf States Marine Fisheries Commission, and the National Marine Fisheries Service. The above referenced funding and programmatic direction provided by Conference Report #105-405 will allow the Gulf States Marine Fisheries Commission to begin transition activities beginning in 1998, which will facilitate full implementation of the RecFIN, as a fully operational program, in January 1999.

The Gulf States Marine Fisheries Commission currently manages and coordinates the Southeast Fisheries Information Network (FIN), of which the RecFIN and ComFIN are components. The 1996 amendments to the Magnuson-Stevens Act, specifically Title IV, mandate the development of a cooperative National data program to be implemented on a regional basis. The amendments name the partners, including “appropriate State, regional, or tribal entities and Marine Fisheries Commissions,” adding that funding, subject to appropriations, will be provided to those partners to assist in implementing the program. Following on the Magnuson-Stevens amendments, the National Marine Fisheries Service began development of the vessel registration (VRS) and fisheries information systems (FIS) as a mechanism to explore alternatives to fulfill the Congressional

mandate. The Gulf States Marine Fisheries Commission believes that the Southeast FIN, Section IV of the Magnuson-Stevens amendments, development of the VRS/FIS, and the 1997 appropriations to the Gulf States Marine Fisheries Commission to transition to a new system of collecting and managing data can all be achieved through the same multi-state/state-federal activity. This report outlines the Gulf States Marine Fisheries Commission's plan to achieve that goal.

In September 1997, the Gulf States, the Gulf States Marine Fisheries Commission, and the National Marine Fisheries Service embarked on a research project to evaluate alternative methods to collecting data from the charter boat fishery in the Gulf of Mexico. Two alternate methodologies, including a telephone survey of charter boat captains and a statistically based log book survey, are being conducted simultaneously with the ongoing Marine Recreational Fishery Statistics Survey (MRFSS) to evaluate the most cost-effective methodology. At the end of the project, the results will be evaluated, and a preferred method selected. That method will then be used to replace the current method of collecting data from the charter boat fishery.

Based on past planning and coordination among the Gulf States by the Gulf States Marine Fisheries Commission, the roles of the program partners has been defined. The Gulf States Marine Fisheries Commission will:

- continue to manage and coordinate the administrative functions of the Southeast FIN, including the RecFIN and ComFIN Committees and all subcommittees and work groups,
- coordinate the field collection by the States of marine recreational fisheries data,
- conduct computer data entry of the data collected by the States,
- manage the Gulf of Mexico regional marine recreational fisheries data base.

The Gulf States will provide field samplers, who will collect the data, and provide supervision and quality control management to assure that all protocols and procedures are followed. The National Marine Fisheries Service will provide National consistency with data collection and management, and will participate in all programmatic functions of the Southeast FIN.

The subject state-federal cooperative fishery data program will be implemented according to protocols and procedures established through the Southeast FIN. This report, and the transitional funding are specific to the RecFIN, and in that regard, protocols and procedures of the RecFIN have closely followed those developed for the MRFSS. However, the establishment of the ComFIN presages full development of a cooperative program for the collection and management of commercial fisheries data for the Gulf of Mexico.

In order to fully implement the RecFIN and ComFIN activities in the Gulf of Mexico funding will be required in the amounts of \$3.0 million and \$4.0 million, respectively. The funds provided for the 1998 transition will allow the Gulf States Marine Fisheries Commission to purchase computer hardware and software, acquire staff with appropriate experience, and provide for aquisition and extensive training of State personnel, to begin a joint program in January 1999.

## 1.0 Introduction

This report is provided to the United States (US) Congress, specifically the Appropriations Committees of the Senate and the House of Representatives, as per specific instructions in Report #105-405, which is the Conference Report entitled *Making Appropriations for the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies for the Fiscal Year Ending September 30, 1998, and for Other Purposes*. The subject Conference Report specifies that \$750,000 will be provided to the Gulf States Marine Fisheries Commission through the National Marine Fisheries Service for the following purposes:

- enhance the current recreational data collection program in the Fisheries Information Network for the Gulf of Mexico;
- consult with the States, the Gulf of Mexico Fishery Management Council, National Marine Fisheries Service, the Gulf and South Atlantic Fishery Development Foundation, and other affected interest groups to:
  - implement this enhanced data collection program,
  - complete a transition that will commence a cooperative program with all the Gulf States;
- provide a report to the Committees on Appropriations by April 1, 1998 that will:
  - define the roles of the respective partners in the cooperative program,
  - provide costs associated with transitioning to a new system of data collection, analysis, and access.

Finally, the Conference Report states that the "...Commission data collection and analysis efforts not be duplicated within NMFS or the Council".

## 2.0 Background

The Gulf States Marine Fisheries Commission (GSMFC) was formed in 1949, through State legislation enacted by the States of Texas, Louisiana, Mississippi, Alabama, and Florida and with the consent of the US Congress through enactment of Public Law 81-66. The general purpose of the GSMFC is "...to promote the better utilization of the fisheries, marine, shell, and anadromous, of the seaboard of the Gulf of Mexico, by the development of a joint program for the promotion and protection of such fisheries and the prevention of the physical waste of the fisheries from any cause." While this statement of purpose is broad, it is clear that cooperative programs involving its member states to assist in managing coastal and marine resources constitute appropriate and legislatively authorized activities. Coordination and management of data collection programs for coastal and marine fisheries, constitute appropriate programmatic activities to be conducted under the auspices of the GSMFC.

The following discourse provides a concise chronology of external events and activities

In 1996, the Gulf of Mexico accounted for 29% of all recreational fishing trips from the combined Atlantic and Gulf coasts.

undertaken by the GSMFC since 1987, in preparation for implementation of a state-federal cooperative program for the collection and management of recreational and commercial fisheries data. The need for accurate, precise, and timely recreational fisheries data has increased, not only regarding Magnuson-Stevens Act activities, but also due to the increased need for regional management of fisheries within the interstate territorial waters. In 1979, the Marine Recreational Fishery Statistics Survey (MRFSS) was established as a centralized program within the National Marine Fisheries Service (NMFS), designed and implemented to provide regional trends data; however, those data lose statistical precision when broken out into smaller geographical units, unless sample sizes are significantly increased. The current design and level of sampling limit the utility of the data for management application, both at the federal council level and the interstate level, primarily because of specific data needs for management strategies that have been, and will likely continue to be, implemented. The past several years there has been an outpouring of concern and criticism from all fisheries sectors, including harvesters, processors, managers, and politicians, that decisions being made which affect both commercial and recreational fisheries lack the confidence of the managers and those who are affected. This concern has been the primary factor in motivating the states and the GSMFC to become directly involved in data collection and management programs. Significant improvements have been made to the MRFSS over the ensuing years, many of which were recommended by the states, individually and through the GSMFC; however, there still remains the need to implement a cooperative program with the States and the NMFS as full partners.

During its regular annual meeting in October 1988, the GSMFC elected to sponsor a workshop which was held in February 1989, during which each Gulf State, a state representative from the Pacific States Marine Fisheries Commission (PSMFC), and the NMFS provided presentations on current or planned recreational fisheries data programs. Among many other technical recommendations, the workshop resulted in a recommendation that the state fishery management agencies should be involved in the intercept portion of any regional/national data collection program. Following on that recommendation, during 1989 and 1990, GSMFC staff provided two briefings to the Marine Fisheries Advisory Committee (MAFAC), which is an advisory committee to the Secretary of Commerce. During that time, the MAFAC offered its official endorsement of the GSMFC initiative to work cooperatively with the NMFS to establish a state-federal cooperative program to collect and manage recreational fisheries data.

Also, during 1989, the GSMFC engaged in an internal programmatic review, which culminated in a variety of recommendations, including a recommendation that the GSMFC staff begin planning activities to become involved in the coordination and administration of marine fishery data programs. This recommendation was developed primarily as a result of presentations by the PSMFC regarding their work in coordination and administration of state-federal data programs, including the Pacific Fisheries Information Network (PacFIN), which is a commercial fisheries program. Since the GSMFC was already working on plans to coordinate and administer recreational fishery data activities, the GSMFC continued to focus on that area, increasing its effort to establish a cooperative program to collect and manage recreational fisheries data.

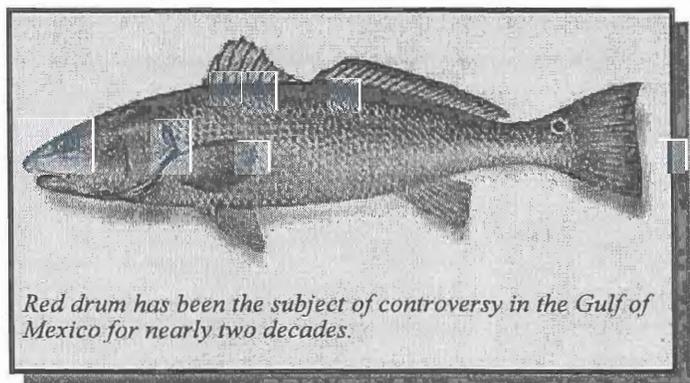
Early in 1990, the GSMFC and the PSMFC corresponded with the NMFS regarding their intent to propose a state/federal, cooperative program called the Recreational Fisheries Information Network (RecFIN), patterned after the earlier relationship between the PSMFC and the NMFS to conduct the

MRFSS on the Pacific coast and PacFIN. While that proposal was rejected, due primarily to administrative problems, NMFS officials were very supportive of the concept and appeared to anticipate future implementation.

Sole-source, or discretionary, funding to Interstate Marine Fisheries Commissions and States was one of the administrative problems referenced above. The GSMFC, along with the PSMFC and the Atlantic States Marine Fisheries Commission, worked with the U.S. Congress to provide a legislative solution to that problem, as reflected in P.L. 102-567, the 1992 NOAA Authorization Act. That act specifically allows the NMFS to provide sole-source funding to the States and Interstate Marine Fisheries Commissions for programs as identified. While that action appeared to provide the authority needed to accomplish receiving discretionary funding from the NMFS, there still remained problems. The three Interstate Marine Fisheries Commissions again consulted with the US Congress in hopes of seeking a more definitive solution. That resulted in language in Magnuson-Stevens Act amendments of 1996, which mirrored the earlier language, but added an important provision that funding can be provided on a sole-source basis in the case of a program for which "... the Secretary has entered into a cooperative agreement with a State, Council, or Marine Fisheries Commission,..."

Funding was also one of the administrative issues referenced. This has been a continuing issue related to our proposals to work as partners with the NMFS to conduct a state-federal cooperative data program. The GSMFC has long realized that more funding was needed for statistics, especially if the kind of comprehensive state-federal cooperative program envisioned is to be achieved. This realization has now emerged from all sectors, including the fishing industries, regulatory agencies, and the US Congress, as a critical, past-due requirement if we are to have better data on which to base sophisticated management decisions. As a result, the primary programmatic issue for the GSMFC over the past several years has been to support increased funding for fisheries data programs. Several appropriations acts recognize the importance of establishing state-federal cooperative programs, including language to provide funding to implement the RecFIN. This Congressional direction has not yet been followed; consequently, additional direction was given in the 1996 Senate appropriations report, stating that the subject funding should be divided evenly among the Pacific, Atlantic, and Gulf States to implement the RecFIN. That language was repeated in the 1997 appropriations bills, still to no avail. In late 1997, considerable Congressional interest was raised to investigate other approaches to collecting and managing marine fisheries data in the Gulf of Mexico. That interest resulted in \$750,000 being directed to the GSMFC, specifically to enhance the current recreational fisheries data collection program and to provide a transition to a new program, to be described by the GSMFC.

Even though the original proposal, submitted in 1991, to establish the RecFIN was rejected, the NMFS made a counter proposal to the GSMFC in 1992 to develop a pilot state-federal cooperative marine recreational fisheries statistics



program for the Southeast Region. There were two primary differences in the GSMFC and NMFS proposals. The first is that the NMFS proposal was for an administrative program only, and did not include establishing the complete partnership, such that the states were to collect the data through coordination and management by the GSMFC. The second is that it extended the program from the Gulf region to the entire Southeast Region, including the South Atlantic and the Caribbean. Since the establishment of the proposed administrative structure was consistent with the GSMFC initiative, that proposal was unanimously approved by the GSMFC on April 9, 1992. The result is the *Strategic Plan: Recreational Fisheries Information Network for the Southeastern United States*, completed in late 1992 and published in 1993. That effort also established a Memorandum of Understanding (MOU) to implement the Southeast RecFIN, which was signed by all the proposed signatory agencies by late 1992. The Southeast RecFIN, as a coordinating and administrative structure, was established January 1, 1993, as a three year pilot program. The purpose and function of the Southeast RecFIN, is to provide a guidance structure to the collection and management of recreational fisheries data, to implement a state-federal cooperative program to collect recreational fisheries data, to provide a mechanism to improve and expand data collection and management, and to provide a forum for resolving problems and conflicts. This is a vital function, which has been well served by the RecFIN since 1993. However, the initial and most important step for establishing the RecFIN had not yet been achieved, ie. a full partnership between the States and the NMFS to conduct a unified marine recreational fisheries statistics survey.

It is important to note that the idea for the RecFIN is not new, and it is not unpopular. The RecFIN was established on the Pacific coast, subsequent to the proposal earlier referenced. Following the actions taken by the GSMFC, the ASMFC has entered into a major initiative for the entire Atlantic seaboard, to develop and implement the Atlantic Coast Cooperative Statistics Program (ACCSP). As this process is progressing, there is a formal agreement that a liaison from the Southeast Fisheries Information Network (FIN) will participate in the meetings to develop and establish the ACCSP, as provided in the goals and objectives of the RecFIN, to ensure regional and national consistency among data programs. The Southeast FIN also provides a liaison with the Pacific RecFIN.

An external program evaluation of the Southeast RecFIN was conducted in May 1995, to determine the success of the program and to consider its fate after the completion of the pilot phase. The Marine Fish Section of the American Fisheries Society conducted the review. The resulting report was very complimentary of the work accomplished by the Southeast RecFIN, and clearly recommended that the RecFIN continue past the pilot phase and be fully implemented, as evidenced by the recommendation which states "Implement as soon as possible integrated and coordinated boat surveys, shellfish surveys, and social and economic surveys in support of fishery management in the southeast region." Following that recommendation, a new MOU was developed and signed which established the Southeast RecFIN as a continuing program. The Gulf States, through the GSMFC, continue to pursue full partnership with the NMFS to jointly and cooperatively conduct a state-federal cooperative data program in the Gulf of Mexico region.

As a consequence of the emphasis placed on the need for a coordinated data program, language was placed in the 1996 amendments to the Magnuson-Stevens Act, to establish a national data program to be implemented on a regional basis. That language is consistent with the goals and objectives of the Southeast RecFIN. Also, the 1996 Magnuson-Stevens amendments provide specifically for the

use of cooperative agreements and authorization for funding to assist “state, regional, or tribal entities and Marine Fisheries Commissions” in carrying out the directive. Full implementation of the Southeast RecFIN, by embracing the Gulf States and the GSMFC as partners in conducting a state-federal cooperative data collection and management program for the Gulf of Mexico, will fulfill the mandates as established in the Magnuson-Stevens Act for the Gulf of Mexico region.

The GSMFC and its member states have:

- expressed their intent to enter into a cooperative, state-federal partnership with the NMFS to conduct a marine recreational fishery data collection program,
- participated in a coordinated planning strategy to establish the Southeast RecFIN through a pilot phase, and now as a continuing program,
- accomplished legislative solutions to providing funding on a discretionary, sole-source basis to the states and the GSMFC,
- received funding in 1998 from the US Congress to conduct activities which will provide for a transition into a state-federal cooperative program involving all Gulf States for the collection and management of fisheries data.

The GSMFC believes that the US Congress intends for the RecFIN, a state-federal cooperative marine recreational fisheries data collection program, to be fully implemented. This report provides the roles and responsibilities of the program partners, many of which have been developed over the years of planning described above, and costs associated with “...transitioning to a new system of data collection, analysis, and access.”

## 3.0 Current Situation

### 3.1 General

The chronology above touches on a number of actions that have set the stage for the current situation. First is the ongoing operation of the Southeast FIN, currently being managed by the GSMFC as an administrative organization. Second, the US Congress passed a number of important amendments to the Magnuson-Stevens Act in 1996. Among those amendments is **Title IV -- Fishery Monitoring and Research, Section 401 -- Registration and Information Management**. This section of the amendments requires that the NMFS develop recommendations for the development of a fishing vessel registration (VRS) and fisheries information system (FIS), and specifies that it be implemented on a regional basis. The intent of this section is clear regarding the identification of partners in implementing the program, as follows:

#### **Section 401a**

- (4) provide for implementation of the system through cooperative agreements with appropriate State, regional, or tribal entities and Marine Fisheries Commissions;

- (5) provide for funding (subject to appropriations) to assist appropriate State, regional, or tribal entities and Marine Fisheries Commissions in implementation;

Further, the language in that section calls for a variety of data elements and development of protocols that have been the subject of much effort and resolution through the Southeast FIN.

Immediately following passage of the 1996 Magnuson-Stevens amendments, the GSMFC passed a resolution in full business session on October 17, 1996, that states the following:

**THEREFORE BE IT RESOLVED** that the Gulf States Marine Fisheries Commission recommends to the Secretary of Commerce that the SEAMAP, and Southeast RecFIN and ComFIN be recognized by the Department of Commerce as the appropriate programs for fulfilling, for the Southeast Region, some of the requirements of the 1996 Magnuson Fishery Conservation and Management Act for developing recommendations for the establishment of a national data program to be implemented on a regional basis.

**BE IT FURTHER RESOLVED** that, while the Southeast RecFIN has been fully implemented as an administrative and coordinating structure to provide overall guidance to and recommendations for the collection and management of recreational fisheries data, the Gulf States Marine Fisheries Commission and its member states believe that full implementation of the Southeast RecFIN in the Gulf of Mexico region, as provided for in the 1995, 1996, and 1997 Congressional appropriations, will be realized only when the states are given the opportunity to work directly in partnership with the National Marine Fisheries Service to cooperatively collect and manage recreational fisheries data, through cooperative agreements with the National Marine Fisheries Service.

**BE IT FURTHER RESOLVED** that, as a means of accomplishing full implementation of the Southeast RecFIN, the cooperative agreement proposal entitled “Gulf States Marine Fisheries Commission (GSMFC)/National Marine Fisheries Service (NMFS) Recreational Fisheries Information Network in the Southeast Region [RecFIN(SE)]” should be approved and implemented as quickly as possible.

Following on the mandate by the Magnuson-Stevens amendments, the NMFS began work to develop the VRS/FIS in late 1997 and early 1998. In order to provide ample time to complete the important report to the US Congress, also mandated by the amendments, the GSMFC and the Southeast FIN, along with other interested entities, indicated a desire to see the reporting deadline, stipulated by the amendments, delayed for six months. That delay was granted, establishing a new deadline of July 1998 for submitting the report to the US Congress. The GSMFC, along with other identified entities, anticipates working closely with the NMFS in finalizing the language in that report. It is the position

of the GSMFC that the Southeast FIN, the 1996 Magnuson-Stevens amendment provisions in Section 401, and the VRS/FIS can all be fully implemented through the same basic activity; develop and implement a state-federal cooperative fishery data collection and management program for the Gulf of Mexico, including the States and the GSMFC as partners with the NMFS. The 1997 appropriation of \$750,000 provides an opportunity for the GSMFC and its member states to conduct transition activities that will sufficiently prepare them for conducting the day-to-day operations of a marine recreational fisheries survey in the Gulf of Mexico.

### 3.2 Pilot Charter Boat Study

A study of charter boat sampling methodologies was initiated by the NMFS, the GSMFC, and the States of Louisiana, Mississippi, Alabama, and Florida during September 1997, because there have been problems identified with the current approach for sampling charter boats under the Marine Recreational Fisheries Statistics Survey (MRFSS). The effort estimates from the phone survey are highly leveraged:

- Phone survey gets only a relatively small percentage of fishing households (10% of the 250,000 contacts country-wide are fishing households).
- The households called have only 'coastal county' residents (people living in counties within 25 miles of coast).
- Charter boat patrons are often not from coastal counties (e.g., they go to the coast for vacation, recreation) - therefore they will not be properly represented among the fishing households in the phone survey.
- NMFS attempts to overcome this problem by asking what county each angler is from and adjusting the effort estimate by using the percent of charter boat patrons who are coastal county residents versus non-coastal county residents (intercept questions asked in the field).
- The method is highly leveraged. In some waves the contractor cannot find even 1 (certainly not 2) coastal county resident in the field survey at all -- especially in states like Mississippi with a small coastline and a large pool of out-of-county visitors. This makes the estimate highly variable.

It is also difficult to obtain catch information on field intercept assignments in charter boat modes because:

- Charter boats tend to come back to dock at the same time. An interviewer struggles to get assignments in the short 'window of opportunity' available.
- Many charter boat captains find intercept assignments to be intrusive and will advise their patrons not to participate in interviews.

The pilot charter boat study is designed to determine if there are better methods to survey the charter boat fishing sector. Some aspects of that study include:

- estimate effort from a list of charter boat operators in the state (a comprehensive sample frame was developed),

- call by phone once per week to a 10% sample of charter boat operators to conduct a short questionnaire to obtain effort information,
- combine phone effort data with standard MRFSS catch data to estimate total catch,
- conduct a statistically based log book survey of charter boats in the Florida panhandle area to obtain effort information,
- combine log book effort data with standard MRFSS catch data to estimate total catch.

At the end of the study, the standard MRFSS estimates, the phone call method estimates, and the log book methods will be compared and evaluated to determine the best method of the three for estimating the catch from the charter boat fishing sector.

## 4.0 Roles and Authorities for Data Collection

### 4.1 General

State and federal fisheries management agencies are authorized by various acts of legislatures and the US Congress to collect, manage, and apply data for routine fisheries management activities. Specifically, the National Marine Fisheries Service is authorized by the following legislation to collect data and information for management of marine fisheries in the Exclusive Economic Zone:

- Section 1854 (e) of Title 16 of the U.S. Code, part of the Magnuson Act, requires the Secretary of Commerce to initiate and maintain, in cooperation with the fishery management councils, a comprehensive program of research regarding fishery conservation and management and on the economics of the fisheries.
- Section 1525 of Title 15 of the U.S. Code authorizes the Secretary of Commerce to engage in joint projects on matters of mutual interest with other government agencies, and non-profit organizations, where the cost of such activities is equitably apportioned among the parties.
- The National Environmental Policy Act (NEPA) and other laws and directives (Regulatory Flexibility Act and E.O. 12291) delineate federal analytical responsibilities for assessing the impact of fishing activities.

The States in the Gulf of Mexico region are authorized to collect and manage data through the following:

#### Alabama

- Code of Alabama Department of Conservation and Natural Resources, Title 9, Subsection 2-4, Subheading (a), provides the Department with full jurisdiction and control of all resources existing or living in the waters of Alabama.

## Florida

- Florida Statute 370.02 directs the Department of Environmental Protection to secure and maintain statistical records of the catch of marine species by various gear, by areas and other appropriate classifications.
- Florida Statute 370.0607 directs the Department to establish a marine fisheries information system in conjunction with the licensing program to gather marine fisheries data.

## Louisiana

- Louisiana Revised Statute 56:6(6) confers upon the Louisiana Department of Wildlife and Fisheries the authority to collect, classify, and preserve such data and information as will tend to conserve and protect marine resources.

## Mississippi

- Mississippi Ordinance 9.002 directs the Department to obtain statistical information on recreational fisheries landed or processed in the State of Mississippi.
- Mississippi Code of 1972, Section 25-61-1 refers to the Public Records Act of 1983 concerning data confidentiality.
- Mississippi Code of 1972, Section 79-23-1 refers to the Commercial and Proprietary Information Act concerning data confidentiality.

## Texas

- Code of Texas Parks and Wildlife Department, Sections 66.217, 76.302, and 77.004 direct the Department to conduct continuous research and study of the supply, economic value, environment and reproductive characteristics of finfish, shrimp, and oysters.

## Gulf States Marine Fisheries Commission

- The Gulf States Marine Fisheries Compact (P.L. 81-66) provides for a regional approach to management, monitoring, and utilization of marine fisheries resources.
- The Interjurisdictional Fisheries Act (P.L. 99-659) provides authorization for the interstate compacts to develop interstate fishery management plans.

Based on the authorities listed above, including the respective responsibilities to manage marine fisheries, the three Interstate Marine Fisheries Commissions established and signed the following position statement on October 19, 1991:

"The States and the Federal Government share the responsibility for public trust and stewardship of the living natural resources in their respective jurisdictions. Many times stock ranges and fishery activities transcend jurisdictional boundaries and should be dealt with cooperatively by the appropriate agencies. Of very basic importance to fulfilling state-federal public trust/stewardship responsibilities is the collection and management of data which are vital to the decision-making process within fishery management. It is therefore the responsibility of the state and federal agencies charged with the public trust and stewardship of fishery resources to oversee and manage programs for the collection and application of fishery data.

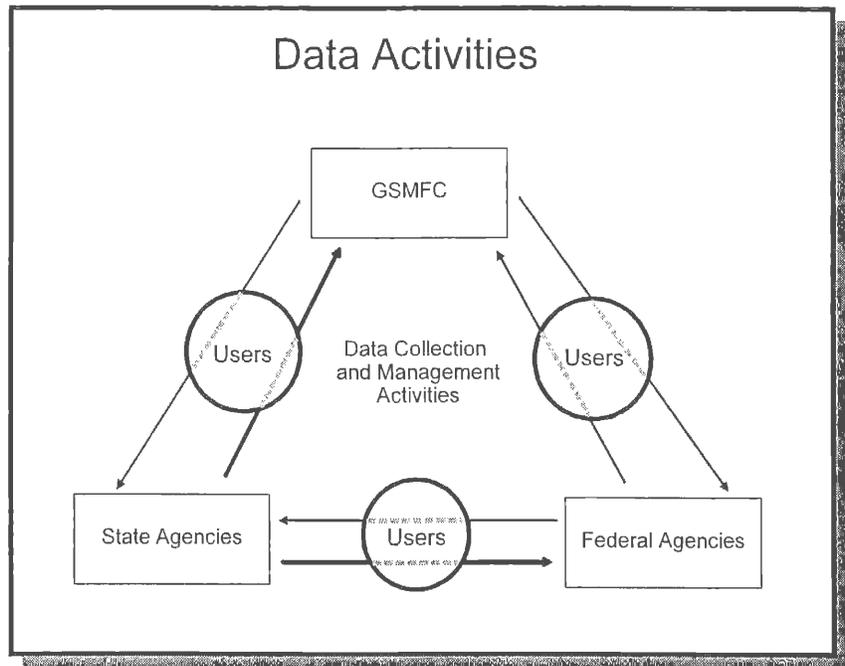


Figure 1. Interaction among program partners.

It is the collective position of the three interstate Marine Fisheries Commissions that the states should be given first priority in regards to cooperation and partnership in all National and regional data collection and management programs. This position accurately reflects the desires of our member states, is consistent with legislation and/or ordinances in each state which provides the agencies with the authority to collect and manage data, and is consistent with the intent of the US Congress as evidenced in the Magnuson Fishery Conservation and Management Act, the Fish and Wildlife Coordination Act, the Interjurisdictional Fisheries Act, and others."

Figure 1 represents the interactions among the GSMFC, states, the NMFS, and user communities in a cooperative data program. For a detailed description of the roles and responsibilities of the program partners, see Section 5.0 of this document.

## 4.2 GSMFC Office

System Administrator - The GSMFC will hire a System Administrator whose responsibility it will be to oversee and maintain the operations of the computer systems and software for all GSMFC programs. Figure 2 provides an overview of the relationship among the System Administrator, the computer system, and the GSMFC programs.

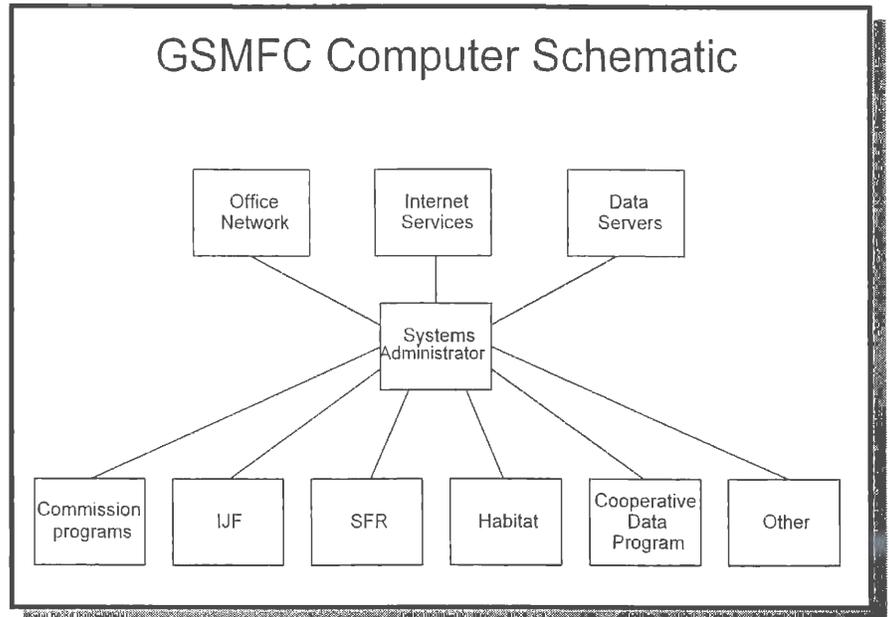


Figure 2. Computer schematic of the Gulf States Marine Fisheries Commission.

While the scope of the System Administrator's responsibility is GSMFC-wide, the initial focus of that position will be to assist in the design, installation, configuration, and operation of the data servers that will serve as the backbone of the regional data management system in the GSMFC Office. The System Administrator will work closely with all data program staff to ensure compatibility between program expectations and system capabilities.

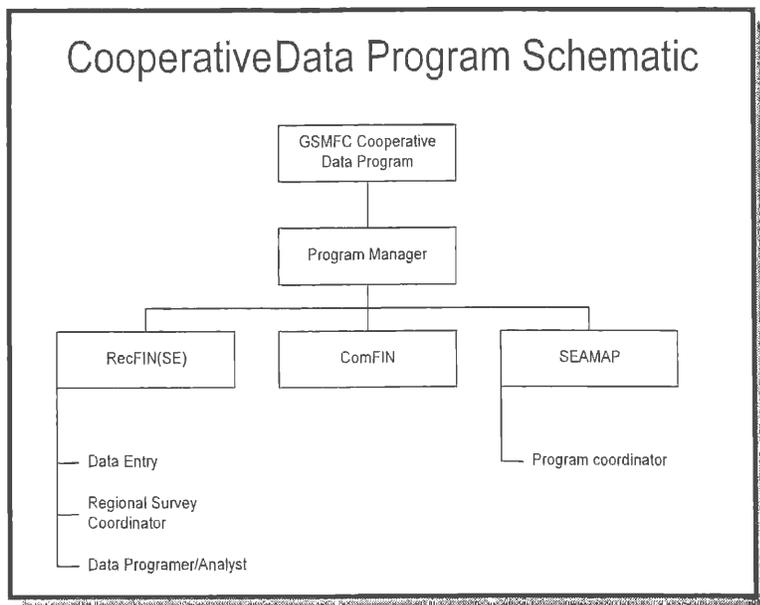


Figure 3. Outline of the GSMFC cooperative data program.

Data Program Staff - The GSMFC coordinated the Southeast RecFIN during its pilot phase through 1995, and continued its coordination role with the expanded Southeast FIN beginning in 1996 through the present. While these are currently limited to administrative and planning activities, the organizational structure in the GSMFC Office is established to accommodate full implementation of a recreational and commercial cooperative data collection and management program. Figure 3 provides a general schematic of the organization within the GSMFC Office.

Under one full-time Program Manager, the GSMFC will oversee the operation of the Southeast Area Monitoring and Assessment Program (SEAMAP), which is a fishery dependent data program that has been coordinated and managed by the GSMFC since its establishment in 1982, the Commercial Fisheries Information Network (ComFIN), which will provide coordination and management of the collection and management of commercial fisheries data, and the Recreational Fisheries Information Network (RecFIN), which is the primary activity covered in this report.

The Program Manager will oversee the functions of a data entry clerk, who will receive raw data from the state data collectors and enter data into the computer system. Also, there will be a Regional Survey Coordinator, whose job it will be to maintain constant contact with state supervisors and samplers to ensure that samples are being collected appropriately and on time and to provide quality control of the data. Finally, there will be a Data Programmer/Analyst who will conduct the day-to-day management of the data base. All GSMFC program staff will maintain appropriate contact with NMFS Headquarters and Regional Office staff involved in the program.

### 4.3 States

The States, including Louisiana, Mississippi, Alabama, and Florida, will serve as collectors of the data. Each State’s staff will include a State Supervisor, who will oversee all program functions, a Sampling Supervisor, who will have direct oversight responsibility over the intercept samplers and will provide quality control management, and several field interviewers, who will conduct interviews with anglers.

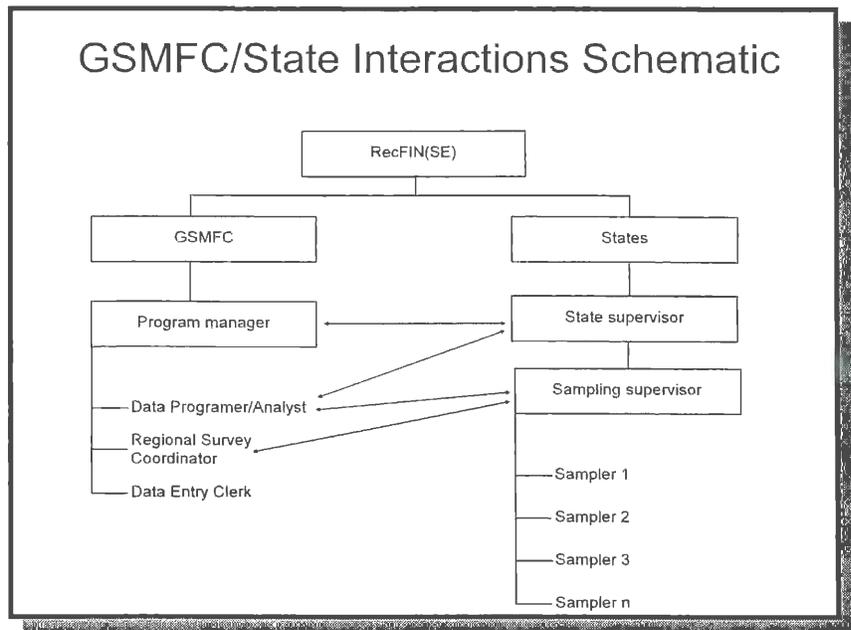


Figure 4. Relationship between the GSMFC and state agencies.

Figure 4 provides an overview of how the GSMFC Office staff will interact with the State program staff.

The key to success is maintaining a high level of communication and attention to schedules and time deadlines. The interaction between GSMFC and State personnel will ensure that all program components are working together.

### 4.4 National Marine Fisheries Service

The NMFS has responsibility under the Magnuson-Stevens Act for managing marine fisheries in the Exclusive Economic Zone. The agency has had and will continue to have a need for accurate, precise, and timely data with which to make decisions regarding management of species under the

jurisdiction of the Federal Fishery Management Councils. Coordination among the various agencies with authorization and responsibility to collect and manage data will be vital to ensuring that State and Federal agencies can respond to management needs. The NMFS regional and national role in data programs will help ensure consistency among the various regional programs, as specified in Section 401 of the Magnuson-Stevens Act.

## 5.0 Implementation Strategy

This section presents a strategy for conducting the survey as part of the RecFIN in partnership with the NMFS, under the supervision of the GSMFC and with collaboration by the States of Alabama, Florida, Louisiana and Mississippi. This proposed strategy is based on the MFRSS program protocols and operations as historically conducted through a private contractor.

### 5.1 Goal

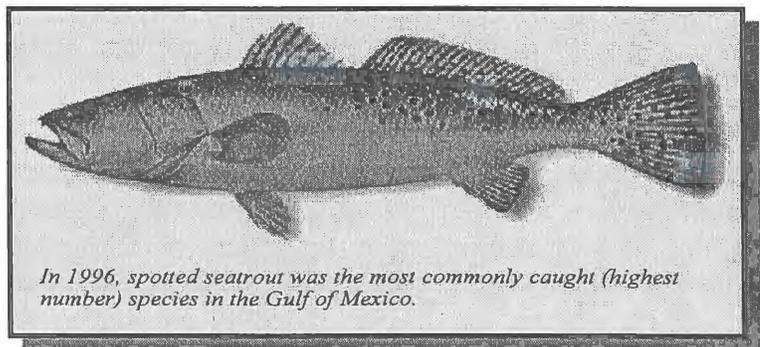
The Goal of this strategy is to provide the basis for conducting a state-federal cooperative data collection and management program for the recreational fisheries in the Gulf of Mexico, to provide critically needed fisheries data of value to both State and Federal conservation agencies. Specifically, the States of the Gulf of Mexico Region want to:

- conduct a recreational fisheries monitoring program that provides policy-relevant information of known confidence to fisheries managers at the state and regional levels in the Gulf of Mexico,
- involve fishing constituents directly in action to insure better understanding of data activities.

To effectively accomplish the goal, the GSMFC will:

- conduct a state-federal cooperative marine recreational fisheries data program in the Gulf of Mexico based on the protocols and operations of the MRFSS, while
- seeking to improve State and regional estimates.

There is a strong intent to maintain the integrity of the existing MRFSS data series with the long term goal of enhancing its value to States, the Gulf Region and the NMFS by cooperating with the NMFS to evaluate current survey effectiveness, test alternative approaches, and implement appropriate improvements. The approach has the benefit of adopting the existing federal approach and getting the Gulf States to monitor recreational fishing the same way. Federal



*In 1996, spotted seatrout was the most commonly caught (highest number) species in the Gulf of Mexico.*

and State conservation agencies will have a greater level of confidence in data on which to make management decisions.

The benefits of this state-federal partnership will be a shared data base of information that incorporates state and federal marine fisheries management needs, that encourages innovation, and that provides both state and federal partners with products that are developed for the use of all partners and that may be easily transferred among partners in the project. There will be a higher level of confidence in the recreational fishery information because the states and public have a vested interest in the data collected in their state and will seek to improve the program to meet the needs of their state, thereby increasing precision in estimates for regional and federal partners.

## 5.2 Description of The Survey

The NMFS is required by law to conduct a survey of marine recreational anglers, gathering information on marine recreational fishing effort and catch, as well as angler participation, demographics and economic characteristics. To obtain information on the total recreational catch, it is necessary to measure data on average catch and effort. When analyzed along with information from supplemental sources, the survey allows for management plans that can optimize the yield for marine recreational fisheries.

The collection of catch and effort data on the marine recreational fishery is a difficult and costly task. The recreational fishing population fishes along the vast coastlines of the Atlantic, Gulf, and Pacific. Furthermore, fishing occurs throughout the year at varying times of day. Some anglers fish on shore, while others enjoy party, charter, private, or rental boat fishing. This expansive and complex population creates the need for a sophisticated sampling design to produce reliable catch and effort estimates.

In the late 1970s, the NMFS tested several alternate methodologies to obtain marine recreational catch and effort statistics. The present methodology is a complemented dual survey approach comprised of a telephone household survey to estimate fishing effort and an access site intercept survey to determine average catch. The NMFS implemented this complemented surveys approach in 1979 as the MRFSS. It has been conducted continuously in the Gulf of Mexico from 1979-1998.

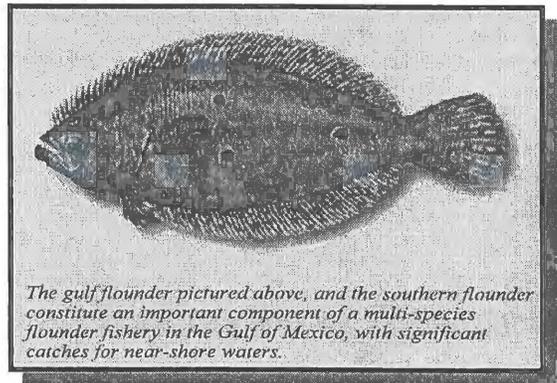
## 5.3 General Approach

The GSMFC proposes to manage and coordinate the Gulf of Mexico geographic component of the survey with the exception of the telephone survey. The NMFS will continue to conduct the telephone survey. This includes the east and west coasts of Florida and the States of Alabama, Mississippi and Louisiana. Texas is not included in this plan for performing the survey, because Texas Parks and Wildlife Department conducts a recreational fishery survey. Personnel from the Texas Parks and Wildlife Department serve on the RecFIN Committee and will be involved in various aspects of the program. For the remainder of this section, the area in which the project will be conducted will be referred to as "the Gulf."

The survey methodology is a complemented surveys approach comprised of a telephone household survey and an access site intercept survey. The telephone component of the survey uses random digit dialing to identify the proportion of fishing households in coastal counties, and to obtain participation and effort statistics for the fishing households. The intercept survey is used to obtain fishing activity and catch per trip data, by species, for marine recreational anglers. The field survey is also used to determine the percentage of intercepted anglers living in households with phones and the distribution of anglers living in coastal versus non-coastal counties. This information can then be used to adjust the expansion of estimates of coastal resident effort to obtain total effort estimates for the Gulf Region.

#### 5.4 Structure of the Survey

The survey design requires that the telephone component of the survey generate data on the total number of marine recreational fishing trips taken by residents of coastal areas. Since it is assumed that the majority of marine recreational fishing trips are taken by coastal residents, the telephone survey is generally conducted only in counties located within 25 miles of the coastline.



The intercept survey provides data regarding catch composition, as well as other trip and demographic information. These data can then be used to determine catch-per-trip estimates, and to determine other factors necessary for the estimates, such as prevalence of respondents with phones and prevalence of respondents living in coastal counties.

Estimates of total catch and landings, by species, of marine recreational anglers in Gulf waters are made by combining the effort and catch data. Both components of the survey are conducted bimonthly on a twelve month basis on the Gulf Coast. The field and telephone components of the Survey are further sub-classified into the following two-month time periods called 'waves':

Wave 1	January, February
Wave 2	March, April
Wave 3	May, June
Wave 4	July, August
Wave 5	September, October
Wave 6	November, December

Within each wave, days are broken down into weekend/holiday and weekday strata, as well. All federal holidays are considered 'weekend' days for the purposes of the survey.

The sampling effort is configured based on three basic types or modes of fishing:

<b>Shore</b>	includes fishing from piers, docks, jetties, breakwaters, breachways, bulkheads, sea walls, bridges, causeways, beaches, banks, or other man-made structures
<b>Charter</b>	includes for-hire vessels
<b>Private/ Rental</b>	includes boats belonging to an individual, as well as renter-operated boats

The sampling unit for the field portion of the survey is an angler trip. Angler trips are sampled by selecting site/days and interviewing anglers at those selected sites on the designated days. A site is defined as an area from which saltwater recreational finfishing occurs that can be covered by one field interviewer on foot during an interviewing assignment.

## 5.5 Technical Approach

### 5.5.1 Intercept Survey

This section contains a detailed plan to conduct a recreational fisheries survey in the Gulf. There is a division between those activities which are required to begin the year's data collection and those which are on-going operations of the survey. The following two major sections address each of these components separately.

### 5.5.2 Initial Survey Activities

Because of the size and complexity of the field component of the survey, there are a number of tasks that will be addressed prior to the commencement of the survey.

#### 5.5.2.1 Revision of Site Register

The NMFS will provide the GSMFC an electronic copy of the existing site register. Each State Supervisor will assess site pressures and site descriptions in their areas of responsibility. State personnel will be responsible for updating general description and mode-specific and stratum-specific pressure information for each month in the upcoming wave. Since State personnel are employees of the fisheries agencies, they will be familiar with the fishing sites in their areas and will be qualified to perform the site register updates.

After site revisions are completed, the changes will be transmitted to the GSMFC office. All suggested changes will be evaluated by the states and the NMFS and entered into the site register data base as appropriate, which will then be used in the assignment draw process. Updated site registers will be printed and distributed to all field interviewers prior to the beginning of each subsequent wave.

### **5.5.2.2 Assignment Draw Program**

The draw will be based on pressure information in the updated site register, and on the requested assignment allocations specified by month, state, mode, and day type (weekend or weekday). Once these factors are determined, the assignment draw itself will be generated by the GSMFC using a computer program provided by the NMFS. For each state, the program will randomly draw mode-specific site/day assignments for each day type within each month of the wave from among all sites weighted by site pressure. The selected site-days will be put into a computer data base of assignments. GSMFC staff will segment this file into state-specific groups for dissemination to the state coordinators.

### **5.5.2.3 Data Collection Instruments**

In preparation for the beginning of each data collection year, the forms to be used in the collection of data should be reconsidered. The GSMFC will coordinate with the NMFS to update all data collection forms for the survey. Expedient form finalization is crucial to the planning of all other aspects of the field survey, including procedural guidelines, training preparation, key entry, and data checking protocol development. Modifications requested by NMFS or States will be considered each year.

### **5.5.2.4 Training Materials**

The GSMFC will be integral to the process of training. Each State will have staff who can train new interviewers who join the survey. The GSMFC will coordinate with the NMFS to develop new training materials as needed. The GSMFC proposes to have training seminars for all State personnel involved in the survey prior to implementation.

The GSMFC will use the procedures manual that has been developed for the MRFSS as a preliminary training protocol. Also, the GSMFC plans to recommend the formation of a RecFIN Work Group to review and possibly enhance the training materials, ensuring that methods presented are consistent with other State and GSMFC goals and objectives.

### **5.5.2.5 Field Interviewer Staffing**

Each State will hire employees to collect survey data in its area of responsibility; however, the GSMFC will hire and train staff for any State which is unable to take the responsibility immediately. In the event a State is unable to continue conducting the survey, for instance due to funding or personnel reductions, the GSMFC will hire and train staff to conduct the survey in that State.

Each State that plans to hire its own staff will do so according to established guidelines and procedures. In some cases staff will be existing full-time staff who will do assignments on a part-time basis, some interviewers will be hired to perform the survey on a full-time basis and others may be hired as part-time employees.

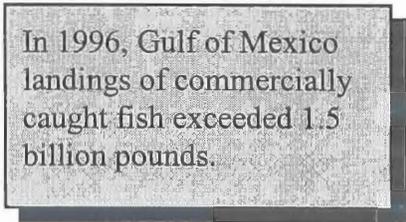
State employees will be able to positively identify at least the top twenty species encountered in their state. In addition, employees will be knowledgeable in the use of dichotomous keys such as found in the *Peterson Field Guide* and Hoese and Moore, *Fishes of the Gulf of Mexico*.

#### 5.5.2.6 Training of Field Interviewers

The GSMFC managing the survey data collection represents a new arrangement for collecting recreational data in the Gulf. Therefore, the GSMFC is proposing to have training sessions for the entire region. All State Supervisors, Sampling Supervisors, and Intercept Samplers will attend training sessions.

The agenda for the training sessions will include an introduction to the survey, survey history, personnel roles and responsibilities, as well as information on fish identification such as "local names" and proper use of the dichotomous keys found in the *Peterson Field Guide* or *The Fishes of the Gulf of Mexico*.

Training will cover all facets of the survey, survey definitions, assignment procedures, on-site procedures, screening for eligible anglers, introducing the survey, item-by-item explanation of the survey questionnaire, conducting the creel census, and administrative paperwork. These items will be covered using a variety of training tools such as overhead visuals, slide presentations and possibly some videotapes.



In 1996, Gulf of Mexico landings of commercially caught fish exceeded 1.5 billion pounds.

Training will include role playing and filling out sample intercept forms. A trainer will interview one of the State Supervisors to show how an intercept flows when done correctly and to illustrate the time frame under which an interview takes place. Particular items may need more attention at this time, such as how to accurately code the catch information.

Training will address all field-related survey procedures and methods. Subjects covered will include introduction of the survey to anglers, site evaluations, alternate site selection procedures, and canvassing and screening anglers for eligibility. Special emphasis will be placed on proper creel examination procedures and obtaining accurate information, as well as a thorough explanation of techniques used to obtain accurate fish weight and length data. Reliable sub-sampling methods will also be emphasized. All interviewer trainees will be observed and critiqued by the training staff regarding their field interviewing techniques and ability to accurately code survey paperwork by the close of the session.

By the end of the training, interviewers will be able to demonstrate the following:

- an understanding of the objectives, goals and the operation of the survey;
- the ability to identify to the species level the top twenty species in their subregion by direct observation; they will also be able to demonstrate the use of a dichotomous key or field guide to properly identify less common species in the area;

- familiarity with proper on-site procedures such as screening for eligible anglers, conducting the interview, and coding the intercept data form;
- a working knowledge of the site register and proper procedure for estimating fishing pressure and for selecting alternate sites;
- an understanding of how to use sub-sampling methods for both sub-sampling anglers and sub-sampling fish;
- personal knowledge or familiarity with sources of local fishing activity;
- correct techniques for length and weight measurements for different groups of fishes, including scale calibration.

#### **5.5.2.7 Field Supervision**

Each State in the Gulf will be responsible for providing field supervisors. In general, this person will be a staff fisheries biologist with experience in field activities and a knowledge of local fish populations.

#### **5.5.2.8 Training of Field Supervisors**

All State Sampling Supervisors will participate in specialized "field supervision" training to be prepared for the tasks and responsibilities of the job. The GSMFC will coordinate with the NMFS to develop a field supervisor training manual. The manual will outline all procedures and tasks for which the field supervisor will be responsible.

The proper procedures in administering the following key tasks will be emphasized during the training of new field supervisors:

- interviewer evaluation via quality control criteria;
- classroom and on-site field training;
- procedures for fish testing;
- testing of survey procedures during wave review meetings;
- weekly reporting of interview tallies by mode;
- updating the site register;
- analyzing fish dumps and providing feedback;
- importance of communication with interviewers and providing feedback on interviewer performance.

The GSMFC Program Manager will be responsible for ensuring that each State Supervisor has a full understanding of the aforementioned criteria and will be available to answer questions and provide feedback.

#### **5.5.2.9 Quality Assurance**

The GSMFC will be responsible for centralized quality assurance throughout all aspects of the survey. Existing quality control standards and procedures will be followed and periodically reviewed, through the RecFIN, to improve the survey.

### 5.5.3 Ongoing Intercept Survey Activities

Once the initial mechanisms to manage the survey are addressed, the following tasks will be conducted on an ongoing basis throughout the survey period.

#### 5.5.3.1 Site Register Update

Once per wave, all State site registers will be updated. Bi-monthly updating is sufficient to maintain information reflective of actual site activity.

While on assignment, each field interviewer will be required to complete a site report for all sites visited. Throughout the wave, interviewers will also be encouraged to complete site reports if they obtain information on sites not actually visited on assignment, as well. Discovery of a newly opened site, for instance, would elicit submission of an additional site report form. All site report forms will immediately be sent to the Sampling Supervisor where they will be consolidated.

Early in the second month of a wave, the following data will be sent to Sampling Supervisors, along with a hard copy of the most recent site register:

- historical information obtained from assignment completion form data including tallies of completed interviews, refusals, and missed eligibles, along with assignment date, assigned mode, time of day, and on-site hours, sorted by site, assigned mode, and day type;
- summary information from all assignment completion forms entered thus far in the wave including tallies of completed interviews, refusals, and missed eligibles, along with other key data, sorted by site, assigned mode, and day type;
- summary site pressure information assignment completion form which will be entered during the key-entry process, sorted by site and assigned mode;
- site description forms completed by interviewers during the wave containing information about site pressure adjustments and site description adjustments observed while on assignment.

Sampling Supervisors will be responsible for sorting all site reports by site number and reviewing all materials on a site-by-site basis to determine mode-specific and day type-specific site pressures for each month of the upcoming wave. After site revisions are determined, the changes will be transmitted to the GSMFC office. All suggested changes will be evaluated and entered into the site register data base, which will then be used in the assignment draw process. Updated site register listings will be sent to all field interviewers prior to the beginning of the next wave.

#### 5.5.3.2 Assignment Allocation

Prior to the beginning of a wave, GSMFC staff will determine the number of assignments to be drawn for that wave. The number of assignments drawn will be based upon an algorithm incorporating the actual intercept quotas by state, mode, month, and day type, and historical assignment productivity data.

In order to calculate the intercept quotas, GSMFC will combine the NMFS allocations, any state-sponsored allocations, and compensatory allocations for interviewing shortfalls from previous waves. Compensatory allocations will be calculated using the methods prescribed by NMFS. Productivity information will be based on data obtained from the assignment completion form files obtained from

In 1996, 87% of the recreational catch in the Gulf of Mexico came from state jurisdictional waters, with the remainder coming from the Federal Exclusive Economic Zone.

NMFS. The primary productivity figure will be based upon the average number of intercepts obtained per assignment, grouped by wave, state, mode, and day type. The interview allocations will be divided by the average number of interviews obtained per assignment to get the base level number of assignments to be drawn. "Reserve" assignments will be added to the assignment

draw allocation by multiplying the base level number of assignments by a factor of about 1.5. The GSMFC will maintain reserve assignments so that extra assignments can be added during the wave if it becomes apparent that the interview quotas might not be achieved. All of the calculations for assignment draw allocations will be derived using a spreadsheet. Once preliminary assignment allocations are generated, the allocations will be reviewed for reasonableness by staff, and slight adjustments will be made, if necessary.

#### 5.5.3.3 Assignment Drawing

During the second week of the second month of a wave, the assignment draw for the following wave will be generated. The draw will be based on pressure information in the updated site register, and on the requested assignment allocations specified by month, state, mode, and day type.

Once these factors are determined, the assignment draw itself will be generated. The program will randomly draw mode-specific site/day assignments for each day type within each month of the wave for each state from among all sites weighted by site pressure.

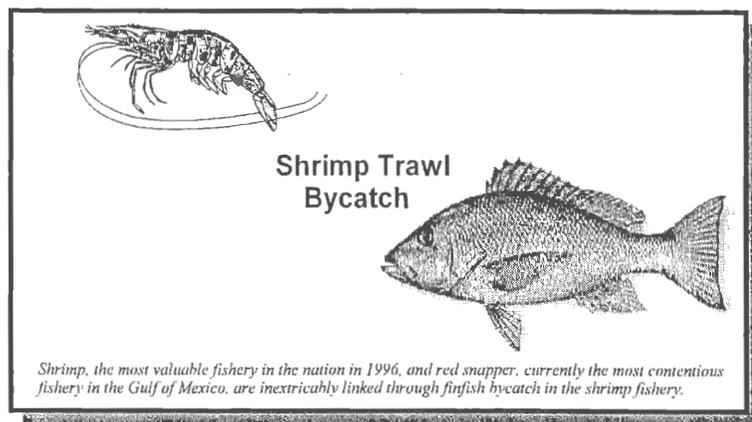
After the draws are made, they will be output to state-specific data bases that can be easily used by State and GSMFC staff to issue assignments. Each record within the data bases will represent one assignment. The record will be comprised of the state code, county code, site code, assigned mode, control number, day, and date of each assignment.

#### 5.5.3.4 Assignment Distribution and Issuance Protocol

Each State Supervisor will have the responsibility of making assignments for their field interviewers. The GSMFC will establish strict guidelines for assignment distribution in order to maintain the integrity of the sample. The assignment draw is comprised of randomly ordered, randomly assigned site/day pairs. Each assignment will have a distinct control number which indicates the day type of the assignment, as well as the order in which the assignment was drawn. Independent draws are generated for each day type and each mode of each month. The goal of assignment distribution will

be to issue assignments without altering the random order or the randomly chosen site/day pairs. In this way, both geographic and temporal randomness will be maintained.

The assignment draws will be in random order within month, mode, and day type. Within each mode and day type, the responsible staff member will distribute the assignments in the order in which they were drawn. If a situation arises in which not all assignments can be distributed in order due to regional staffing shortages, States will deal with the situation by either recruiting or temporarily using staff from adjacent areas to complete the necessary assignments. Neither the GSMFC nor the States will allow assignments within the draw to be 'skipped' due to lack of interviewer availability as such a practice could cause geographical bias in the interviewing results. When this is not possible, very strict requirements regarding rescheduling will be established and enforced. The GSMFC's assignment rescheduling policy will not allow for any alteration in the assigned site location. Furthermore, assignments will only be rescheduled to other days in the initially assigned month, mode and day type.



On occasion, assignment draws will undergo some modifications throughout the wave. Typically a small number of assignments are either not completed or are added. When an assignment is not completed, the reason that the assignment was not done (interviewer unable to complete assignment, assignment weathered out, etc.) will be recorded. Every effort will be made to reschedule assignments that are canceled by interviewers in order to maintain the integrity of the draw. Also, as the GSMFC or a State becomes aware of trouble spots, additional assignments will be issued in order to achieve interviewing quotas.

#### **5.5.3.5 On-Site Procedures**

On-site procedures have been established through the MRFSS. The GSMFC and State staff will monitor methods to assure that data collection is conducted in a reasonable and standardized manner (reading questions verbatim, for instance). One of the most challenging parts of conducting this survey will be maintaining a good rapport with intercepted anglers and site owners. In addition to following all fundamental requirements for interviewing, interviewers will at all times strive to maintain open communication and a good rapport with both anglers and site managers. Each interviewer will be charged not only with the role of data collector, but also with the role of ambassador, possessing essential personnel skills, a thorough knowledge of the survey, and the ability to collect survey data without bias.

Off-Site Preparation - A prime method in maintaining good public relations is for interviewers to appear professional and knowledgeable in the field. For this reason the GSMFC believes it essential for interviewers to be thoroughly prepared before beginning an assignment. Interviewers will be required to follow State regulations and codes of behavior while in the field. These will include, but not be limited to, the following: dressing appropriately, wearing some form of identification (uniform or ID badge), having access to all necessary equipment, and having a clear understanding of on-site procedures.

An enhanced site register containing comprehensive site description information can be a good initial source of data on the assigned site. Other references could include site contact persons, local newspapers, NMFS or other state agency personnel, other field interviewers, or State Supervisors. During off-site preparation, interviewers will determine the most appropriate time of day to interview at the site; interviewing should be conducted at times representative of expected fishing activity for the assigned mode.

Once on site, interviewers will immediately check in with site owners or operators. At this point, if necessary, interviewers will provide information about the history and purpose of the survey, the form of State involvement in the survey, and explain their planned activity. Once approval is granted, the interviewer will commence his/her actual interviewing efforts.

Interviewers will also be provided with copies of the "To Whom It May Concern" letter to further address questions participating anglers may have and to provide a telephone number so that the angler or site manager can contact someone at NMFS for additional information regarding the survey. Copies of the full version of the Privacy Act Statement will also be furnished to interviewers. Interviewers may distribute these after reading the shortened version of the Privacy Act of 1974 to all intercepted anglers who question their rights about answering the questions.

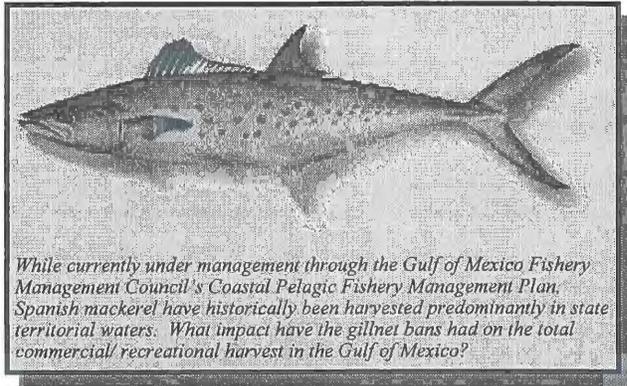
Determining Eligibility - Interviewers will use the screening introduction as a means of determining whether or not anglers are eligible to be interviewed. When the guidelines of this instrument are followed, the interviewer will interview only the anglers who:

- targeted or caught marine finfish;
- were fishing recreationally;
- completed their fishing trip;
- fished primarily in U.S. waters.

Interviewers will only obtain incomplete interviews when assigned to the beach bank mode. In this case, the angler must have completed one third of his/her fishing. No more than 50 percent of the beach bank interviews can be incomplete for a beach bank assignment. These guidelines are described in more detail in the eligibility section of the NMFS procedures manual.

Mode Specific On-Site Procedures - Because of the varying natures of each fishing mode, on-site interviewing procedures will differ depending on assigned mode. Regarding shore assignments, interviewers should canvas the site in order to introduce themselves to prospective respondents and explain the survey. This is an excellent way to foster respondent cooperation. Shore assignments

focused on man-made structures such as bridges, jetties, or piers typically require interviewers to station themselves at locations where exiting anglers can be intercepted. On assignments at beach/bank locations, the vastness of the sites and points of exit often do not allow for this type of arrangement. At these sites, interviewers will need to constantly monitor anglers in order to intercept them at the completion of their fishing before they leave the site.



When interviewing anglers in the private boat modes, it is important for the interviewer to position him/herself where anglers securing their vessels at the dock or on trailers can be intercepted without interfering with disembarking anglers. State and GSMFC interviewers understand that "timing is everything" and approaching an angler at the wrong time can keep the interviewer from getting the interview completed. Likewise, waiting too long can have a similar result, with the members of the party departing the site before the intercept has begun.

When interviewing anglers on charter vessels, interviewers will need to be especially prepared before they arrive on-site. Site managers or vessel captains need to be contacted in advance so that the interviewer arrives on-site at the appropriate time. Intercepting anglers in these modes can be challenging for an interviewer working on the dock when approaching anglers disembarking the vessel. The well-trained interviewer will understand the importance of unbiased subsampling of anglers in this situation, and will approach people or parties at random without regard to catch or personal characteristics of the anglers.

**Assignment Goals** - For each assignment, an interviewer will attempt to obtain the target quota for completed interviews in their area. In the Gulf States, the goal will be 30 completed intercepts in the shore and private/rental modes, and twenty completed intercepts in the charter boat mode. It will also be important that, for each wave/state/mode cell, at least two coastal residents are obtained. When necessary, roving assignments will be issued to ensure that this requirement is achieved. (A roving assignment will be conducted specifically with the goal of obtaining coastal resident intercepts, and will therefore not be constrained by the usual alternate site guidelines.) An interviewer may be asked to complete multiple assignments in one day if deemed necessary by a State or GSMFC staff member.

The GSMFC and States will be responsible for having interviewers on-site at the time of peak fishing activity with the initial goal of intercepting anglers who have been fishing in the assigned mode and at the assigned site. Interviewers will be allowed to visit up to three sites per assignment; the assigned site and two alternate sites. The States or the GSMFC will instruct the interviewers to ensure that alternate site selection procedures fall within the appropriate procedural guidelines. Alternate site selection during an assignment will ultimately be at the discretion of the interviewer. The determination to exercise this option can be made under the following circumstances:

- there is no fishing activity at the assigned site in the assigned mode;
- there is low fishing activity at the assigned site and a preliminary canvass indicates that anglers presently fishing will not complete their fishing within a relatively short amount of time;
- one interview per on-site hour cannot be obtained.

Once the interviewer has decided to select an alternate site, the interviewer will be aware of the rules applying to the alternate site selection process. The interviewer will select as the first alternate the site closest to the assigned site in travel time that has the assigned mode of fishing. Interviewers will be able to use the alternate site guide provided in the site register to help them determine the most appropriate alternate site to visit.

Interviewers assigned to exclusively beach bank or natural shoreline sites understand that any alternate sites selected must possess natural shoreline and that all interviews obtained must be from anglers fishing in the beach bank mode. When the assigned mode is not exclusively beach bank or natural shoreline, interviews may be obtained in alternate modes under the circumstances discussed in the procedures manual. Specifically, an interviewer will be permitted to switch modes after visiting the assigned and first alternate sites if it is determined that the next appropriate alternate site does not have fishing activity in the assigned mode. Interviewers will always visit the assigned site first. The only exceptions would occur if an interviewer calls ahead to a charter site and learns that no vessels will be operating from that site on the day of the assignment or if the assigned site is closed to all activity.

Obtaining Biological Information - All interviewers will be in possession of the required biological sampling equipment while on site. A standard one meter measuring board will be used when measuring all fish. Lengths will be recorded to the nearest millimeter for all fish measured. The fork length ( or total length for species with unforked tails) with the rostrum of the fish touching the end bracket should be recorded. A metric measuring tape will be issued to each interviewer to be used as a complement to the one meter measuring board when measuring fish over one meter in length.

Two brass hand-held scales will be issued to each interviewer, one having a 2 kilogram (kg) capacity and the other having a 12.5 kg capacity. These scales will be used to measure all fish. The only exception to this would be a fish weighing more than 12.5 kg. The weights for these fish will only be recorded if there is a certified scale located on-site. All fish weighing less than 2 kg will be weighed using the 2 kg scale and the weight will be recorded to the nearest five hundredth of a kilogram. Fish weighing in excess of 2 kg will be weighed using the 12.5 kg scale and the weights will be recorded to the nearest tenth of a kilogram. Individual fish weighing less than 0.05 kg will be weighed together in groups of up to fifteen individuals using the "baggie technique" outlined in the procedures manual.

Each interviewer will be fully instructed on how to properly calibrate and maintain the scales. Interviewers will calibrate the scales before every assignment or as necessary to ensure that accurate weights are obtained. Interviewers having dysfunctional equipment will notify their State or GSMFC office so that a replacement can be issued as soon as possible.

Reference materials issued to all interviewers will include a *Peterson's Field Guide, Fishes of the Gulf of Mexico* (Hoese and Moore) or other approved field guide for the marine fish in the Gulf of Mexico. Interviewers will be required to have the field guides on site for each assignment for the identification of fish available for inspection and to substantiate claims of fish caught by anglers which are unavailable for inspection.

Assignment Completion - When the assignment has been completed, the interviewer will be required to complete all the information on the assignment completion form or other similar state-specific form before departing the site. This information includes the number of anglers not interviewed, not done fishing, not fishing in US waters, under 5 years of age, and not finfishing. To facilitate tracking of completed assignments, interviewers will also be required to record the total number of interviews completed by mode for the assignment. All tallies will be site-specific.

#### **5.5.3.6 Field Supervision**

The GSMFC will work to constantly implement the essential processes of quality control and communication in order to link the field staff with the project management staff. All methods, including the use of field supervisors, quality control visits, wave review meetings, training, editing, and validation will be key in interviewer supervision. The State and GSMFC staff will be a critical element in the supervision of the field interviewers, issuing assignments and verifying their completion, monitoring quotas, and implementing field survey logistics. In addition, the State Supervisors will also act in a supervisory role with respect to the field supervisors. The State Supervisors will inform the Sampling Supervisors of the current status of the quotas and work with them in arranging short notice assignments, finding interviewer availability near the end of the wave when additional assignments may be necessary, and rallying the interviewers to work towards achieving the short and long term goals of the survey. Further, the State and GSMFC staff will keep the Sampling Supervisors up to date on administrative policies and procedural matters.

The GSMFC plans to use one Program Manager who will be assigned the task of overseeing the States and other GSMFC staff. This individual will be involved in field supervision and quality control in a variety of ways. He/she will contact the States at least once per week to discuss the status of the survey quotas. The project manager will also be in contact with the State Supervisors during the review of fish records, and may rely on the local expertise of state personnel in validating catch information. State Supervisors will also assist in the evaluation of the bimonthly "fish dumps" and contacting interviewers when questionable data are encountered. The Sampling Supervisor will report any changes that need to be made in the data files to the Program Manager. The Program Manager will regularly call upon Sampling Supervisors to convey important information to the field interviewers regarding changes in procedures or the need to pay closer attention to coding or other data collection errors.

Sampling Supervisors will provide supervision to the field interviewers; answering fishing site and pressure questions, organizing and conducting quality control visits, training interviewers on-site and informing them of procedures, and providing related training at the regional wave review meetings. The key-entry staff will provide feedback to field interviewers through proper chain of authority by completing data quality sheets that identify miscoding errors on data sheets.

### 5.5.3.7 Data Collection Monitoring

Effective communication between field and GSMFC staff is critical in ensuring comprehensive and effective monitoring of field interviewing. In addition to the field supervisory techniques discussed above, the GSMFC will also implement a system for data collection monitoring to assure that interview quotas are met in an efficient manner to achieve quality results.

State Supervisors will be responsible for monitoring the progress of assignments in their own states. However, the GSMFC plans to develop uniform assignment tracking software to be used in each State. Interviewers will be required to report to their State or GSMFC on a weekly basis the results of each assignment for that week. This information will also be entered into an assignment tracking system where the resulting status of each assignment is indicated. In the assignment data base the staff person will indicate whether or not the assignment is completed and, if not completed, the reason why. If the assignment is completed, the number of interviews obtained by mode will be entered into the database.

The GSMFC or State will require all interviewers to complete all data forms and submit them to the appropriate office. Once the assignment packets are received by either the State or GSMFC, the assignment completion forms will be reviewed by a staff member to ensure that proper on-site time and alternate site procedures are recorded. The staff will also check all survey forms for completion to validate that the interviewer reported to the assigned site on the assigned date. The data will then be key entered.

The States and the GSMFC will continuously monitor the status of the quota in each state and address survey-related issues. Tracking system updates will provide information on the total number of interviews obtained to date by mode and by state for the current wave and detail the number of issued assignments remaining for the wave. Using historic productivity information and anecdotal knowledge, the staff will determine whether assignments need to be added or canceled in each area in order to make quota. These determinations will be reviewed by the project manager and the State Supervisors to ensure that quotas are met.

### 5.5.3.8 Key Entry

Once data have been checked in, they will be key entered using a data entry system developed in conjunction with the NMFS. The software system will allow for speedy and accurate data entry by allowing full access flexibility to all portions of the data record. The software will be designed so that it can be modified to allow for entry of supplemental data forms.

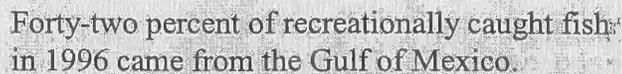
As data are being keyed, any errors identified by the key-entry system will be examined by GSMFC staff. If necessary, the Sampling Supervisor or field interviewer will be called for clarification. Key-entry personnel will be familiar with the proper coding methods and the key-entry system data checks.

Key-entry will be organized in a manner that allows for small portions of the monthly data to be edited throughout the month. This will allow for relatively easy achievement of data transmittal

deadlines. Typically, once a data form arrives in the office, it will be checked in and key-entered within five business days. Editing of a data record will occur within about ten days from receipt. The GSMFC will schedule its key entry to accommodate the needs of the survey and any other supplemental surveys.

#### 5.5.3.9 Intercept Data Editing

Portions of the monthly data will be output to data files on a regular basis throughout the month. Continuous editing of data files allows for easier achievement of monthly data transmittal deadlines. Timely editing also allows any possible interviewer coding errors to be addressed immediately which, in turn, prevents any future errors of the same sort and effects more accurate interviewer recall so that incorrect data can be reliably corrected. Intercept data editing will include checks for key-entry errors, range errors, value outliers, biological reasonableness, and checks of agreement between related variables.



Forty-two percent of recreationally caught fish in 1996 came from the Gulf of Mexico.

The actual editing program will be SAS-based software, and extremely thorough. It will be executable from personal computers. The output from the data checking program will include the identification number of the package in question, along with the erroneous data values and a message to indicate what type of error is present.

The editor will then reference the actual assignment package to determine what revision to make. If necessary, the interviewer will be called to verify the correction. As data corrections are determined and made, they will be recorded on the error listing to serve as an "audit trail" to keep track of modifications made to the data. The data quality manager will update the files and then run the error checking program again. If necessary, corrections will be made. This process will continue until no more errors are indicated in the error output.

At the end of the month, when all data have been entered, all data will be combined. At this point, the data quality editor will verify that no duplicate intercepts have been entered and that all assignment packages received in the office have been entered. Once these checks have been made, along with the intercept data checks and the fish data checks discussed below, the data will be ready for transmittal preparation.

#### 5.5.3.10 Fish Data Editing

Once the intercept data are entered into a database, records that do not fall within the proper length, weight, or geographic range for that particular species will be flagged using an application linked to the data-entry/data-edit program. All flagged data will then be reviewed by the project manager. Outlier criteria for a large percentage of marine species will be present within the initial data entry program, and information for more species will be added to the checking program as it becomes available.

Initially when a potential error is flagged, the value will be compared with the original data form to determine if a key-entry error was made. If so, the correction will be made. Otherwise, the State Supervisor, Sampling Supervisor, or field interviewer will be contacted directly to determine if proper procedures for species identification or length and weight measurements were followed. Following this research, the project manager may or may not authorize a change in the data. The suspicious data may remain unchanged to allow the information to be reviewed by NMFS and other State personnel in the "fish dump" process. When all flagged data are reviewed, all intercept data files will be combined and output for each state. This information will be distributed to State Supervisors, NMFS personnel, and the Program Manager. Particular attention will be focused on geographical feasibility of each species and the number of fish for each disposition and area fished. Length and weight data are also reevaluated for reasonableness, as is the number of anglers contributing to the catch. Feedback from all associated personnel will then be sent back to the project manager who then will evaluate the information and make the necessary changes to the data base files.

#### **5.5.3.11 Monthly Data Preparation**

After all data for the month have been received, key-entered, and edited, they will be prepared for delivery to NMFS. All edited intercept survey data files will be delivered to NMFS on the 21st of the following month or the first business day thereafter. The data will be placed in hierarchical formats provided by NMFS and transmitted electronically. Full documentation of all data files will be provided.

#### **5.5.3.12 Data Reporting**

The GSMFC will deliver to NMFS a complete summary of all data collection activities and results for each wave. These 'wave reports' will be delivered by the 27th of the month following each wave, or the first business day thereafter.

Each wave report will include the following information, grouped by subregion, state, and mode.

- A complete accounting of all assignments drawn for each interviewer including:
  - numbers and percentages of intercepted persons found to be ineligible during the screening process,
  - numbers and percentages of eligible anglers not interviewed by reason for exclusion,
  - numbers and percentages of issued assignments not completed by reason (e.g., weathered out),
  - numbers and percentages of completed assignments including alternate site visits, including reasons for visiting alternate site,
  - numbers and percentages of assignments for which no interviews were attempted,
  - estimated numbers of eligible anglers missed due to inability of interviewer to intercept while interviewing another angler,

- distribution of obtained interviews versus estimated fishing effort as defined in the site register, by county.

#### 5.5.4 Telephone Survey

In order for the GSMFC and States to estimate catch and landings for an individual State or the Gulf Region, the catch data must be combined with the effort data. The telephone survey provides the current mechanism for estimating effort for the survey. It is the ultimate goal that the components necessary to estimate landings in the Gulf of Mexico be wholly contained within RecFIN (Gulf Component) to allow the States and/or GSMFC to estimate catch and landings as needed for management purposes. However, the GSMFC recognizes the initial need to continue operating the intercept survey through the NMFS.

While the GSMFC and its member states are interested in exploring other methodologies for obtaining effort data, the current telephone survey will continue to be operated. Through cooperation among the GSMFC, States, and the NMFS, alternate methodologies can be evaluated with a goal of maintaining or improving the effort estimation while being more efficient.

#### 5.5.5 Management

##### 5.5.5.1 Program Administration

The GSMFC will administer and coordinate the implementation and operation of the survey in the Gulf Region as a Southeast RecFIN activity . The GSMFC is uniquely qualified and legally authorized to provide these functions on behalf of its member states.

##### 5.5.5.2 Shared Management Authority

The distribution and movement of most marine fishery resources transcend jurisdictional boundaries. Indeed, the origin of the three interstate marine fisheries commissions in the 1940s can be traced to that fact. Current management philosophy states that fishery species should be managed as units throughout their respective ranges. In order to accomplish this, coordination of fishery management activities among states and between the states and federal agencies is imperative. This sentiment was eloquently established and accepted as the most effective approach to fishery management in *To Stem the Tide* (1975), published by the Council on State Governments. Throughout that document, the development and implementation of interjurisdictional fishery management plans recurs as the best mechanism for the states and federal agencies to cooperatively manage marine fishery resources.

REGIONAL FISHERY MANAGEMENT PLANS IN THE GULF OF MEXICO		
FEDERAL	INTERSTATE	INTERSTATE IN DEVELOPMENT
Reef Fish	Striped Mullet	Spotted Seatrout
Spiny Lobster	Gulf Menhaden	Flounder
Shrimp	Black Drum	
Coastal Pelagics	Striped Bass	
Red Drum	Oyster	
Stone Crab	Blue Crab	
Coral	Spanish Mackerel	
	Gulf Sturgeon	
	Gulf Shrimp	

The Magnuson Fishery Conservation and Management Act (MFCMA) was passed in 1976. This legislation was patterned after much of the language and many of the recommendations found in *To Stem the Tide* and its proposed legislation. The MFCMA established regional fishery management councils that develop fishery management plans through cooperative state-federal-user group interaction. Since the MFCMA is a federal program and addresses those species predominantly harvested in the federal jurisdiction, species harvested predominantly within state territorial waters are not managed under that authority. Most of those species not only transcend interstate borders, but many are also harvested in significant amounts in federal waters (e.g., Spanish mackerel and, historically, red drum). In 1986 the US Congress passed into law the Interjurisdictional Fisheries Act (PL 99-659) which makes federal funds available to the States for fisheries work, and also provides funds to the three Interstate Marine Fisheries Commissions for the express purpose of developing interstate fishery management plans. The States, federal agencies, and user groups participate in the development of those plans, and it is the responsibility of the states to implement them. The two primary purposes of PL 99-659 are:

- "... (1) to promote and encourage State activities in support of the management of interjurisdictional fishery resources; and
- (2) to promote and encourage management of interjurisdictional fishery resources throughout their range."

Section 4.0 of this document addresses the various legislation that provides the NMFS with the authority to collect and manage marine recreational fisheries data. In like manner, the States of the Gulf of Mexico region have various legislative and regulatory authorities which direct the respective agencies responsible for management of marine fisheries to collect and manage marine recreational

fisheries data (Recreational Fisheries Information Network 1993). The recognition of the shared responsibility among the various state marine resource management agencies and the appropriate federal agencies, and the need for those agencies to cooperate toward shared, interjurisdictional planning and management, led to the adoption of the position statement in Section 4.0 of this document.

#### **5.5.5.3 Interstate Administration and Coordination**

The GSMFC was established in 1949, through enabling legislation of the States of Texas, Louisiana, Mississippi, Alabama, and Florida, and was sanctioned by the US Congress through passage of the Gulf States Marine Fisheries Compact (PL 81-66). The purpose of the GSMFC is stated as follows:

"... to promote the better utilization of the fisheries, marine, shell and anadromous, of the seaboard of the Gulf of Mexico, by development of a joint program for the promotion and protection of such fisheries and the prevention of the physical waste of the fisheries from any cause."

The enabling legislation passed by each of the compacting states provides the authority to the respective state marine resource management agencies to participate in the joint programs developed by the GSMFC, thus establishing the GSMFC as an instrument of its member states for the administration and coordination of said joint programs.

#### **5.5.5.4 Recreational Fisheries Information Network**

In January 1993, the Recreational Fisheries Information Network (RecFIN) was established in the Southeast Region of the US, including the states ranging from North Carolina to Texas, Puerto Rico, the Virgin Islands, the NMFS, the three southeastern federal fishery management councils, the US Fish and Wildlife Service, and the National Park Service. This was accomplished after many years of planning, and was led in large part by the GSMFC and through coordination with the Pacific States Marine Fisheries Commission, who had previously established a RecFIN program. The mission of RecFIN is:

"... to cooperatively collect, manage, and disseminate MRF statistical data and information for the conservation and management of fishery resources in the Southeast Region and to support the development of a national program."

As indicated in Section 2.0 of this document, the establishment of the RecFIN was the direct result of past activities of the states to examine mechanisms to improve recreational fishery data, and, ultimately, a proposal submitted by the GSMFC to the NMFS. As an ultimate goal of the RecFIN, the Gulf States have expressed their desire to participate as partners with the NMFS in conducting a state-federal cooperative program for the collection and management of marine recreational fisheries data. Through the Southeast RecFIN and coordinated and managed by the GSMFC, the States of Louisiana, Mississippi, Alabama, and Florida plan to conduct such a survey in cooperation with the NMFS, as authorized by their respective legislatures, and as stated in the 1991 position statement. The GSMFC will provide administration and coordination of those efforts as authorized

through the Congressional and State legislative authorities establishing the GSMFC as the appropriate organization to serve the needs of interstate/interjurisdictional marine fisheries management.

Further justification for using the GSMFC as the program administrator and coordinator is found in PL 102-567, which authorized 1991 appropriations for the National Oceanic and Atmospheric Administration. Under Section 404(c), the US Congress established the following:

"Exemption. Notwithstanding any other provision of law, financial assistance provided under a program for which the recipient of such financial assistance is specified by statute to be, or has customarily been, a state or an interstate fishery commission ... may be provided by the Secretary to that recipient on a sole-source basis."

The Interstate Marine Fisheries Commissions have customarily been involved in administering and coordinating programs for their member states. More specifically, they have historically administered and coordinated state-federal cooperative data programs, including the Southeast Area Monitoring and Assessment Program (SEAMAP), the Marine Fisheries Initiative (MARFIN), and the Pacific Fisheries Information Network (PacFIN) and Pacific RecFIN on the Pacific coast. This history clearly establishes the GSMFC as the most appropriate vehicle for administration and coordination of a Gulf of Mexico cooperative survey through the RecFIN.

#### 5.5.5.5 Management Structure

The RecFIN provides the umbrella organization to focus the implementation of the survey in the Gulf. The mission of RecFIN is to “cooperatively collect, manage, and disseminate marine recreational fisheries statistical data and information for the conservation and management of fishery resources in the Southeast Region and to support the development and operation of a national program.” RecFIN (Gulf Component) is a true State-Federal partnership seeking to implement and improve recreational fisheries data in the Gulf. As such, the implementation of the survey through RecFIN will receive continual scrutiny and improvements for both the federal and state partners.

#### 5.5.5.6 National Marine Fisheries Service

The NMFS is responsible for national program management of the MRFSS, coordination of the program among Regions, survey design, and Federal data management and archival. In addition, the NMFS has historically used the intercept survey data combined with the telephone survey data to estimate landings on a state, regional and national basis. This information is used for marine fisheries management at the regional level. The NMFS will monitor Cooperative Agreements used to implement the survey for compliance and will work with the States and GSMFC to improve the approaches and procedures with the goal of improving marine recreational fishery statistics for all fisheries management agencies.

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#### 5.5.5.7 Gulf States Marine Fisheries Commission

The GSMFC will provide two primary functions in the implementation of the survey through RecFIN -- project management and operations. Project management will address all administrative aspects of the project; whereas, operations will be concerned specifically with accomplishing the field portion of the survey.

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##### 5.5.5.7.1 Project Management

The GSMFC will execute a Cooperative Agreement with the NMFS to implement the MRFSS in the States of Louisiana, Mississippi, Alabama, and Florida (east and west coasts). The GSMFC will work closely with the NMFS Contracting Office to ensure the performance of the work as presented in the Cooperative Agreement.

The GSMFC will execute subcontracts with the States to perform the intercept portion of the MRFSS. Where States are unable to execute subcontracts, the GSMFC will employ the necessary field personnel and place them within a State to conduct the required sampling. The GSMFC may execute one or more subcontracts to develop data entry software and data validation-verification software for an anticipated 1999 implementation of the survey in the Gulf. The GSMFC may execute other subcontracts within the scope of the Cooperative Agreement as necessary to meet requirements of the agreement.

In addition, the GSMFC will provide the following services as program administrator for the survey in the Gulf of Mexico:

- contract management;
- coordination among States and with NMFS;
- conduct periodic meetings to evaluate progress, discuss issues and suggest improvements;
- provide support for the development of 'start-up' requirements for implementing the survey;
- periodic reports preparation and data delivery to NMFS;
- program direction for meeting State and regional needs;
- field and office forms, operations manuals, other documents as necessary.

##### 5.5.5.7.2 Operations

The GSMFC will provide the following services in support of operations associated with implementing the survey:

- staff training, initial and periodic,
- centralized quality management system,
- centralized site registry management and site selection allocations,
- centralized data entry and data management, including a rigorous validation-verification process,
- employment of staff for conducting interviews if States are unable to assume the responsibility immediately.

#### 5.5.5.8 States

The States of Louisiana, Mississippi, Alabama, and Florida (east and west coasts) will be responsible for implementing the survey within their respective states. The States will employ and/or reassign staff to collect required data according to accepted protocol. If a State is initially unable to employ staff for data collection, the State will supervise staff hired by the GSMFC to obtain the required data. In addition, the States will provide:

- State Supervisor to function as the internal project leader within the State;
- field supervisors to oversee the collection of all intercept data and ensure the quality of intercept data meets criteria developed for the program;
- field interviewers to collect intercept data ;
- completed data sheets and summaries to the GSMFC for key entry, and verify and correct, if necessary, initial data returned from GSMFC;
- suggested improvements to the survey to better meet the needs of the States and the NMFS.

#### 5.5.5.9 Personnel

The following personnel positions will be used to implement survey in the Gulf. It is the intent of the GSMFC and the States to hire the best qualified individuals for the positions to ensure the quality of the products for fisheries management. General responsibilities of each position are provided.

##### 5.5.5.9.1 Program Manager

###### ***Primary Responsibilities***

Guides the implementation of survey through RecFIN  
Executes cooperative agreement with the NMFS  
Executes subcontracts with States for work within State  
Prepares, reviews and monitors budget  
In concert with NMFS, sets direction for evolution of survey within RecFIN  
Coordinates all administrative activities  
Reports to RecFIN on status of survey

##### 5.5.5.9.2 Regional Survey Coordinator

###### ***Primary Responsibilities***

Provides technical guidance on project  
Reviews and revises operations manuals and procedures  
Oversees quality management system  
Performs site registry reviews and supervises updates  
Provides States with wave/mode specific site selections  
Reviews State data  
Ensures the integrity of data base, key entry system, verification and validation system  
Provides verified data to NMFS, GSMFC and States according to predetermined schedules  
Provides guidance on development of more efficient approaches to data entry and validation

Ensures maintenance of key entry system and verification and validation system  
Monitors key-entry, temporary data files and final data sets

#### **5.5.5.9.3**      State Supervisor

##### ***Primary Responsibilities***

Ensures administrative and operational requirements for survey within State are being met  
Provides guidance to improve State data needs through project enhancements

#### **5.5.5.9.4**      Sampling Supervisor

##### ***Primary Responsibilities***

Supervises collection of recreational fisheries data  
Supervises fishery technicians  
Conducts interviews  
Trains new State employees  
Provides assignments to staff  
Reviews data, summarizes data and provides data to key-entry  
Supervises verification of data at State level

#### **5.5.5.9.5**      Field Interviewer

##### ***Primary Responsibilities***

Performs interviews of recreational anglers  
Identifies fishes to species and collects biological, demographic and social information  
Records data on preprinted forms  
Summarizes data  
Reviews data  
Enters/edits data via computer entry/verification program  
Writes monthly summary reports  
Maintains trip logs  
Updates site status information

#### **5.5.5.9.6**      Data Entry Clerk

##### ***Primary Responsibilities***

Provides administrative support  
Provides key-entry of survey data

#### **5.5.6** Implementation

The GSMFC will implement the survey in the Gulf prior to the start of the 1999 sampling year. The GSMFC is confident that all mechanisms and protocols can be in place prior to the start of January 1999 sampling. Table 1 provides the tasks which must be accomplished during 1998.

<b>Table 1 Start-up tasks to be accomplished prior to the implementation of the RecFIN managed survey in the Gulf of Mexico.</b>	
1.	Execute Cooperative Agreement with NMFS
2.	Execute Subcontracts with States
3.	Develop Administrative Procedures
4.	Obtain and Update Site Registry
5.	Develop Assignment Draw Protocols and Program
6.	Develop Key-Entry and Data Verification System
7.	Review and Finalize Data Collection Instruments
8.	Develop Assignment Tracking System
9.	Finalize Operations Manual
10.	Develop Training Materials
11.	Hire Staff

## **6.0 Comprehensive Data Program Development**

As evidenced by Section 4.0 of this document, the GSMFC has coordinated and managed the SEAMAP, a cooperative state-federal fishery independent survey, since its inception in 1982. This has been a successful program that, under effective management by the GSMFC, has become an integral component in supplying data for fisheries management in the Gulf of Mexico region. Also note in that section the reference to the ComFIN. The GSMFC anticipates that, following successful implementation of this survey, the next step will be to fully implement the ComFIN. The full implementation of these data programs will satisfy the directives of the 1996 amendments to the Magnuson-Stevens Act and address the vessel registration and fisheries information system provisions included in that Act.

## **7.0 Program Costs**

As directed by the Conference Report (#105-405), this section contains a discussion of the costs associated with full implementation of the cooperative state-federal data collection and management program envisioned by the GSMFC. The Fisheries Information Network (FIN) is a regionally based program which is a component of an overall national, state-federal cooperative program. It is composed of two units; these are the ComFIN, which is a fishery dependent data program for

commercial fisheries, and the RecFIN(SE), which is a fishery dependent data program for recreational fisheries. Each of these units functions through three distinct program activities, including data collection, data management, and program management and coordination. Data collection and data management represent the operational aspects of the FIN, while program management and coordination represent the administrative aspects.

The FIN for the Gulf of Mexico, including the ComFIN and the RecFIN(SE), was patterned after highly successful programs implemented on the Pacific coast, including the Pacific Fisheries Information Network (PacFIN) and the Pacific Recreational Fisheries Information Network (Pacific RecFIN), which have been fully implemented for several years. These programs, coordinated and managed by the PSMFC, have the support and confidence of the commercial and recreational fishing industries, the management community, including the states, the PSMFC, the NMFS, and the federal fishery management councils.

While the ComFIN and RecFIN(SE) for the Gulf of Mexico have been very successful as coordinating and administrative bodies, they have not yet been fully implemented, as have the PacFIN and Pacific RecFIN. The organizational structures created under the ComFIN and RecFIN provide a state-federal cooperative oversight function to identify data needs and operations plans to satisfy those needs. Additionally, these organizational structures provide the means to resolve problems and issues regarding the collection and management of data, with the ultimate goal of providing data that are of sufficient quantity and quality to meet the needs of fishery management agencies in a timely manner. Full implementation of the FIN for the Gulf of Mexico will require the following developments:

- continued support of the ComFIN and RecFIN(SE) Committees and their organizational structures,
- program management and coordination conducted by the GSMFC,
- data collection conducted by the state resource management agencies, and
- data management, through state-of-the-art computer hardware and software, conducted as a joint, coordinated effort between the GSMFC and the NMFS.

Following an evaluation analysis of needs by all partners, excluding NMFS costs, it has been determined that the financial requirements to fully implement the FIN in the Gulf of Mexico will be \$7.0 million. This program is composed of the ComFIN, which will receive \$4.0 million, and the RecFIN Southeast, which will receive \$3.0 million. These funding levels include sampling activities, such as verification, observer, and bycatch modules, that are not currently being conducted. The identified funding should be provided to the GSMFC, who will administer, coordinate, manage, and operate the day to day functions of the program in cooperation with its member states and the NMFS. The GSMFC emphasizes that full implementation of the FIN for the Gulf of Mexico will require a phase-in period during which transition activities will be developed and implemented to facilitate full program implementation.

## 8.0 Conclusion

The GSMFC is currently implementing transition activities, as required by the Conference Report and outlined below, in anticipation of beginning a “new system” of collecting and managing recreational fisheries data for the Gulf of Mexico in January 1999. Transition activities include:

- computer hardware and software acquisition,
- acquiring data management and computer expertise for the GSMFC Office,
- providing for the States to acquire data collection personnel,

Included in these activities are provisions for training of all personnel of the GSMFC and States in preparation of conducting the survey beginning in January 1999.

The GSMFC’s long history of coordinating and managing state-federal cooperative programs makes it uniquely qualified to undertake such a significant program development activity, and would like to thank the US Congress for the opportunity to provide this report, which outlines a collective vision for the future of data collection and management in the Gulf of Mexico region.