

ANNUAL REPORT

TO THE

TECHNICAL COORDINATING COMMITTEE

GULF STATES MARINE FISHERIES COMMISSION

OCTOBER 1, 2006 TO SEPTEMBER 30, 2007

SEAMAP Subcommittee

James G. Hanifen, Chairman

Jeffrey K. Rester

SEAMAP Coordinator

October 9, 2007

GSMFC No: 151

TABLE OF CONTENTS

INTRODUCTION	1
FY2007 SEAMAP RESOURCE SURVEYS.....	1
Fall Shrimp/Groundfish Survey.....	1
Winter Plankton Survey.....	2
Spring Plankton Survey.....	2
Reeffish Survey	3
Summer Shrimp/Groundfish Survey.....	3
Fall Plankton Survey	4
Plankton and Environmental Data Surveys.....	4
INFORMATION SERVICES	5
SEAMAP Information System.....	5
Data Management.....	5
Real-time Data.....	6
SEAMAP Archiving Center.....	6
SEAMAP Invertebrate Plankton Archiving Center	7
PROGRAM MANAGEMENT	8
Planning	8
Information Dissemination.....	9
Proposed 2008 Activities.....	9
FY2007 Financial Report.....	9
TABLE 1. SEAMAP REPRESENTATIVES FOR FY2007	10
TABLE 2. SEAMAP WORK GROUP MEMBERS FOR FY2007	11
TABLE 3. PRELIMINARY 2008 PROGRAMMATIC BUDGET	15
TABLE 4. PROPOSED SEAMAP-GULF ACTIVITIES, 2008.....	15
APPENDIX A. 2006-2007 SEAMAP MINUTES	A-1
APPENDIX B. 2008 SEAMAP OPERATIONS PLAN.....	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 1985-2007 (October 1 through September 30). State and Gulf States Marine Fisheries Commission (GSMFC) funding allocations for FY1985-FY2007 were handled through State/Federal cooperative agreements, administered by SERO and the Southeast Fisheries Science Center (SEFSC), National Marine Fisheries Service (NMFS).

In FY2007, SEAMAP operations continued for the twenty-sixth consecutive year. SEAMAP resource surveys included the Fall Plankton Survey, Fall Shrimp/Groundfish Survey, Winter Plankton Survey, Spring Plankton Survey, Summer Shrimp/Groundfish Survey, Reefish Survey, and plankton and environmental data surveys. Other FY2007 activities included SEAMAP information services and program management.

This report is the twenty-fourth 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 FY2007 and proposed SEAMAP activities for FY2008.

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

FY2007 SEAMAP RESOURCE SURVEYS

The surveys conducted during the year address distinct regional needs and priorities and provide information concerning the marine resources in the Gulf of Mexico. Other activities included SEAMAP information services and program management.

Fall Shrimp/Groundfish Survey

The Fall Shrimp/Groundfish Survey was conducted from October 5 to December 15, 2006, from off Mobile, Alabama to the U.S.-Mexican border. Vessels sampled waters out to 60 fm, covering 344 trawl stations, in addition to plankton and environmental sampling. 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.

NMFS and Louisiana vessels collected ichthyoplankton data with bongo and/or neuston nets at sample sites occurring nearest to half-degree intervals of latitude/longitude. The Polish Sorting and Identification Center will sort the samples. Once sorted, the specimens and data will be archived at the SEAMAP Archiving Center.

Winter Plankton Survey

A new SEAMAP Winter Plankton Survey took place from March 17 to March 29, 2007. Ichthyoplankton samples were collected at 42 SEAMAP stations. The stations were east of Mobile Bay on the outer shelf. The objectives of the survey were to assess the occurrence, abundance and geographical distribution of the early life stages of winter spawning fishes from mid continental shelf to deep Gulf waters; measure the vertical distribution of fish larvae by sampling at discrete depths in the water column using a 1-meter Multiple Opening and Closing Net Environmental Sensing System (MOCNESS); sample the size fraction of fishes that are underrepresented in bongo and neuston samples using a juvenile (Methot) fish trawl; and measure extrusion of the smallest size fraction of fish larvae through the standard SEAMAP bongo net by collecting samples at selected locations with a bongo frame fitted with a 335 micron net on one side and a 202 micron mesh net on the other side.

Spring Plankton Survey

The SEAMAP Spring Plankton Survey took place from April 16 to May 29, 2007. One hundred twenty-five stations were sampled from the west Florida shelf to the Louisiana/Texas border. This was the twenty-sixth 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 were transshipped to the Polish Sorting and Identification Center. Left bongo samples were archived at the SEAMAP Invertebrate Plankton Archiving Center (SIPAC).

Reeffish Survey

The primary purpose of this survey was 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 were 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 were baited with squid before deployment. The resultant video recordings (typically of one hour duration) were processed back at the laboratory where fishes were identified and counted independently by two tape readers. Final counts were entered into the SEAMAP reef fish database along with additional observations on habitat and fish activity. NMFS conducted reeffish sampling from April 11 to May 10, 2007. Video cameras were deployed at 185 sites and the chevron trap at 27 sites.

Summer Shrimp/Groundfish Survey

The overall sampling strategy during the 2007 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. This was the twenty-sixth year for the survey. The entire survey occurred from June 4 to August 3, 2007 and 307 trawl stations were sampled during the survey. In addition, NMFS, Mississippi, and Louisiana vessels collected ichthyoplankton data.

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.

During the survey, the NOAA Ship OREGON II and R/V TOMMY MUNRO sampled offshore and 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, and oxygen at each station.

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 since then have covered Gulf waters from Florida Bay to Brownsville, Texas. The Fall Plankton cruise took place from August 28 through September 29, 2007. NMFS sampled 144 stations on the west Florida shelf and northern Gulf of Mexico. The objective of this survey was 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 transshipped to the Polish Sorting and Identification Center. Left bongo samples will be archived at the SEAMAP Invertebrate Plankton Archiving Center (SIPAC).

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) 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. 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 1982-2006 have been entered into the system and data from 2007 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.

Requested SEAMAP data were used for a multitude of purposes in 2007:

- 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;
- Assessing the potential impact of liquefied natural gas facilities on marine fish stocks;
- Compiling the 2007 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. 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 Data Manager and staff members provide the information 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. A Central Operations staff will handle these requests 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 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, edited, and processed by GSMFC for weekly distribution to management agencies, fishermen, processors and researchers. SEAMAP real-time data plots were produced during the 2007 Summer Shrimp/Groundfish Survey. Six weekly mailings were produced and distributed to approximately 200 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.

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 (SAC) for archiving and loan to

researchers. To date in 2007, 17,424 lots of samples were returned from the Polish Sorting and Identification Center. Data entry for 20,063 of the specimens has been completed in the SEAMAP Access data entry system. The specimens cataloged this year represent 18 orders, 126 families, 235 genera and 245 species.

The SEAMAP Archiving Center is managed in conjunction with Florida Fish and Wildlife Conservation Commission's (FWC) Fish and Wildlife Research Institute (FWRI) in St. Petersburg, Florida. The SAC processes specimen loans, requests for associated plankton survey data, and requests for data clarification. Seventy-six requests have been accommodated this year to eighteen different researchers at both the state and federal level.

SEAMAP Invertebrate Plankton Archiving Center

The SEAMAP Invertebrate Plankton Archiving Center (SIPAC) is in its twenty third year of operation. Sara LeCroy at the USM/GCRL Museum currently serves as the 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 the focus remained on the recovery of material damaged by Hurricane Katrina. The SIPAC continues to provide unsorted plankton samples and data or specimens of larval invertebrates to qualified researchers upon request.

On August 29, 2005, Hurricane Katrina struck the Mississippi Gulf coast, severely damaging the building at the Gulf Coast Research Laboratory in which the SIPAC samples were housed. The room containing these samples was breached by the storm surge and many samples were washed out into the surrounding area. Although some samples were destroyed, many were not, and to date approximately 4,675 samples (52%) have been recovered and are in the process of being re-archived.

An additional, as yet undetermined, number of vials containing partially or completely identified invertebrate plankton material have also been recovered and are currently being assessed. Prior to re-archiving, each of the recovered samples is carefully checked and the alcohol, internal and external labels replaced, if necessary. Available data from the labels are entered in an Excel spreadsheet as an ongoing record of sample recovery and as soon as the recovered samples are stabilized, data from samples known to be destroyed will also be entered. The recovered samples are currently housed within the GCRL Museum's Research Building Collection Room. At this time, the room that previously housed the samples has been completely cleared of debris and there are no remaining samples to be recovered in that area. The actual number of recovered samples mentioned above may change slightly in the future as some of the salvaged material may ultimately prove to be damaged beyond recovery when it is examined more closely.

In July 2007, additional NOAA SEAMAP funds were awarded to aid in the recovery of the SIPAC plankton collection over the next two years. As a result, a half-time technician has been hired specifically to work on rehabilitating and reorganizing the recovered plankton samples and integrating new samples from ongoing cruises into the collection. She is being assisted by a graduate student in the Department of Coastal Sciences for part of that time. Thus we are once again in a position to begin receiving backlogged material from past SEAMAP plankton cruises, as well as new material from current cruises.

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, as necessary. 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; of these, at least 116 were recovered post-Katrina. Because there is very little free space in the area currently being used to store the samples, part of the post-Katrina recovery process will include further aliquoting of older samples to reduce the space required for storage.

Activities during the past year were limited to the recovery, maintenance and curation of the existing collection; no new material was cataloged and there were no new loan requests. The number of samples cataloged in the SIPAC collections prior to Katrina was 9,010, with 4,335 still missing post-Katrina and 326 samples currently on loan. During the next year, the SIPAC will continue to manage SEAMAP plankton collections, accession samples and provide available data from the collection to qualified researchers as requested. A high priority will be placed on the rehabilitation, reorganization and documentation of the post-Katrina collection.

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 Executive Director.

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

Planning

Major SEAMAP-Gulf Subcommittee meetings were held in October 2006 and March 2007 in conjunction with the Annual Meeting of the GSMFC. All meetings included participation by various work group leaders, the Coordinator, the Data Manager, the Program Monitor and other GSMFC staff. Representatives from the Gulf program also met with the South Atlantic and Caribbean representatives in August 2007 to discuss respective program needs and priorities for FY2008.

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 2007. 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:

- *2007 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, 2005 to September 30, 2006*. 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, 2005 to September 30, 2006*. A summary of FY2006 activities and proposed FY2007 events for the SEAMAP-Gulf, South Atlantic, and Caribbean Programs.

Proposed 2008 Activities

Preliminary 2008 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 \$1.38 million. In FY2007, the Gulf SEAMAP component received a one-time supplement of \$1.89 million for fishery independent sampling in the Gulf of Mexico. At the August meeting, the SEAMAP components based their allocations for 2008 on level funding of \$1.38 million and \$5 million which was the funding amount in the President's and Senate's proposed FY2008 budget. At this level, the share to be allocated for SEAMAP-Gulf activities (including GSMFC) will be \$612,430 at the level funding amount and \$2.1 million at the \$5 million level.

Proposed 2008 activities for all Gulf participants are shown in Table 4. The approved 2008 Operations Plan for SEAMAP-Gulf is contained in Appendix B.

FY2007 Financial Report

Total allocations for FY2007 program administration were \$99,137 plus supplemental funding of \$132,763. 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, 2007.

TABLE 1.

SEAMAP REPRESENTATIVES FOR FY2007

James Hanifen, Chairman
Louisiana Department of Wildlife and Fisheries

Stevens Heath, Vice Chairman
Alabama Department of Conservation and Natural Resources

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

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

Mark Lingo
Texas Parks and Wildlife Department

Butch Pellegrin
National Marine Fisheries Service
Pascagoula Laboratory

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

TABLE 2.

SEAMAP WORK GROUP MEMBERS FOR FY2007

ADULT FINFISH WORK GROUP

Terry Henwood, Leader
National Marine Fisheries Service
Pascagoula Laboratory

Texas Parks and Wildlife Department	Rick Leard Gulf of Mexico Fishery Management Council
Mark Leiby Florida Fish and Wildlife Conservation Commission	Eric Hoffmayer 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

ENVIRONMENTAL DATA WORK GROUP

Terry Romaine, 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

Thomas Leming
National Marine Fisheries Service
Pascagoula Laboratory

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

Joanne Lyczkowski-Shultz
National Marine Fisheries Service
Pascagoula Laboratory

PLANKTON WORK GROUP

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

Ken Edds
Louisiana Department of Wildlife and
Fisheries

Leslie Hartman
Alabama Department of Conservation and
Natural Resources

Mark Leiby
Florida Fish and Wildlife Conservation
Commission

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

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

Mark Benefield
Louisiana State University

RED DRUM WORK GROUP

Mike Murphy, Leader

Florida Fish and Wildlife Conservation Commission

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

Joanne Lyczkowski-Shultz
National Marine Fisheries Service
Pascagoula Laboratory

Louisiana Department of Wildlife and
Fisheries

Mark Van Hoose
Alabama Department of Conservation and
Natural Resources

Mark Fisher
Texas Parks and Wildlife Department

REEF FISH WORK GROUP

Richard Waller, Leader

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

Texas Parks and Wildlife Department

Mark Leiby
Florida Fish and Wildlife Conservation
Commission

Chris Gledhill
National Marine Fisheries Service
Pascagoula Laboratory

John Mareska
Alabama Department of Conservation and
Natural Resources

Louisiana Department of Wildlife and
Fisheries

SHRIMP/GROUNDFISH WORK GROUP

Butch Pellegrin, Leader
National Marine Fisheries Service
Pascagoula Laboratory

Texas Parks and Wildlife Department

Michael Harden
Louisiana Department of Wildlife and
Fisheries

Read Hendon
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 2008 PROGRAMMATIC BUDGET

	FY2007 Funding	FY2007 Supplemental Funding
GSMFC	\$99,137	\$132,763
Alabama	\$79,600	\$154,052
Florida	\$121,340	\$402,079
Louisiana	\$135,200	\$638,519
Mississippi	\$118,349	\$376,490
Texas	\$58,804	\$184,422
Total	\$612,430	\$1,888,325

TABLE 4.

PROPOSED SEAMAP-GULF ACTIVITIES, 2008

	Fall	Winter	Spring	Summer
Resource Surveys:				
Winter Plankton Survey		X		
Spring Plankton Survey			X	
Shrimp/Groundfish Surveys	X	X		X
Fall Plankton Survey	X			
Plankton & Environmental Data Surveys	X	X	X	X
Inshore Shark Surveys	X		X	X
Florida Trawl Survey				X
Louisiana Inshore Survey	X	X	X	X
Information Operations:				
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
Program Administration:	X	X	X	X

APPENDIX A

OCTOBER 2006 - AUGUST 2007

SEAMAP MINUTES

APPENDIX B

2008 SEAMAP OPERATIONS PLAN