

**ANNUAL REPORT**

**TO THE**

**TECHNICAL COORDINATING COMMITTEE**

**GULF STATES MARINE FISHERIES COMMISSION**

**OCTOBER 1, 2000 TO SEPTEMBER 30, 2001**

**SEAMAP Subcommittee**

**James G. Hanifen, Chairman**

**Jeffrey K. Rester**

**SEAMAP Coordinator**

**September 30, 2001**

**GSMFC No: 92**

# TABLE OF CONTENTS

INTRODUCTION .....	1
FY2001 SEAMAP RESOURCE SURVEYS .....	2
Fall Plankton Survey .....	2
Fall Shrimp/Groundfish Survey .....	2
Reeffish Survey .....	3
Spring Plankton Survey .....	3
Summer Shrimp/Groundfish Survey .....	4
Plankton and Environmental Data Surveys .....	5
INFORMATION SERVICES .....	5
SEAMAP Information System .....	5
Data Management .....	6
Real-time Data .....	7
SEAMAP Archiving Center .....	7
SEAMAP Invertebrate Plankton Archiving Center .....	8
PROGRAM MANAGEMENT .....	8
Planning .....	9
Information Dissemination .....	9
Proposed FY2002 Activities .....	10
FY2001 Financial Report .....	10
APPENDIX A .....	A-1
APPENDIX B .....	B-1

## INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/university program for collection, management and dissemination of fishery-independent data and information in the southeastern United States. The program presently consists of three operational components: SEAMAP-Gulf of Mexico, which began in 1981; SEAMAP-South Atlantic, implemented in 1983; and SEAMAP-Caribbean, formed in 1988.

Each SEAMAP component operates independently, planning and conducting surveys and information dissemination in accordance with administrative policies and guidelines of the National Marine Fisheries Service's Southeast Regional Office (SERO).

Federal programmatic funding for SEAMAP activities and administration was appropriated in Federal Fiscal Years 1985-2001 (October 1 through September 30). State and Gulf States Marine Fisheries Commission (GSMFC) funding allocations for FY1985-FY2001 were handled through State/Federal cooperative agreements, administered by SERO and the Southeast Fisheries Science Center (SEFSC), National Marine Fisheries Service (NMFS).

In FY2001, SEAMAP operations continued for the twentieth consecutive year. SEAMAP resource surveys included the Fall Plankton Survey, Fall Shrimp/Groundfish Survey, Spring Plankton Survey, Summer Shrimp/Groundfish Survey, Reefish Survey, and plankton and environmental data surveys. Other FY2001 activities included SEAMAP information services and program management.

This report is the eighteenth in a series of annual SEAMAP Subcommittee reports to the Technical Coordinating Committee (TCC) of the Gulf States Marine Fisheries Commission. It is intended to inform the TCC of SEAMAP-Gulf of Mexico activities and accomplishments during FY2001 and proposed SEAMAP activities for FY2002.

Appreciation is gratefully extended to the staff of the Gulf States Marine Fisheries Commission for their considerable assistance in the preparation of this document.

## **FY2001 SEAMAP RESOURCE SURVEYS**

In FY2001, collection of resource survey information continued for the twentieth consecutive year. The surveys conducted during the year address distinct regional needs and priorities and provide information concerning the marine resources in the Gulf of Mexico.

### **Fall Plankton Survey**

The first fall ichthyoplankton survey to assess abundance and distribution of king mackerel eggs and larvae occurred in August 1984. No sampling survey was conducted in 1985; however, expanded surveys in 1986-2000 covered Gulf waters from Florida Bay to Brownsville, Texas. The Fall Plankton cruise took place from September 5 - October 16, 2000. Florida, Alabama, NMFS, Mississippi, and Louisiana sampled 148 stations on the west Florida shelf and northern Gulf of Mexico. The objective of this survey is to collect ichthyoplankton samples with bongo and neuston gear for the purpose of estimating abundance and defining the distribution of eggs, larvae, and small juveniles of Gulf of Mexico fishes, particularly king and Spanish mackerel, lutjanids and sciaenids.

Plankton samples were taken with standard SEAMAP bongo and neuston samplers. The bongo sampler consisted of two conical 61-cm nets with .333-micron mesh. Tows were oblique, surface to near bottom (or 200 m) and back to surface. Wire angle was maintained at 45 degrees. Neuston samples were taken with .947-micron mesh nets on 1 x 2-meter frames towed at the surface for ten minutes. Right bongo and neuston samples were initially preserved in 10% buffered formalin and after 48 hours were transferred to 95% ethyl alcohol for final preservation. Left bongo samples were preserved via an ethanol/ethanol transfer to aid in preservation of larval otoliths. In addition, hydrographic data (surface chlorophylls, salinity, temperature and dissolved oxygen from surface, midwater and near bottom, and Forel-ule color) were collected at all stations.

Right bongo and neuston samples collected from SEAMAP stations will be transhipped to the Polish Sorting and Identification Center. Left bongo samples will be archived at the SEAMAP Invertebrate Plankton Archiving Center (SIPAC).

### **Fall Shrimp/Groundfish Survey**

The Fall Shrimp/Groundfish Survey was conducted from October 14 - December 1, 2000, from off Mobile, Alabama to the U.S.-Mexican border. Vessels sampled waters out to 60 fm, covering 373 trawl stations, in addition to plankton and environmental sampling.

Sampling design was similar to the Summer Shrimp/Groundfish Survey. The objectives of the survey were to:

- (1) sample the northern Gulf of Mexico to determine abundance and distribution of demersal organisms from inshore waters to 60 fm;

- (2) obtain length-frequency measurements for major finfish and shrimp species to determine population size structures;
- (3) collect environmental data to investigate potential relationships between abundance and distribution of organisms and environmental parameters; and
- (4) collect ichthyoplankton samples to determine relative abundance and distribution of eggs and larvae of commercially and recreationally important fish species.

During the survey, the NOAA Ship OREGON II sampled 232 stations from Mobile Bay, Alabama to Brownsville, Texas at depths out to 60 fm. The R/V VERRILL sampled 13 stations at the mouth and outside Mobile Bay. The R/V TOMMY MUNRO sampled 22 stations south of Mississippi Sound along a 30-minute grid. The R/V PELICAN sampled 26 stations in Louisiana territorial waters. Texas vessels sampled 80 stations within their territorial waters.

In addition, ichthyoplankton data were collected by NMFS, Mississippi, and Louisiana vessels at sample sites occurring nearest to half-degree intervals of latitude/longitude. A total of 55 stations was sampled with bongo and/or neuston nets, as encountered along cruise tracks. NMFS completed 46 ichthyoplankton stations, Mississippi completed 2 stations, and Louisiana completed 7 stations. The samples, except those taken by Louisiana, will be sorted by the Polish Sorting and Identification Center. Once sorted, the specimens and data will be archived at the SEAMAP Archiving Center.

### **Reeffish Survey**

The primary purpose of this survey is to assess relative abundance and compute population estimates of reef fishes found on natural reef fish habitat in the Gulf of Mexico. Two types of gear are used to deploy video cameras: 1) a single-funnel fish trap (2.13 m long by 0.76 m square) with the camera mounted at a height of 25 cm above the bottom of the trap; or 2) a 4 camera array with 4 cameras mounted orthogonal to each other at a height of 25 cm above the bottom. Both gears are baited with squid before deployment. The resultant video recordings (typically of one hour duration) are processed back at the laboratory where fishes are identified and counted independently by two tape readers. Final counts are entered into the SEAMAP reef fish database along with additional observations on habitat and fish activity.

Reeffish sampling took place on several occasions throughout the fiscal year. Alabama conducted sampling on October 17, October 19-20, October 30, and November 3, 2000. NMFS conducted sampling May 29 - June 6, 2001 onboard the NOAA Ship OREGON II . NMFS also conducted sampling June 12-23 onboard the NOAA Ship MCARTHUR.

### **Spring Plankton Survey**

The SEAMAP Spring Plankton Survey took place from April 17, 2001 through May 31, 2001. One hundred eighty-nine stations were sampled from the west Florida shelf to the Louisiana/Texas border. This was the twentieth year for the survey. The objectives of the survey were to collect

ichthyoplankton samples for estimates of the abundance and distribution of Atlantic bluefin tuna larvae and collect environmental data at all ichthyoplankton stations.

Plankton samples were taken with standard SEAMAP bongo and neuston samplers. The bongo sampler consisted of two conical 61-cm nets with .333-micron mesh. Tows were oblique, surface to near bottom (or 200 m) and back to surface. Wire angle was maintained at 45 degrees. Neuston samples were taken with .947-micron mesh nets on 1 x 2-meter frames towed at the surface for ten minutes. Right bongo and neuston samples were initially preserved in 10% buffered formalin and after 48 hours were transferred to 95% ethyl alcohol for final preservation. Left bongo samples were preserved via an ethanol/ethanol transfer to aid in preservation of larval otoliths. In addition, hydrographic data (surface chlorophylls, salinity, temperature and dissolved oxygen from surface, midwater and near bottom, and Forel-ule color) were collected at all stations.

Right bongo and neuston samples collected from SEAMAP stations will be transhipped to the Polish Sorting and Identification Center. Left bongo samples will be archived at the SEAMAP Invertebrate Plankton Archiving Center (SIPAC).

### **Summer Shrimp/Groundfish Survey**

During the spring of 2001, there was communication between the Shrimp/Groundfish Work Group members to examine the design for the Summer Shrimp/Groundfish Survey and determine the random station locations for each participant.

Objectives of the survey were to:

- (1) monitor size and distribution of penaeid shrimp during or prior to migration of brown shrimp from bays to the open Gulf;
- (2) aid in evaluating the "Texas Closure" management measure of the Gulf Council's Shrimp Fishery Management Plan; and
- (3) provide information on shrimp and groundfish stocks across the northern Gulf of Mexico from inshore waters to 50 fm.

The overall sampling strategy during the 2001 SEAMAP summer survey was to work from the eastern Gulf to the Texas/Mexico border, in order to sample during or prior to migration of brown shrimp from bays to the open Gulf area. The entire survey occurred from June 1 through July 24, 2001. This was the twentieth year for the survey. Efforts were affected by Tropical Storm Allison, the OREGON II breaking down, and the trawl wench breaking on the OREGON II .

During the survey, the NOAA Ship OREGON II and R/V TOMMY MUNRO sampled offshore and inshore Gulf waters with 40-ft trawls. Alabama's R/V VERRILL sampled offshore Alabama waters with 40-ft trawls, the R/V PELICAN sampled both Louisiana state waters and offshore waters with 40-ft trawls, and Texas vessels sampled Texas state waters and offshore waters with 20-ft trawls.

All vessels took environmental data, including temperature, salinity, oxygen, and chlorophyll at each station.

### **Plankton and Environmental Data Surveys**

As in previous years, plankton samples and environmental data were collected routinely during most SEAMAP trawling surveys. During the Summer Shrimp/Groundfish Survey, plankton tows were piggybacked on the NMFS and state vessels, sampling randomly generated trawl stations within the standard 30-minute SEAMAP grids.

Objectives of these piggybacked surveys were: 1) to collect plankton samples throughout the survey area; and 2) to collect associated hydrographic and environmental data at each plankton station. Additionally, environmental data (salinity, temperature, and oxygen from surface, mid-depth and bottom waters, and chlorophyll from surface and bottom waters) were collected during the shrimp/groundfish surveys. Wind direction, wind speed and wave height were taken at all trawl stations.

Samples from the right side of the bongo nets and neuston samples were shipped to the NMFS-Pascagoula Laboratory for shipment to the Polish Sorting and Identification Center, where they will be sorted to the family level (both ichthyoplankton and selected crustacean and molluscan species). The left bongo sample from each station is retained as a back-up in the event of damage or loss of the specimens and maintained at the SIPAC.

Chlorophyll samples were filtered at each station using GF/C filters. All filters were put in petri disks and wrapped in foil for onboard storage in the freezer. Chlorophyll analysis will be completed ashore. Preservation of plankton samples was in buffered formalin prior to transfer to ethanol.

## **INFORMATION SERVICES**

Information from the SEAMAP activities is provided to user groups through the program administration and three complementary systems: the SEAMAP Information System, SEAMAP Archiving Center and SIPAC. Products resulting from SEAMAP activities can be grouped into two major categories: data sets (including broadly, digital data and collected specimens) managed by the SEAMAP Information System, SEAMAP Archiving Center and SIPAC; and program information. Program information is discussed in the *PROGRAM MANAGEMENT* Section of this report.

### **SEAMAP Information System**

Biological and environmental data from all SEAMAP-Gulf surveys are included in the SEAMAP Information System, managed in conjunction with NMFS-SEFSC. Raw data are edited by the collecting agency and verified by the SEAMAP Data Manager prior to entry into the system. Data from all SEAMAP-Gulf surveys during 1982-2000 have been entered into the system and data from

2001 surveys are in the process of being verified, edited, and entered for storage and retrieval. Verified, non-confidential SEAMAP data are available conditionally to all requesters, although the highest priority is assigned to SEAMAP participants. A total of 252 SEAMAP data requests have been received. In most instances, requests were filled promptly. To date, 248 requests have been completed. During this reporting period, 13 requests were received.

Requested SEAMAP data were used for a multitude of purposes in 2001:

- @ Evaluating the abundance and size distribution of penaeid shrimp in federal and state waters to assist in determining opening and closing dates for commercial fisheries;
- @ Evaluating and plotting the size of the hypoxic (Dead Zone) area off of Louisiana;
- @ Assessing shrimp and groundfish abundance and distribution and their relationship to such environmental parameters as temperature, salinity, and dissolved oxygen;
- @ Identifying environmental parameters associated with concentrations of larval finfish;
- @ Compiling the 2001 SEAMAP Environmental and Biological Atlas; and
- @ Comparing catches of shrimp and groundfish captured by 40-ft versus 20-ft trawl nets.

## **Data Management**

The requirements report for an integrated data system, *Data Management System Design Study for Gulf and South Atlantic, 1987*, was completed in March 1987. The document identifies the high-level design specifications and recommended implementation plan for a module-based SEAMAP Data Management System (DMS). The design is based on information contained in the SEAMAP Gulf and South Atlantic DMS Requirements Document developed through a cooperative effort between NMFS and other SEAMAP participants. The document has five sections: 1) background and brief descriptions of current centralized and proposed distributed systems; 2) summary of the Requirements Survey; 3) overview of the system's architecture; 4) description of developmental modules constituting the DMS design; and 5) a modular implementation plan which includes costs and schedule.

Work was completed during FY1990 on the new distributed SEAMAP DMS. New modules completed include those for data entry, edit, upload, data query and download. All of the Gulf States are now equipped with the necessary computer hardware and software.

The system is decentralized, i.e., distributed. Thus, the SEAMAP users are able to locally, and directly, enter and retrieve data. Software for the system has been distributed to participants for trial runs of data input.



This system decreases the time necessary to enter and retrieve data and provides powerful and flexible local data analysis and display capabilities. Under the system, each SEAMAP site enters, verifies and edits their data, eliminating the mail-oriented loop necessary to enter/edit/verify data. Secondly, each site has the capability of locally accessing SEAMAP data, utilizing a user-friendly system. Local data retrieval allows the data to be accessed in a timely manner with a minimum amount of effort and programming skills.

Under the system, outside users (e.g., Minerals Management Service, U.S. Army Corps of Engineers, etc.) may request special data sets for research or study. The outside users submit the request to the SEAMAP Subcommittee through the SEAMAP-Gulf Coordinator for approval to proceed. Once the request is approved, the information is provided by the Data Manager and staff members through a priority-based, mail-oriented system. Also, SEAMAP participants may use the Special Request mechanism for data sets too large for economical downloading by telephone. These requests will be handled by a Central Operations staff in the same priority-based, mail-oriented manner as noted above.

### **Real-time Data**

A major function of the SEAMAP Information System is the processing of catch data from the Summer Shrimp/Groundfish Survey as near-real-time data. Data were transmitted three times weekly via cellular phone to the NMFS Mississippi Laboratories from the NOAA vessel, while the states' data were entered into the system weekly. Plots of station locations and catch rates of shrimp, squid and dominant finfish species were prepared and edited at the NMFS Mississippi Laboratories, and processed by GSMFC for weekly distribution to management agencies, fishermen, processors and researchers. SEAMAP real-time data plots were produced during the 2001 Summer Shrimp/Groundfish Survey. Seven weekly mailings were produced and distributed to approximately 240 interested individuals. These plots were also available through the SEAMAP home page. Management agencies also received comprehensive data listings showing penaeid shrimp length frequencies, sampling parameters and environmental conditions.

Data from the 2000 Fall Shrimp/Groundfish Survey were used to produce red snapper real-time plots. These plots described research trawl effort and catch rates for juvenile red snapper during the Survey. This was the third year the plots were produced and distributed to interested individuals.

### **SEAMAP Archiving Center**

Larval fish and fish egg samples sorted to the lowest taxa level possible by the Polish Sorting and Identification Center are returned to the SEAMAP Archiving Center for archiving and loan to researchers. For 2001, 34,155 samples were returned from the Polish Sorting and Identification Center. Data entry for sorted samples is being completed in the new Oracle format of the SEAMAP DMS. The 20,933 samples cataloged this year represent 18 orders, 126 families, 235 genera and 245 species.

The SEAMAP Archiving Center, which is managed in conjunction with Florida Fish and Wildlife Conservation Commission (FWC) in St. Petersburg, Florida, processes both specimen loans and requests for associated plankton survey environmental data. Fifty-six requests have been accommodated this year to ten different researchers at both the state and federal level.

### **SEAMAP Invertebrate Plankton Archiving Center**

The SIPAC is in its seventeenth year of operation. Sara LeCroy at the USM/COMS/GCRL currently serves as SIPAC curator. The overall mission of the SIPAC, to archive and manage the large collection of plankton samples acquired during SEAMAP cruises and to obtain specimens and/or data on selected invertebrate larval stages from those samples, continued during the year, but at a reduced level of activity. The SIPAC continues to provide unsorted plankton samples and data or specimens of larval invertebrates to qualified researchers upon request.

The graduate student previously employed by SIPAC graduated during the current year and will be replaced by another student or technician. This person will assist the curator with the cataloging of new samples, and the maintenance and curation of the collection. Activities during the year included the maintenance and curation of the existing collection, as well as the cataloging of 251 additional bongo net samples from year 2000 SEAMAP plankton cruises. The number of samples currently cataloged in the SIPAC collections is 7,609, with 146 samples currently on loan.

In an effort to keep the space required to house the SIPAC collection of unsorted plankton samples to a minimum, samples that have been in the collection for over 10 years and duplicate samples sorted and received from the Polish Sorting and Identification Center, are aliquoted to ¼ their original volume and placed into 100 ml vials. When possible, the remaining ¾ aliquots are donated to educational institutions for use as teaching materials. If the remaining sample must be discarded, sample jars are cleaned and returned to NMFS-Pascagoula for reuse. To date, approximately 2,264 samples collected from 1982 - 1988 have been aliquoted and prepared for long-term storage. Due to the recent addition of samples to the collection during the year, there is currently no space available for additional samples to be deposited into the SIPAC archives. However, once the ongoing aliquoting of the 1988-1990 SEAMAP samples has been completed, there should be sufficient space available for archiving additional samples.

During the next year, the SIPAC will continue to manage SEAMAP plankton collections, accession samples, and provide unsorted samples, sorted specimens and data from the collection to qualified researchers as requested. Efforts with sorted materials will concentrate on curation and analysis of current holdings and publication of distribution patterns of selected taxa by cruise.

## **PROGRAM MANAGEMENT**

The SEAMAP program is administered by the SEAMAP Subcommittee of the TCC through the SEAMAP Coordinator, who is under the technical direction of the Subcommittee Chairman and administrative supervision of the GSMFC's Executive Director.

Personnel associated with SEAMAP program management include the Coordinator, Data Manager, SEAMAP Archiving Center Curator, SIPAC Curator and the NMFS-Pascagoula Laboratory Director, serving as Program Monitor.

## **Planning**

Major SEAMAP-Gulf Subcommittee meetings were held in March 2000, in conjunction with the Annual Meetings of the GSMFC. All meetings included participation by various work group leaders, Coordinator, Data Manager, Program Monitor and other GSMFC staff. Representatives from the Gulf program also met with the South Atlantic and Caribbean representatives in August 2000 to discuss respective program needs and priorities for FY2001.

Coordination of program surveys and distribution of quick-report summaries of a Gulf-wide survey to management agencies and industry were major functions of SEAMAP management in 2000. Other important management activities included coordinating data provision and specimen loans, preparing publications and documents and assisting in the preparation of State/Federal cooperative agreements, including amendments to permit extension of activities previously not detailed in the agreements.

## **Information Dissemination**

The following documents were published and distributed during this reporting period:

- @ *2001 SEAMAP Marine Directory*. Inventories of marine agency contacts (State, Federal and university) concerned with fishery research in the Gulf of Mexico, and summaries of information provided by these organizations: target species, types of fishery-independent sampling gear and platforms, annual sampling effort, and other materials.
- @ *SEAMAP Subcommittee Report to the GSMFC Technical Coordinating Committee -October 1, 2000 to September 30, 2001*. A detailed summary of program accomplishments, emphasizing survey design, material collected, data dissemination, budget information, and future survey activities.
- @ *Annual Report of the SEAMAP Program - October 1, 1999 to September 30, 2000*. A summary of FY2000 activities and proposed FY2001 events for the SEAMAP-Gulf, South Atlantic, and Caribbean Programs.
- @ *Environmental and Biological Atlas of the Gulf of Mexico, 1999*. A compilation of information obtained from the 1999 SEAMAP survey including catch rates of shrimp and finfish, abundance and distribution of plankton in the Gulf of Mexico and environmental data from all surveys.

## **Proposed 2002 Activities**

Preliminary 2002 SEAMAP-Gulf budget allocations are shown in Table 3. Last year, total program allocations for all three SEAMAP components, Gulf, South Atlantic and Caribbean, was approximately \$1.4 million. At the August meeting, the SEAMAP components based their allocations on level funding for 2002. At this level, the share to be allocated for SEAMAP-Gulf activities (including GSMFC) will be \$612,403.

Proposed 2002 activities for all Gulf participants are shown in Table 4. The approved 2002 Operations Plan for SEAMAP-Gulf is contained in Appendix B.

## **FY2001 Financial Report**

Total allocations for FY2001 program administration were \$90,564. The GSMFC has arranged and paid for all expenses associated with personnel, meetings, travel and operating expenses to date. The remaining balance will be used to provide administration of the SEAMAP-Gulf program through December 31, 2001.

**TABLE 1.**

**SEAMAP REPRESENTATIVES FOR FY2001**

James G. Hanifen, Chairman  
Louisiana Department of Wildlife and Fisheries

Richard Waller, Vice Chairman  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Stevens Heath  
Alabama Department of Conservation and Natural Resources

Mark Leiby  
Florida Fish and Wildlife Conservation Commission  
Florida Marine Research Institute

Terry Cody  
Texas Parks and Wildlife Department

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

Richard Leard (non-voting)  
Gulf of Mexico Fishery Management Council

**TABLE 2.**

**SEAMAP WORK GROUP MEMBERS FOR FY2001**

ADULT FINFISH WORK GROUP

Terry Henwood, Leader  
National Marine Fisheries Service  
Pascagoula Laboratory

Billy Fuls  
Texas Parks and Wildlife Department

Rick Leard  
Gulf of Mexico Fishery Management  
Council

Mark Leiby  
Florida Fish and Wildlife Conservation  
Commission

James Warren  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

John Roussel  
Louisiana Department of Wildlife and  
Fisheries

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

Robert Shipp  
University of South Alabama

DATA COORDINATING WORK GROUP

Mark McDuff, Leader  
SEAMAP Data Manager  
National Marine Fisheries Service  
Pascagoula Laboratory

Butch Pellegrin  
National Marine Fisheries Service  
Pascagoula Laboratory  
Shrimp/Groundfish Work Group

Mike Murphy  
Florida Fish and Wildlife Conservation Commission  
Red Drum Work Group

Terry Henwood  
National Marine Fisheries Service  
Pascagoula Laboratory  
Adult Finfish Work Group

Richard Waller  
University of Southern Mississippi/College of Marine  
Sciences/Gulf Coast Research Laboratory  
Reef Fish Work Group

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory  
Plankton Work Group

Terry Romaine  
LA Department of Wildlife and Fisheries  
Environmental Data Work Group

Jim Hanifen  
LA Department of Wildlife and Fisheries  
SEAMAP Chairman

ENVIRONMENTAL DATA WORK GROUP

Terry Romaire, Leader  
Louisiana Department of Wildlife and Fisheries

Mark Van Hoose  
Alabama Department of Conservation and  
Natural Resources

Kim Williams  
Florida Fish and Wildlife Conservation  
Commission

Rob Ford  
National Marine Fisheries Service  
Pascagoula Laboratory

Richard Waller  
Gulf Coast Research Laboratory  
University of Southern Mississippi  
College of Marine Sciences

Thomas Leming  
National Marine Fisheries Service  
Pascagoula Laboratory

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

PLANKTON WORK GROUP

Joanne Lyczkowski-Shultz, Leader  
National Marine Fisheries Service  
Pascagoula Laboratory

Alonzo Hamilton  
National Marine Fisheries Service  
Pascagoula Laboratory

Sara LeCroy, Curator  
SEAMAP Invertebrate Plankton Archiving  
Center  
University of Southern Mississippi/College  
of Marine Sciences/Gulf Coast Research  
Laboratory

Ken Edds  
Louisiana Department of Wildlife and  
Fisheries

Mark Benefield  
Louisiana State University

Mark Leiby  
Florida Fish and Wildlife Conservation  
Commission

Harriet Perry  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

RED DRUM WORK GROUP

Mike Murphy, Leader

Florida Fish and Wildlife Conservation Commission

James Warren  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

Joseph Shepard  
Louisiana Department of Wildlife and  
Fisheries

Larry McEachron  
Texas Parks and Wildlife Department

Mark Van Hoose  
Alabama Department of Conservation and Natural Resources

REEF FISH WORK GROUP

Richard Waller, Leader

University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Billy Fuls  
Texas Parks and Wildlife Department

Mark Leiby  
Florida Fish and Wildlife Conservation  
Commission

Chris Gledhill  
National Marine Fisheries Service  
Pascagoula Laboratory

Jim Duffy  
Alabama Department of Conservation and  
Natural Resources

Richard Kasprzak  
Louisiana Department of Wildlife and  
Fisheries



SHRIMP/GROUNDFISH WORK GROUP

Butch Pellegrin, Leader  
National Marine Fisheries Service  
Pascagoula Laboratory

Billy Fuls  
Texas Parks and Wildlife Department

Ken Edds  
Louisiana Department of Wildlife and  
Fisheries

Bruce Comyns  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Leslie Hartman  
Alabama Department of Conservation and  
Natural Resources

Nate Sanders  
National Marine Fisheries Service  
Pascagoula Laboratory

**TABLE 3.**  
**PRELIMINARY 2002 PROGRAMMATIC BUDGET**

Alabama Department of Conservation and Natural Resources	68,000
Florida Fish and Wildlife Conservation Commission	141,340
Louisiana Department of Wildlife and Fisheries	135,200
University of Southern Mississippi/College of Marine Sciences/ Gulf Coast Research Laboratory	118,495
Texas Parks and Wildlife Department	58,804
Gulf States Marine Fisheries Commission	90,564
<b>TOTAL</b>	<b>\$612,403</b>

**TABLE 4.**  
**PROPOSED SEAMAP-GULF ACTIVITIES, 2002**

	Fall	Winter	Spring	Summer
<b>Resource Surveys:</b>				
Spring Plankton Survey			X	
Shrimp/Groundfish Surveys	X			X
Fall Plankton Survey	X			
Plankton & Environmental Data Surveys	X	X	X	X
<b>Information Operations:</b>				
Biological and Environmental Atlas				X
Marine Directory			X	
Joint Annual Report		X		
Data Input and Request Processing	X	X	X	X
Specimen Archiving and Loan	X	X	X	X
Real-time Data Summaries		X		X
<b>Program Administration:</b>	X	X	X	X

APPENDIX A

MINUTES FOR 2000 AND 2001 SEAMAP MEETINGS

SEAMAP Subcommittee Meeting  
MINUTES  
Clearwater, Florida  
Monday, October 16, 2000

Chairman Richard Waller called the meeting to order at 1:14 p.m. The following members and others were present:

**Members:**

Richard Waller, USM/IMS/GCRL, Ocean Springs, MS  
Mark Leiby, FWC/FMRI, St. Petersburg, FL  
Jim Hanifen, LDWF, Baton Rouge, LA  
Terry Cody, TPWD, Rockport, TX  
Steve Heath, ADCNR/MRD, Gulf Shores, AL  
Rick Leard, GMFMC, Tampa, FL

**Others:**

Tim MacDonald, FMRI, St. Petersburg, FL  
Scott Nichols, NMFS, Pascagoula, MS  
Cynthia Pierce, NMFS, St. Petersburg, FL  
Harriet Perry, USM/IMS/GCRL, Ocean Springs, MS  
Kirsten Larsen, USM/IMS/GCRL, Ocean Springs, MS

**Staff:**

Jeff Rester, GSMFC, Ocean Springs, MS  
Cheryl Noble, GSMFC, Ocean Springs, MS  
Dave Donaldson, GSMFC, Ocean Springs, MS

**Adoption of Agenda**

**J. Hanifen moved to adopt the agenda as submitted.** M. Leiby seconded, and it passed unanimously.

**Approval of Minutes**

**J. Hanifen moved to approve the August 3, 2000 minutes as submitted.** M. Leiby seconded, and it passed unanimously.

**Administrative Report**

J. Rester reported that a Subcommittee conference call was held September 11 to discuss SEAMAP funding priorities for the 2001-2005 management plan. He compiled a priority list and sent it to

Geoff White for inclusion in the management plan. He stated he did not include the specific state breakdowns but only the cost of each survey. He will send a copy of this list to the Subcommittee.

J. Rester stated that they missed the project proposal deadline for ESDIM which is a program under NOAA that rescues data that is in trouble of being lost. The letters of intent were due at the beginning of August, but Mark McDuff was not able to meet the deadline due to other responsibilities. He said they will try to submit a proposal next year. He said that at the last meeting he reported on another program (NESDES) that is interested in obtaining environmental data, and it should be in operation in December. After discussion of these two programs, the Subcommittee decided to ask Mark McDuff and Tom Leming to find out what type of projects NESDES will fund when they are up and running. If they are going to fund activities similar to what SEAMAP does, then the Environmental Data Work Group will draft a proposal for the Subcommittee to submit to them.

The Annual Report to NMFS was completed in August, and the TCC Report was completed and distributed.

The Fall Plankton Cruise took place in September and October and the Fall Shrimp/Groundfish Cruise is underway. J. Rester reminded the Subcommittee to please send in all cruise data as soon as possible.

### **Inshore Sampling in Florida**

T. MacDonald from FMRI gave a presentation on Florida's Fisheries-Independent Monitoring (FIM) program. He reviewed the program objectives, philosophy, history and sampling design. The slide presentation is attached (ATTACHMENT I).

### **Status of Fourth Quarter Funding**

C. Pierce reported that SEAMAP is currently funded through the end of October. She said that all of the states have cooperative agreements in for funding, however, the fourth quarter funding will be used from FY2001 funds which are on hold at NOAA grants until certification of funds are received. Because the FY2001 budget has not been signed by the President, there is a continuing resolution until the funds are received. She said she realizes this is a problem for some of the states because funding ends in October and they will be sampling in November and December. When received, the funding will be retroactive to cover this sampling. She said that if they do not get funded by next week, she will call the budget officer in the regional office.

She told the Subcommittee to wait until the end of November to submit next year's cooperative agreements because there is a possibility they may receive supplemental funding. She wants the states to have the correct figures before submitting any cooperative agreement. R. Waller asked that if the fourth quarter funds get certified out of FY 2001, will they be able to ask for the full amount next year. S. Nichols said they are trying to push for one year of funding.

## **Update on the SEAMAP Web Page**

J. Rester reported that the South Atlantic registered the name SEAMAP.ORG as their own. G. White said this web page will list all of the SEAMAP components' activities and instructions on how to access SEAMAP data. He said the Gulf will still house SEAMAP data. The history of SEAMAP, information on each component, and links to the other components will be on this web page.

J. Rester said beta testing has been done on the SEAMAP data base which can be accessed on the web. Several people from the Gulf and South Atlantic will be testing it further and they will make suggestions on what else needs to be done. R. Waller, D. Donaldson, and J. Rester will meet to determine what type of queries needs to be set up for the SEAMAP database. J. Rester said an instructional page will also be developed and hopefully Mike Sestak will come to the next meeting to give a demonstration.

## **SEAMAP Real-Time Data**

J. Rester asked the Subcommittee to send their information in as soon as possible after the fall shrimp/groundfish cruise so he can distribute the red snapper real time data. R. Leard stated that this real time data does not have a purpose. NMFS is considering adopting a recovery plan that would not change the current management structure for red snapper for another five years. If the plan is passed, GMFMC will not request another stock assessment until 2004 so this real time data is not needed. R. Waller stated that one of the reasons SEAMAP is distributing this data is to get visibility for the program. He said that after this year the Subcommittee will only post the information on the web and maybe do an email distribution. The Subcommittee asked J. Rester to inform the recipients in the mail out that this information will only be available via the website or email next year and following years.

R. Leard stated that in reference to the shrimp real time data, the Council is currently considering a permit program and in the past has considered limited access systems for shrimp. The scientific community feels the shrimp industry is fully utilized. He questioned why a fully utilized fishery would need information to be more efficient. He suggested using the resources for something else.

## **1998 Data Atlas Presentation**

J. Rester stated that at the last meeting, the Subcommittee asked him to put the 1998 atlas on CD-ROM in a PowerPoint or other type presentation. He then showed the Subcommittee the presentation and asked for comments. There is an instructional file on how to access the data and a slide show to accompany the text. He said he also put the atlas in PDF format on the web. He said another possibility would be to add video from the surveys to the CD-ROM for future atlases. He asked the Subcommittee to send him more pictures and to have final comments to him within the next three weeks.

## **Final Review of the 2001-2005 Management Plan**

J. Rester reported he sent all comments to Geoff White for incorporation in the management plan. He expects to receive the final draft within the next few weeks and will distribute it to the Subcommittee for final approval.

## **Election of Chairman**

**T. Cody moved to nominate J. Hanifen for Chairman and R. Waller for Vice Chairman and to be accepted and elected by acclamation.** M. Leiby seconded and it passed unanimously. The Subcommittee thanked R. Waller for his years of service.

## **Other Business**

R. Waller said that GCRL has purchased a new laptop computer that will be dedicated to the electronic measuring boards that have been ordered, but not yet received. He said they will have training sessions when the boards come in and hopefully be able to use them for the December cruises.

R. Waller said Ken Stuck will resign as curator of the SIPAC. He suggested asking Sarah Lacroix to replace him. **M. Leiby moved to accept S. Lacroix as curator of SIPAC.** J. Hanifen seconded and it passed unanimously. The Subcommittee asked J. Rester to send a letter to K. Stuck thanking him for his years of service and a letter to S. Lacroix offering her the position.

M. Leiby said J. Shultz is in the process of rewriting the manual for ichthyoplankton sampling. He said he had questions about some of the changes and would not feel comfortable accepting it without review. The Subcommittee will ask the Plankton Work Group to review the manual upon its completion and submit comments to the Subcommittee before accepting it.

J. Rester reminded T. Cody to find a speaker for the next meeting.

There being no further business, the meeting adjourned at 4:00 p.m.

SEAMAP Subcommittee Meeting  
MINUTES  
Brownsville, Texas  
Monday, March 12, 2001

### **Call to Order**

Chairman Jim Hanifen called the meeting to order at 1:32 p.m. The following members and others were present:

#### **Members:**

Richard Waller, USM/IMS/GCRL, Ocean Springs, MS  
Mark Leiby, FWC/FMRI, St. Petersburg, FL  
Jim Hanifen, LDWF, Baton Rouge, LA  
Terry Cody, TPWD, Rockport, TX  
Rick Leard, GMFMC, Tampa, FL  
Joanne Shultz, NMFS, Pascagoula, MS

#### **Others:**

William Ward, Commissioner, Tampa, FL  
Chris Dorsett, GRN, New Orleans, LA  
Frank Courtney, FWC/FMRI/SERF, Port Manatee, FL  
Randy Blankinship, TPWD, Brownsville, TX  
Paul Choucair, TPWD, Corpus Christi, TX  
Page Campbell, TPWD, Rockport, TX

#### **Staff:**

Larry Simpson, GSMFC, Ocean Springs, MS  
Jeff Rester, GSMFC, Ocean Springs, MS  
Cheryl Noble, GSMFC, Ocean Springs, MS  
Dave Donaldson, GSMFC, Ocean Springs, MS

### **Adoption of Agenda**

The agenda was adopted as submitted.

### **Approval of Minutes**

J. Shultz asked to change the spelling of Sara Le Croy's name. **R. Waller moved to approve the October 15, 2000 minutes with this one change. T. Cody seconded, and it passed unanimously.**

### **Administrative Report**



J. Rester reported the Fall/Shrimp Groundfish Cruise took place from October 14 - December 1, 2000. Data from this Survey were used to produce the latest red snapper real-time plots which were distributed in January 2001. This is the third year the plots were produced and distributed to interested individuals. The plots will no longer be mailed but they will be available via the Commission web page. In November, J. Rester attended a South Atlantic SEAMAP meeting where they discussed the new SEAMAP.org web page. He also demonstrated the SEAMAP database to the attendees. The Subcommittee met via conference calls in December, January, and February to discuss the additional \$200,000 for SEAMAP. An Environmental Data Work Group conference call was held in January to discuss the possibility of submitting a proposal to the National Environmental Satellite Data, and Information Service (NESDIS). This is a new group located at Stennis Space Center that is interested in environmental data. SEAMAP would like to provide CTD casts to NESDIS and NESDIS will then process the profiles for SEAMAP. The work group stated that if NESDIS is willing to fund equipment purchases, then CTDs and bench top fluorometers should be acquired. Larry Simpson met with Congressmen and Senators February 5-9 to discuss additional funding for SEAMAP. He stated that things went well. A follow up letter was sent to everyone that he visited stressing the need for additional SEAMAP funding. J. Rester asked the Subcommittee to ask their state director's to communicate this need to their delegations. Data from the 1999 cruises are being converted over into the old database so the Data Atlas can be run. There is a problem with the new database but the Atlas should be out for review in April and hopefully the 2000 data can be processed as well. Real time data was produced and distributed last summer and it will be done again this summer. J. Shultz stated a new person will be doing the real-time data. J. Rester reminded the Subcommittee to get all cruise data in as soon as possible.

### **Fishery Independent Sampling in Texas**

Page Campbell gave a presentation on Texas' fishery independent sampling programs. A copy of the presentation is attached (Attachment 1).

### **Status of the NMFS Reef Fish Survey**

J. Shultz distributed a summary (Attachment II) of the NMFS portion of the Reefish Survey and discussed each item. She stated that NMFS will attempt their portion of the Reefish Survey for the first time in three years. They will be sampling areas in the eastern and western Gulf. She stated that Chris Gledhill or Kevin Radenmacher should be able to give a more detailed presentation at the joint meeting in August.

### **SEAMAP Work Group Meeting Discussion**

J. Rester stated there is now money available for work group meetings and asked the Subcommittee which work groups should meet and what issues need to be addressed. The Subcommittee agreed the plankton data issues need to be solved and it is time to update the Operations Manual. J. Shultz stated NMFS will be hiring new personnel in the near future and this will help with the data issues.

**R. Waller moved that when resources become available, the cleaning up of the plankton files should be M. McDuff's highest priorities. M. Leiby seconded. After discussion, M. Leiby amended the motion to read to make the plankton files a very high priority as opposed to the highest since there may be other legitimate claims to that. R. Waller seconded and the amended motion passed unanimously.**

**M. Leiby moved that all of the work groups review the appropriate sections of the SEAMAP Operations Manual for updates and revisions and have changes and suggestions available to the Subcommittee for the October meeting. T. Cody seconded it and it passed unanimously.** J. Rester will contact the work groups and if they feel a meeting is necessary to accomplish this, he will make the arrangements.

The Subcommittee agreed that the biocode changes need to be completed soon. . **J Shultz moved that the biocode ad hoc group formed at the Savannah meeting should meet, preferably within six months, to resolve the biocode issues for the SEAMAP data set. They should report to the subcommittee at the October meeting. T. Cody seconded it and it passed unanimously.** M. Leiby, J. Shultz and others on the Subcommittee will contact the appropriate personnel to participate in the meeting.

#### **Review of the Plankton Section of the SEAMAP Manual**

J. Rester reported the updated plankton section of the SEAMAP Manual has been distributed for review and comments. J. Shultz asked the Subcommittee to distribute it to the people in the field for their comments also. The Subcommittee asked J. Rester to send a copy of this section to the plankton work group. All comments should be submitted by April 15<sup>th</sup>.

#### **Update on the SEAMAP Web Page**

J. Rester gave an update on accessing the SEAMAP database on the web. Currently, the database is accessible, but the Commission does not have enough software licenses to allow public access to the data. This will soon be resolved and interested individuals will then have access to the data. R. Waller stated he is still having problems with this and J. Rester said improvements have been made. He asked the Subcommittee to keep making suggestions on how accessing the database can be more user friendly.

#### **Environmental Data Sampling**

J. Resters stated that as he said in his Administrative Report, the Environmental Work Group wants guidance on what to put in the proposal to NESDIS. After discussion, the Subcommittee agreed to state they will provide CTD casts to NESDIS and NESDIS will then process the profiles for SEAMAP. Furthermore, if NESDIS is willing to fund equipment purchases so they may obtain more environmental data from SEAMAP, the proposal should ask for CTDs and bench top fluorometers.

## **Final Review of the 2001-2005 Management Plan**

J. Rester stated that the final draft of the 2001-2005 Management Plan is out for its final review and G. White wanted comments back by March 15<sup>th</sup>. The Subcommittee stated this is not enough time to review the plan and they will have their comments in by mid-April. The Plan should be finalized at the joint meeting for approval and then the Subcommittee will ask for approval from the TCC via mail ballot.

## **Other Business**

R. Waller said they did receive the electronic measuring boards and after quite a few problems, they are now working.

J. Rester said that he would like to add video clips to the next CD-ROM atlas and asked the states and NMFS to video some of their cruises. He said to tape all of the operations on board such as putting trawls over and pulling them in, measuring/counting the fish from the trawls, CTD casts, etc.

D. Donaldson said GSMFC has a copy of the SEAMAP data base on the server and the software that allows access to unlimited users has been received. It has not been loaded but once it is, they can provide the SEAMAP data to anyone. He said they should develop some canned reports and suggests that J. Rester, J. Hanifen, R. Waller and himself meet to develop some of these reports. He also stated they should advertise the fact that the SEAMAP data is now available on line via the various web pages and the GSMFC newsletter and any other newsletters.

M. Leiby said he feels a lot of time and money is spent on the frequent SEAMAP meetings and suggested some of the meetings be conference call or teleconferencing. The Subcommittee feels the meetings are important but some may be done that way. J. Hanifen asked J. Rester to look into the availability of video conferencing technology in and around the domiciles of the Subcommittee members and see what might can be arranged.

There being no further business, the meeting adjourned at 4:55 p.m.

## ATTACHMENT I

### Fishery Independent Sampling in Texas

Texas has grown dramatically over the past two decades. Metropolitan areas are expanding and reaching out to urban areas. One of the fastest growing areas is the coast of Texas.

The latest census estimates there are over 21 million Texans with about 6 million living along the coast. Projections are that by 2030 there will be 34 million people living in the state of Texas.

With the increase in population has come increasing numbers of fishermen and increasing demands on fisheries resources. Coastal Fisheries manages and regulates fisheries resources to ensure quality fisheries and prevent depletion of stocks.

An effective management program must be based on a thorough understanding of the life history, abundance, population dynamics, harvest and utilization of target species.

Our management program consists of two long-term monitoring programs and an enhancement program.

The Resource Monitoring Program monitors the abundance and species diversity of finfish and shellfish.

1. The Harvest Monitoring Program monitors commercial and recreational harvest of finfish and shellfish.
2. Bear in mind that we have been sampling the resources since the beginning of Parks & Wildlife; however the programs I will describe here are the routine monitoring programs that are currently in place,
3. The Enhancement Program seeks to enhance existing populations and fishing opportunities through research, culture and stocking hatchery-reared fishes.

Each of these activities are conducted in all Texas bay systems from Sabine Lake to the Lower Laguna Madre.

The Resource Monitoring Program utilizes 4 gears to provide trend data on species and size composition and abundance of fish and shellfish.

Random sampling regimes are used to insure unbiased estimates of trend information that represent bay systems as a whole. Each bay system, in this case the North end of the Upper Laguna Madre, has been sectioned into 1-minute latitude by 1-minute longitude grids, each grid has been further

subdivided into 144 "gridlets". With this grid system, each spot of shoreline and open bay water is a potential sample site depending on the gear used (i.e. each grid that touches a shore line is a potential gill net or bag seine sample site and each grid with open bay water >3' deep is a potential trawl sample site). All sample sites are selected at random before going to the field.

Our oyster dredge samples for spat small oysters and market oysters. Routine monitoring was established in 1984, we are currently collecting 1,080 samples/yr.

Otter trawls (shrimp trawls) have been used since 1982 to sample juvenile and subadult fish, shrimp and crabs in bay water greater than 3-feet deep. Trawls are 20 ft wide with 1-1/2 stretch mesh throughout the trawl. Twenty 10-minute trawl samples are conducted each month in each bay system, except in the Upper Laguna Madre and Lower Laguna Madre where only 10 samples are conducted each month. A total of 1,680 bay trawl samples are collected each year.

Gulf trawls have been collected off Texas since 1985. These too, sample juvenile and subadult finfish, shrimp and crabs. Sixteen trawls per month are collected off of 5 pass areas along the Texas coast. A total 960 samples are collected per year.

Bag seines have been used since 1977 to sample juvenile fish, shrimp and crabs along bay shore lines. These 60 ft. seines ( w-1/2" stretch mesh bag) are stretched perpendicular to the shore and are pulled parallel to the shore for 50 ft. Depending on the species, we use bag seine data as an index of abundance or recruitment. 2,040 randomly selected bag seine stations are sampled each year.

Gill nets have been used since 1975 to provide information on relative size and abundance of adult and subadult fish. Gill nets are 600 ft long and have four panels of 3, 4, 5, 6" webbing. The nets are fished overnight with one end placed on shore and the net deployed perpendicular to shore. Nets are retrieved the following morning. Forty-five gill net sets are conducted during two 10-week sampling period, one in the spring (April - June) and one the fall (September - November) for a total of 760 gill net samples/year.

Here are the total samples taken in a year on our routine resource monitoring program.

All organisms caught in the oyster dredges, trawls, bag seines and gill nets are sorted, identified to species, counted and measured.

Various environmental parameters such as dissolved oxygen, salinity, water temperature and meteorological conditions are collected with every biological sample enabling us to assess environment's condition and correlate the condition to the catch.

Recreational harvest and angler activities are estimated by interviewing private and party boat anglers at public boat access sites. Bay Harvest surveys have been conducted in Texas since 1974. Gulf access sites were added in 1983.

Surveys are conducted coastwide on weekend and weekdays. During 1997-98, we conducted over 1,000 surveys, where 11,000 angling interviews occurred, counting 727,000 anglers, expending 6,338,700 man-hours to harvest 2,294,000 fish.

Data gathered during these interviews provide information necessary to determine species composition of the recreational harvest, to estimate fishing pressure and to calculate the mean size of fish landed. Data collected during these interviews also enables us to assess the need for and effectiveness of salt water fishing regulations.

Commercial landings have been collected from seafood dealers since 1887. These data were collected sporadically until 1936 when the then Texas Game and Fish and Oyster Commission began collecting data on a regular basis. Finfish, oysters, crabs and shrimp landings and value are monitored through a mandatory self reporting system known as the Monthly Aquatic Products Report.

Since 1956, the National Marine Fisheries Service has collected landings data on shrimp through dealer reports and interviews. An informal data exchange between agencies allowed compilation of total landings. In 1985, NMFS and TPW entered into a formal agreement to exchange commercial fisheries statistics.

The Harvest and Resource monitoring programs have provided information on 335 fish and 204 invertebrate species.

In addition to the monitoring programs, I have described, Coastal Fisheries operates three fish hatcheries, one located at the CPL plant in Corpus Christi, one near Palacios and the third is located in Lake Jackson.

Current research at the Corpus Christi and Lake Jackson facilities focuses on spawning and raising red drum and spotted seatrout fingerling for stocking in Texas Bays as well as work on Atlantic croaker, Southern flounder and tarpon.

These programs allow us to make the management decisions that will ensure healthy populations for present as well as future generations of Texas fishermen.

We are currently holding the tarpon at Sea Center for spawning. The tank is about 20' in diameter, 5 ft deep and holds about 10,000 gallons and is completely self contained and is controlled completely in terms of environmental parameters such as temperature, light and salinity. The 6 tarpon (17-32 lbs.) have been held on an ambient cycle, but have recently been put on a shortened photo period or condensed cycle to facilitate the initiation of spawning.

The Science staff at Perry R. Bass is divided into two groups, the genetics staff and the life history staff.

Long-term studies of the genetics group focuses on three areas: 1) application of genetic markers for species identification, 2) utilization of genetic tags in the evaluation of stocking success and strategy and 3) examination of genetic structure (genetic subdivisions) prior to management intervention.

The purpose of the life history program at Perry R. Bass is to investigate sport fish population and life history parameters that cannot be adequately addressed using routine monitoring data. Much of their work has concentrated on age, growth and development of age-length keys which are used for population assessments. A number of aging studies have been conducted ranging from studies on red drum, black drum, spotted seatrout, red snapper and southern flounder to examination of otoliths for archaeological digs in coastal native American middens. Other areas receiving considerable attention involve reproductive biology and stocking program evaluation.

All the data that we collect is used to aid in the management of Texas' marine resources.

Some of the uses of our data include results of our coastwide bag seines for red drum. Catch rates are showing an increasing trend. Also, looking at 1989, you can see effects of the freeze.

Catch rates for red drum caught in gill nets show an increase. Catch rates for red drum >28" caught in gill nets are increasing. From our recreational harvest surveys fishing pressure is increasing and So are the numbers of red drum caught by sport boat fishermen. We can see that the mean weight of red drum caught by anglers has increased which is an effect of size regulations.

This shows how the regulations have changed what we see in our surveys.

In 1980 the size limit was 14"

In 1983 the size limit was 16-30"

In 1987 the size limit was 18-30"

In 1998 20 the size limit was -28 with 2 fish >28"

We are continuing to see new things in our data, For instance, from our surveys we can see how the increased pressure from guided trips have changed the percentage of spotted seatrout being retained by sport anglers in the upper Laguna Madre.

In addition to our routine monitoring, we do special projects like longlining funded by SEAMAP. These show some of the action from one of our sampling trips.

The large red drum were put into a holding tank, their bladders decompressed and then held so that we could send them to one of our hatcheries to add to the brood stock.

Another study was a bycatch device comparison study where we tested different devices in several different bay systems. We have since required that these devices be used in Texas waters.

We also are adding a few new boats to our aging fleet. The older boats are 44 feet in length but our new boats (at 53ft) will allow us more flexibility with studies such as bycatch and also give us better access to the Gulf.

And we will be initiating new studies such as Pilot Charterboat study in Texas that is being funded by FIN.



SEAMAP Subcommittee Meeting  
MINUTES  
St. Thomas, U.S. Virgin Islands  
Wednesday, August 8, 2001

### **Call to Order**

Chairman Jim Hanifen called the meeting to order at 8:55 a.m. The following members and others were present:

#### **Members:**

Richard Waller, USM/CMS/GCRL, Ocean Springs, MS  
Kim Williams (representing Mark Leiby), FWC/FMRI, St. Petersburg, FL  
Jim Hanifen, LDWF, Baton Rouge, LA  
Terry Cody, TPWD, Rockport, TX  
Joanne Lyczkowski-Shultz, NMFS, Pascagoula, MS  
Steve Heath, ADCNR/MRD, Gulf Shores, AL

#### **Others:**

Perry Thompson, NMFS, Pascagoula, MS

#### **Staff:**

Dave Donaldson, GSMFC, Ocean Springs, MS  
Jeff Rester, GSMFC, Ocean Springs, MS  
Cheryl Noble, GSMFC, Ocean Springs, MS

### **Adoption of Agenda**

Under Other Business, D. Donaldson will discuss coordination of fishery-independent activities; the Subcommittee will discuss the funding allocations document distributed by the South Atlantic; and J. Shultz will discuss her trip to Poland this summer. With these additions, the agenda was adopted.

### **Approval of Minutes**

**J. Shultz moved to approve the March 12, 2001 minutes as submitted. S. Heath seconded, and it passed unanimously.**

### **Administrative Report**

J. Rester said the status of some of the Subcommittee members has changed. R. Waller is no longer an official employee of GCRL and T. Cody will be retiring soon. T. Cody said there may not be an official replacement but a representative should be at future meetings when he officially retires. R.

Waller said that at this time and as long as funds are available, he will continue to be the Mississippi representative but if he is replaced it will probably be with someone from the Mississippi Department of Marine Resources.

The Environmental Data Work Group is still working on a proposal to the National Environmental Satellite, Data and Information Service (NESDIS). The work group has compiled CTD data for each state. The work group would like NESDIS to analyze past CTD casts and provide funds for CTD and benchtop fluorometer purchases for member states. When the RFP is announced, the work group will meet to finalize the proposal.

The SEAMAP Spring Plankton Survey took place from April 17 through May 31. One hundred eighty-nine stations were sampled from the west Florida shelf to the Louisiana/Texas border. This was the twentieth year for the survey.

The SEAMAP Summer Shrimp/Groundfish Survey took place from June 1 through July 24. This was the twentieth year for this survey, also. Efforts were affected by Tropical Storm Allison and the OREGON II breaking down twice. P. Thompson thanked J. Hanifen and D. Waller for the use of their vessels so they could continue with their surveys. P. Thompson also informed the Subcommittee that NMFS hopes to replace the OREGON II within 5-6 years. Real-time shrimp data were produced from this survey. Catches of shrimp and finfish were reported weekly from the survey and plots and catch rates were distributed to interested individuals and were available on the Commission web site.

The 1999 Environmental and Biological Atlas of the Gulf of Mexico has been completed and is at the printer.

The Management Plan was completed and is at the printer. J. Rester stated he had copies if the Subcommittee wants one before the printing is complete.

J. Rester took photos and videos from the Alabama and Louisiana Summer Shrimp/Groundfish Surveys to be used on the CD-ROM version of the Atlas. The CD-ROM features the Atlas as an Adobe Acrobat file with interactive photos and video clips and it also includes an Atlas PowerPoint presentation. He then demonstrated the draft Atlas CD-ROM to the Subcommittee, distributed copies, and asked for input to improve or add to the CD-ROM.

T. Cody asked P. Thompson the status of the reef fish cruise. P. Thompson said they started a reef fish cruise but it was not completed due to mechanical failures of the vessel.

### **Summary of 2001 Distribution of Shrimp Real-Time**

J. Rester said the real time data was distributed for the second year this summer. It was distributed to approximately 200 people via mail and it was also available on the internet. He said no negative comments were received from TSA or anyone else and several people called the week the OREGON II was down asking for the data.

T. Cody asked if the red snapper data will be distributed this fall and J. Rester said the summary will be available on the Internet (per the Subcommittee decision at the last meeting). J. Shultz suggested calling the data the end of season snapper report and the Subcommittee agreed. J. Rester will also make photos available with the summary.

### **Status of FY2002 Budget**

J. Shultz reported that SEAMAP should expect level funding at \$1.4 million for FY2002. J. Rester stated that everyone should have received the signed modified cooperative agreement for the 2001 increase but if they have not they will soon.

### **Activities and Budget Needs for FY2002**

- (1) Florida - K. Williams said Florida is asking for level funding with the increase which totals \$141,340.00. She also reported Florida will do one cruise in the fall and cooperate with the federal cruises. With the increase in funding for 2001, another person was hired full time at the archiving center.
- (2) Alabama - S. Heath said Alabama is asking for level funding, \$68,000, but they did not receive an increase in 2001 when the new funds came through. Due to cost of living increases, they may need additional funds in 2002. He said all of the 2000 reefish videos are in and the first read has been done. The 2000 data was formatted and sent to NMFS and one trip was completed in 2001. The Summer Groundfish cruise was done on June 18 & 25. The finfish and shrimp catches were low but there was low DO in the water off Alabama this year. The fall red drum and king mackerel cruise is scheduled for September 18, the Fall Groundfish cruise is set for October 15 and 18, and all of the inshore trawl sampling has been usual.
- (3) Mississippi - R. Waller stated that the Spring Plankton cruise was successful but the first leg of the trawl cruise was interrupted by Tropical Storm Allison two days before completion. The second and third leg off Louisiana was a little different. It was a short cruise but most stations were completed. Mississippi is asking for level funding with the extra \$24,000 for a total of \$118,495.
- (4) Louisiana - J. Hanifen said Louisiana will continue doing the three seasonal shrimp groundfish and plankton surveys and are asking for level funding which is \$135,200.
- (5) Texas - T. Cody reported Texas has accomplished everything planned. The fall cruise went well and all of the data are in the system. The summer cruise went well, all samples were collected and the data will be in the system soon. He said that depending on his replacement, the video and longlining cruises may be affected. It depends on his replacement's enthusiasm. Texas plans to continue all cruises for level funding which is \$58,804.

(6) GSMFC - J. Rester stated that the Commission received a \$10,000 increase this past year and it will cover increased overhead expenses and additional work group meetings. They plan to continue at level funding which is \$90,564.

(7) NMFS - S. Nichols said NMFS plans to continue the same work for level funding.

### **SEAMAP Video Conferencing**

J. Rester reported that at the last meeting the Subcommittee asked him to research video conferencing options. He discussed several options and after discussion, the Subcommittee decided it was beneficial for the Subcommittee to meet in person, but if someone is not able to attend a future meeting and the technology is available at the meeting hotel, this is an option for them to participate in the meeting.

### **Use of all SEAMAP Data in Stock Assessments**

J. Shultz reported that S. Nichols has edited all the state data and has made it available to the stock assessment team in Miami. The Subcommittee asked if the data is being used in stock assessments. J. Shultz said she does not know, but will ask S. Nichols to find out and let the Subcommittee know.

### **SEAMAP Database Public View**

J. Rester reported the SEAMAP database can now be accessed via the Commission website. He said there is a list a variables in the folders and asked the Subcommittee to review the variables and delete those that the average public user would not need or be interested in. The Subcommittee then reviewed the list and took off the variables that they felt should not be included in the public view. J. Rester will send the revised variable list to the Subcommittee for final review. The Subcommittee asked him to also develop a key and disclaimer page to state if the user needs more detailed information, to contact the GSMFC office.

### **Mirroring the SEAMAP Database**

J. Rester reported that they originally thought they would be able to mirror the database at GSMFC with the database at NMFS. Basically, whenever a change was made on the NMFS database it will automatically be updated on the GSMFC website. Due to configuration problems, this will be impossible. Mike Sestak from the GSMFC office has proposed to compare the databases monthly to insure both are updated. It will also be noted on the disclaimer page that this data is accurate as of a specific date.

### **SEAMAP Administration**

Cynthia Pierce will give her presentation at the Joint Meeting.

### **Preparation of Cooperative Agreements**

The Subcommittee will review the Operations Plan and the NMFS portion of the Cooperative Agreement and send changes to J. Rester before August 17, 2001. The changes will be incorporated and distributed to the Subcommittee.

### **Other Business**

D. Donaldson said he will be discussing SEAMAP coordinating fishery-independent data at the joint meeting, but wanted to inform the Subcommittee before the meeting. He said that in March of 1999 the Commission charged staff with developing coordinated fishery independent data activities. Obviously, SEAMAP is a major contributor to that, but there are other fishery independent data activities going on in the Gulf, South Atlantic and Caribbean. The FIN discussed this at their meeting and decided that goals and objectives need to be developed to do this. The problem with having SEAMAP do this is that SEAMAP is very specific to the activities that they are involved in. They do not coordinate with the other activities but there are ways to go about this. One would be to have SEAMAP expand the program and include these other activities. Another would be to have SEAMAP involved in the process of developing this overall guiding document for fishery-independent activities. There is travel funding available for planning these activities, but no funds are available for operational costs. He then asked the Subcommittee to think about this and be ready to discuss it at the joint meeting.

J. Rester directed the Subcommittee's attention to the funding allocation document developed by the South Atlantic that will be discussed at the joint meeting. He said the South Atlantic is leaning toward Option 4 and asked if the Subcommittee wants to decide which option they want or develop a new one. After discussion, the Subcommittee agreed that they are not interested in using formulas or set percentages to distribute future funding. They decided to listen to the presentation at the joint meeting and if nothing is resolved they will discuss it at the next Gulf meeting.

J. Shultz said she went to Poland in June for advisory committee meetings and all was well. She said the Polish Sorting Center is now able to send their data electronically.

There being no further business, the meeting adjourned at 11:55 a.m.

APPENDIX B  
2002 SEAMAP OPERATIONS PLAN

# SEAMAP-GULF OF MEXICO

## OPERATIONS PLAN

January 1, 2002 - December 31, 2002

### INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/University program for collection, management and dissemination of fishery-independent data and information in the southeastern United States. The program presently consists of three operational components, SEAMAP-Gulf of Mexico, which began in 1981, SEAMAP-South Atlantic, implemented in 1983, and SEAMAP-Caribbean, formed in 1988.

Each SEAMAP component operates independently, planning and conducting surveys and information dissemination in accordance with administrative policies and guidelines of the National Marine Fisheries Service's Southeast Regional Office.

Organizations directly involved in planning and managing the Gulf's program are the marine fishery management agencies of Florida, Alabama, Mississippi, Louisiana, and Texas, the National Marine Fisheries Service (NMFS), the Gulf of Mexico Fishery Management Council (GMFMC) and the Gulf States Marine Fisheries Commission (GSMFC) which administers the Gulf program. Sea Grant Directors are also asked to attend and participate in SEAMAP-Gulf Subcommittee meetings.

A five year *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005* has been developed for the SEAMAP outlining goals and objectives; management structure and responsibilities; data collection activities along with management and dissemination of the data; and financial and personnel resources necessary for successful operation of the program. This Management Plan, along with the *1981 SEAMAP Strategic Plan* and *SEAMAP Management Plan: 1996-2000* should be considered as charter documents defining and guiding operations of the Gulf program. An external review of SEAMAP-Gulf and South Atlantic was performed in 1987, and endorsement of specific recommendations was adopted by consensus of the joint SEAMAP-Gulf Subcommittee and SEAMAP-South Atlantic Committee. These recommendations, as implemented, will guide activities and operations of SEAMAP-Gulf, as well as the South Atlantic and Caribbean components.

Five major goals were outlined in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005* and remain as key missions:

- (1) Collect long-term standardized fishery-independent data consistent with established fisheries data systems on the condition of regional living marine resources and their environment;
- (2) Cooperatively plan and evaluate SEAMAP-sponsored activities;

- (3) Operate the SEAMAP Data Management System for efficient management and timely dissemination of fishery-independent data and information;
- (4) Identify and describe existing non-SEAMAP databases and activities that are of value in fishery-independent assessments of regional living marine resources; and
- (5) Coordinate and document SEAMAP activities, and disseminate programmatic information.

Each of these goals is implemented by several objectives requiring specific tasks and events, e.g. a Summer Shrimp/Groundfish Survey. By intent, some specific tasks may fulfill more than one objective. Each of the participants in the Gulf program receives a portion of the annual Congressional allocation to perform tasks associated with the goals. Participants also contribute significant in-kind support for activities.

The SEAMAP-Gulf and South Atlantic committees, meeting jointly in January 1988, accepted the Program Review recommendation to develop separate annual operations plans. This SEAMAP-Gulf Annual Operations Plan describes planned activities and events for the period January 1, 2002 through December 31, 2002. Detailed information on Gulf program objectives, activities, administrative procedures, data management protocols, information dissemination and funding requirements are found in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005*.

## **SURVEYS**

### Spring and Fall Plankton Surveys

The objectives of the spring and fall plankton surveys are to provide data on the distribution and abundance of eggs and larvae of commercial and recreational species such as bluefin tuna, mackerels, carangids, sciaenids and lutjanids. Stations are located in a systematic grid across the northern Gulf at increments of 30 minutes latitude/longitude.

Plankton samples will be taken with standard SEAMAP bongo and neuston samplers. The bongo sampler consists of two conical 61-cm (mouth opening) nets with 333 micron mesh. Tows are oblique, surface to within 5 m above the bottom (or 200 m maximum) and back to surface. Wire angle will be maintained at 45°. Neuston samples will be taken with 947 micron mesh nets on 1 x 2 meter frames towed at the surface for ten minutes. Most plankton samples are to be initially preserved in 10% buffered formalin and after 48 hours transferred to 95% ethyl alcohol for final preservation. Some samples are initially preserved in 95% ethanol for use in genetics and age/growth studies. Hydrographic data at all stations will include at a minimum chlorophyll or fluorescence, salinity, temperature and dissolved oxygen, and water color, using the Forel-ule test.

Right bongo samples and neuston samples collected in 2002 from SEAMAP stations will be transshipped by the NMFS Pascagoula Laboratory to the Polish Sorting and Identification Center



for sorting and identification, after which the larvae removed from those samples will be returned to the SEAMAP Archiving Center at Florida Marine Research Institute in St. Petersburg, Florida. Left bongo and neuston samples from previous surveys are currently archived at the SEAMAP Invertebrate Plankton Archiving Center (SIPAC) housed at the USM/CMS Gulf Coast Research Laboratory in Ocean Springs, Mississippi.

### Reef Fish Survey

The objectives of the survey are to:

- (1) assess relative abundance and compute population estimates of reef fishes using a 4-camera system and fish traps;
- (2) determine habitat using an echo sounder and video camera;
- (3) estimate length distributions of fishes using lasers; and
- (4) collect environmental data at each station.

The primary purpose of this survey is to assess the relative abundance and compute population estimates of reef fishes. Stations are 100 m<sup>2</sup> sites designated as “reef areas” that are selected by a stratified random sample procedure. The 4-camera system soaks on the bottom for 30 minutes. A chevron fish trap is employed to collect fish specimens and soaks for 1 hour.

### Summer Shrimp/Groundfish Survey

Objectives of this survey are to:

- (1) monitor size distribution of penaeid shrimp during or prior to migration of brown shrimp from bays to the open Gulf;
- (2) aid in evaluating the "Texas Closure" management measure of the GMFMC's Shrimp Fishery Management Plan;
- (3) provide information on shrimp and groundfish stocks across the northern Gulf of Mexico from inshore waters to 60 fm;
- (4) obtain length frequency measurements for major finfish, shrimp and other important invertebrate species to determine population size structures; and
- (5) collect ichthyoplankton samples to determine abundance and distribution of the larvae of commercial and recreationally important species.

The sampling strategy will include sites chosen randomly in three areas (east of the Mississippi River, west of the River to the Texas-Louisiana border and off Texas) stratified by depth and statistical area. Trawls will be towed perpendicular to the depth contours and cover a specified depth stratum at each station. Plankton samples will be taken along a ½ degree grid system.

### Fall Shrimp/Groundfish Survey

Objectives of this survey will be to:

- (1) sample the northern Gulf of Mexico to determine abundance and distribution of white shrimp and other demersal organisms from inshore waters to 60 fm;
- (2) obtain length frequency measurements for major finfish, shrimp and other important invertebrate species to determine population size structures;
- (3) collect environmental data to investigate potential relationships between abundance and distribution of organisms and environmental parameters; and
- (4) collect plankton samples to determine relative abundance and distribution of the larvae of commercial and recreationally important species.

Trawl sample stations and plankton sampling will be conducted as described for the Summer Shrimp/Groundfish Survey.

## **OPERATIONS**

The following activities and events by participant comprise the SEAMAP-Gulf of Mexico operations schedule for the period January 1, 2002 to December 31, 2002:

### Texas Parks and Wildlife Department

- (1) Summer Shrimp/Groundfish Survey: June, nearshore and offshore Texas waters
- (2) Fall Shrimp/Groundfish Survey: November, nearshore and offshore Texas waters
- (3) Reef Fish Survey: sampling in Texas waters
- (4) Adult Finfish Survey: March-May, nearshore Texas waters
- (5) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (6) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information

Louisiana Department of Wildlife and Fisheries

- (1) Summer Shrimp/Groundfish Survey: July, nearshore and offshore Louisiana waters
- (2) Fall Shrimp/Groundfish Survey: October-November, nearshore and offshore Louisiana waters
- (3) Fall Plankton Survey: September, nearshore and offshore Louisiana waters
- (4) Winter Seasonal Shrimp/Groundfish Survey: November-December, nearshore and offshore Louisiana waters
- (5) Plankton sampling in conjunction with trawl surveys
- (6) Plankton sample sorting and identification
- (7) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (8) Process sediment and chlorophyll samples
- (9) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information

University of Southern Mississippi/College of Marine Sciences/Gulf Coast Research Laboratory

- (1) Summer Shrimp/Groundfish Survey: June and July, Gulf waters
- (2) Fall Plankton Survey: September, nearshore and offshore Gulf waters
- (3) Fall Shrimp/Groundfish Survey: October, Gulf waters
- (4) Plankton sampling in conjunction with trawl surveys
- (5) SEAMAP Invertebrate Plankton Archiving Center operations
- (6) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (7) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information

Alabama Department of Conservation and Natural Resources

- (1) Summer Shrimp/Groundfish Survey: June and July, nearshore Gulf waters

- (2) Fall Plankton Survey: September, nearshore Gulf waters
- (3) Fall Shrimp/Groundfish Survey: October-November, nearshore Gulf waters
- (4) Reef Fish Survey: sampling in nearshore Alabama waters
- (5) Quarterly estuarine shrimp/groundfish sampling
- (6) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (7) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information

#### Florida Fish and Wildlife Conservation Commission

- (1) Spring Plankton Survey: May, nearshore/offshore Gulf waters off Florida
- (2) Fall Plankton Survey: September, nearshore/offshore Gulf waters
- (3) SEAMAP Archiving Center operations
- (4) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (5) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information

#### National Marine Fisheries Service, Southeast Fisheries Science Center

- (1) Reef Fish Survey: July-August, offshore Gulf waters
- (2) Spring Plankton Survey: April-May, offshore Gulf waters
- (3) Summer Shrimp/Groundfish Survey: June-July, offshore Gulf waters
- (4) Fall Plankton Survey: September-October, offshore Gulf waters
- (5) Fall Shrimp/Groundfish Survey: October-November, offshore Gulf waters
- (6) Plankton sampling in conjunction with trawl surveys
- (7) SEAMAP Information System implementation and operations

- (8) Processing and transshipment of SEAMAP plankton samples to the Polish Sorting and Identification Center
- (9) Real-time data processing
- (10) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee

#### Gulf of Mexico Fishery Management Council

- (1) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (2) Annual review of fisheries-independent data needs

#### Gulf States Marine Fisheries Commission

- (1) Coordination of meetings for Subcommittee and work groups
- (2) Provision of SEAMAP-Gulf Coordinator, clerical and office support
- (3) Publication and distribution of SEAMAP Environmental and Biological Atlas, SEAMAP Marine Directory, SEAMAP Subcommittee Report to the GSMFC Technical Coordinating Committee, Real-time data summaries, minutes of Subcommittee meetings and co-production of the SEAMAP Joint Annual Report
- (4) Attend SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee
- (5) Annual Operations Plan development

## **INFORMATION DISSEMINATION**

Data produced from SEAMAP-Gulf of Mexico surveys and studies will be entered into the SEAMAP Information System, in accordance with procedures and protocols stated in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005*. User policies and procedures are also defined in this document.

The SEAMAP Archiving Center and SIPAC have the responsibility of maintaining SEAMAP specimens and samples, processing specimen requests and ensuring that archiving and loans are carried out in accordance with guidelines and policies established by the SEAMAP Subcommittee. Specific duties and responsibilities of the curators are found in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan 2001-2005*.

Documents to be produced in the period covered by this Annual Operations Plan are:

- (1) SEAMAP Annual Report, in conjunction with South Atlantic and Caribbean;
- (2) SEAMAP Subcommittee Report to the GSMFC Technical Coordinating Committee;
- (3) SEAMAP Marine Directory;
- (4) Minutes of Subcommittee meetings;
- (5) SEAMAP Environmental and Biological Atlas;
- (6) Annual Operations Plan;
- (7) Real-time Data Summaries of the Summer Shrimp/Groundfish Survey and juvenile red snapper summary;
- (8) Maintain SEAMAP web page on Commission's website; and
- (9) Other pertinent documents deemed appropriate by the Subcommittee

## **ADMINISTRATION**

Program administration is achieved through coordination by the SEAMAP-Gulf Subcommittee and work groups, the SEAMAP Coordinator, and the Gulf States Marine Fisheries Commission. General responsibilities are described below.

### SEAMAP-Gulf of Mexico Subcommittee

The Subcommittee will convene for three regularly-scheduled meetings during 2002:

- (1) Spring meeting (in conjunction with the GSMFC Annual Spring Meeting): March;
- (2) Joint meeting (with SEAMAP-Caribbean & SEAMAP-South Atlantic): August; and
- (3) Fall meeting (in conjunction with the GSMFC Annual Fall Meeting): October.

Other meetings may be called at the discretion of the Chairman. Specific responsibilities of the Subcommittee and procedures of governance are described in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005*. Designated members for 2001 are:

Texas Parks and Wildlife Department:	Terry Cody
Louisiana Department of Wildlife and Fisheries:	James Hanifen
University of Southern Mississippi/College of Marine Sciences/Gulf Coast Research Laboratory:	Richard Waller
Alabama Department of Conservation & Natural Resources:	Stevens Heath
Florida Fish and Wildlife Conservation Commission:	Mark Leiby
National Marine Fisheries Service:	Joanne Lyczkowski-Shultz
Gulf of Mexico Fishery Management Council:	Richard Leard (non-voting)

### Work Groups

SEAMAP work groups are formed to assist in planning, coordinating and evaluating program activities. Members of work groups are invited to serve by the Subcommittee and do not have to be members of the Subcommittee. SEAMAP-Gulf work groups and membership for 2002 are:

ADULT FINFISH WORK GROUP

Terry Henwood, Leader  
National Marine Fisheries Service  
Pascagoula Laboratory

Billy Fuls  
Texas Parks and Wildlife Department

John Roussel  
Louisiana Department of Wildlife and Fisheries

Robert Shipp  
University of South Alabama

Richard Leard  
Gulf of Mexico Fishery Management Council

Mark Leiby  
Florida Fish and Wildlife Conservation  
Commission

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

James Warren  
University of Southern Mississippi  
College of Marine Sciences/GCRL

DATA COORDINATING WORK GROUP

Mark McDuff, Leader  
SEAMAP Data Manager  
National Marine Fisheries Service

Butch Pellegrin  
National Marine Fisheries Service  
Pascagoula Laboratory  
Shrimp/Groundfish Work Group

Terry Henwood  
National Marine Fisheries Service  
Pascagoula Laboratory  
Adult Finfish Work Group

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory  
Plankton Work Group

Terry Romaine  
Louisiana Department of Wildlife and Fisheries  
Environmental Data Work Group

Richard Waller  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory  
Chairman, SEAMAP Subcommittee/  
Reef Fish Work Group

Mike Murphy  
Florida Fish and Wildlife Conservation  
Commission  
Red Drum Work Group



ENVIRONMENTAL DATA WORK GROUP

Terry Romaine, Leader  
Louisiana Department of Wildlife and Fisheries

Thomas Leming  
National Marine Fisheries Service  
Pascagoula Laboratory

Rob Ford  
National Marine Fisheries Service  
Pascagoula Laboratory

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

Kim Williams  
Florida Fish and Wildlife Conservation  
Commission

Mark Van Hoose  
Alabama Department of Conservation and  
Natural Resources

Richard Waller  
Gulf Coast Research Laboratory  
University of Southern Mississippi  
College of Marine Sciences

PLANKTON WORK GROUP

Joanne Lyczkowski-Shultz, Leader  
National Marine Fisheries Service  
Pascagoula Laboratory

Alonzo Hamilton  
National Marine Fisheries Service  
Pascagoula Laboratory

Mark Benefield  
Louisiana State University

Ken Edds  
Louisiana Department of Wildlife and Fisheries

Sara LeCroy, Curator  
SEAMAP Invertebrate Plankton Archiving  
Center  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Mark Leiby  
Florida Fish and Wildlife Conservation  
Commission

Harriet Perry  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

RED DRUM WORK GROUP

Mike Murphy, Leader  
Florida Fish and Wildlife Conservation Commission

James Warren  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Joanne Lyczkowski-Shultz  
National Marine Fisheries Service  
Pascagoula Laboratory

Joseph Shepard  
Louisiana Department of Wildlife and Fisheries

Larry McEachron  
Texas Parks and Wildlife Department

Mark Van Hoose  
Alabama Department of Conservation and Natural  
Resources

REEF FISH WORK GROUP

Richard Waller, Leader  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

Billy Fuls  
Texas Parks and Wildlife Department

Mark Leiby  
Florida Fish and Wildlife Conservation  
Commission

Chris Gledhill  
National Marine Fisheries Service  
Pascagoula Laboratory

Jim Duffy  
Alabama Department of Conservation and  
Natural Resources

Richard Kasprzak  
Louisiana Department of Wildlife and Fisheries

SHRIMP/GROUNDFISH WORK GROUP

Butch Pellegrin, Leader  
National Marine Fisheries Service  
Pascagoula Laboratory

Billy Fuls  
Texas Parks and Wildlife Department

Leslie Hartman  
Alabama Department of Conservation and Natural  
Resources

Ken Edds  
Louisiana Department of Wildlife and Fisheries

Nate Sanders  
National Marine Fisheries Service  
Pascagoula Laboratory

Bruce Comyns  
University of Southern Mississippi  
College of Marine Sciences  
Gulf Coast Research Laboratory

SEAMAP work groups will meet as determined by work group leaders. Specific responsibilities of the work groups are described in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005*.

#### SEAMAP-Gulf Coordinator

The Coordinator's primary responsibility is to assist the Subcommittee in ensuring that the SEAMAP-Gulf component functions efficiently and satisfies user requirements. The *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005*, schedule of events, survey plans, and GSMFC directives constitute the basic documents by which the Coordinator monitors program status, coordinates Subcommittee meetings and operations, anticipates potential problems, and initiates corrective action. Specific responsibilities of the Coordinator are described in the *Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005*

#### Gulf States Marine Fisheries Commission

Planning and funds disbursement for authorized SEAMAP-Gulf administrative activities (travel meetings, publications, information dissemination, etc.) are administered by the Gulf States Marine Fisheries Commission under a NMFS/GSMFC Cooperative Agreement, and in accordance with this Annual Operations Plan, GSMFC policies, and Department of Commerce/National Oceanic and Atmospheric Administration policies and procedures.