

Seventy-Second
Annual Report of the
Gulf States Marine
Fisheries Commission

For the Year 2021



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(Order of listing – administrator, legislator, Governor’s appointee)

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and Natural Resources
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Mobile, Alabama

Chris Nelson
Bon Secour Fisheries, Inc.
Bon Secour, Alabama

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Alice R. Wilhelm, Staff Assistant

GULF STATES MARINE FISHERIES COMMISSION

SEVENTY-SECOND ANNUAL REPORT (2021)

*to the
Congress of the United States
and to the
Governors and Legislators
of
Alabama, Florida, Louisiana, Mississippi, and Texas*

Presented in compliance with the terms of the Compact and State Enabling Acts creating such
Commission and Public Law 66-81st Congress assenting thereto.



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Preserving the Past ▪ Planning the Future ▪ A Cooperative Effort

ACKNOWLEDGEMENTS

In submitting this Seventy-Second Annual Report, we the Commissioners, wish to express our most sincere appreciation for the splendid cooperation of the members of Congress and the Governors and Legislators of our Compact states. We fully appreciate that success in the management of the public's fishery resources would not be possible without your valued assistance. This acknowledgement is also extended to the directors of the federal, state, and interstate agencies and their respective staff, and to representatives of all organizations and individuals who have contributed to the realization of the objectives of the Gulf States Marine Fisheries Commission.

Gulf States Marine Fisheries Commission Executive Committee,

Doug Boyd, Chairman
Scott Bannon, 1st Vice-Chairman
Jason Froeba, 2nd Vice-Chairman
Dan Ellinor, Immediate Past Chairman
Joe Spraggins, Chairman's Appointee
David Donaldson, Executive Director

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ACTIVE COMMITTEES

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Jason Froeba
Dan Ellinor
Joe Spraggins

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Patrick Carron, Chairman

State-Federal Fisheries Management Committee

Scott Bannon, Chairman

Menhaden Advisory Committee

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Technical Coordinating Committee

Darrin Topping, Chairman

TCC Artificial Reef Subcommittee

Mike McDonough, Chairman

TCC Crab Subcommittee

Ryan Gandy, Chairman

TCC Data Management Subcommittee

Steve Brown, Chairman

TCC Fisheries Information Network

Ken Brennan, Chairman

TCC SEAMAP Subcommittee

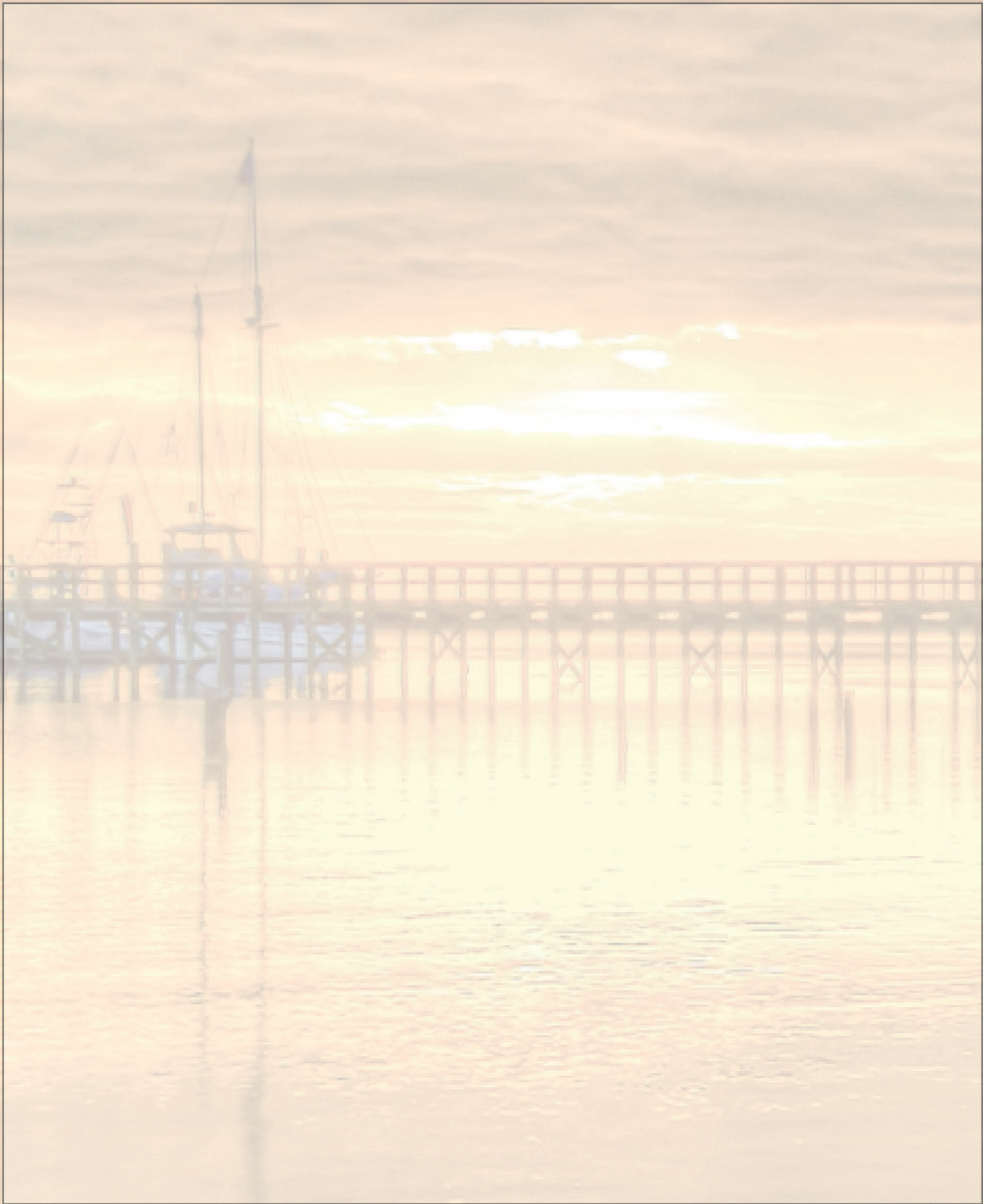
Ted Switzer, Chairman

TCC Molluscan Shellfish Subcommittee

Carolina Bourque, Chairman

COMMON ACRONYMS

ADCNR/MRD	Alabama Department of Conservation Natural Resources/Marine Resources Division
ANS	Aquatic Nuisance Species
ASMFC	Atlantic States Marine Fisheries Commission
ComFIN	Commercial Fisheries Information Network
CRFAP	Commercial/Recreational Fisheries Advisory Panel
DMS	Data Management Subcommittee
EDRP	Emergency Disaster Recovery Program
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
FDA	Food and Drug Administration
FDD	Fishery-Dependent Data
FID	Fishery-Independent Data
FIN	Fisheries Information Network
FMP	Fishery Management Plan
FWC	Florida Fish and Wildlife Conservation Commission
FWRI	Florida Fish and Wildlife Research Institute
GCRL	Gulf Coast Research Laboratory
GMFMC	Gulf of Mexico Fisheries Management Committee
GSMFC	Gulf States Marine Fisheries Commission
IFA	Interjurisdictional Fisheries Act
IJF	Interjurisdictional Fisheries Program
JEA	Joint Enforcement Agreement
LDWF	Louisiana Department of Wildlife and Fisheries
LEC	Law Enforcement Committee
MAC	Menhaden Advisory Committee
MDMR	Mississippi Department of Marine Resources
Mag-Stevens	Magnuson-Stevens Fisheries Management
MMPA	Marine Mammal Protection Act
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRFSS	Marine Recreational Fisheries Statistical Survey
MRIP	Marine Recreational Information Program
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
ODRP	Oil Disaster Recovery Program
PSMFC	Pacific States Marine Fisheries Commission
RecFIN	Recreational Fisheries Information Network
SAT	Stock Assessment Team
SEAMAP	Southeast Area Monitoring and Assessment Program
SERO	Southeast Regional Office (NOAA Fisheries)
SFFMC	State-Federal Fisheries Management Committee
SFRP	Sport Fish Restoration Administrative Program
TCC	Technical Coordinating Committee
TED	Turtle Exclusion Device
TPWD	Texas Parks and Wildlife Department
TTF	Technical Task Force
TTS	Texas Territorial Sea
USFWS	United States Fish and Wildlife Service



INTRODUCTION

The Gulf States Marine Fisheries Commission (Commission) is an organization of the five states whose coastal waters are the Gulf of Mexico. This Compact, authorized under Public Law 8166, was signed by the representatives of the Governors of the five Gulf States on July 16, 1949, at Mobile, Alabama.

THE PURPOSE

The Commission was formed specifically to provide interstate and state/federal coordination of interjurisdictional programs. The general purpose of the Commission is "...to promote the better utilization of the fisheries, marine, shell, and anadromous, of the seaboard of the Gulf of Mexico, by the development of a joint program for the promotion and protection of such fisheries and the prevention of the physical waste of the fisheries from any cause." While this statement of purpose is broad, it is clear that cooperative programs involving its member states to assist in managing coastal and marine resources constitute appropriate and legislatively authorized activities. Coordination and management of data collection programs for coastal and marine fisheries constitute appropriate programmatic activities to be conducted under the auspices of the Commission.

COMMISSIONERS

Fifteen Commissioners, three from each of the five Gulf States, work to set policy, approve the Commission's budget, and provide direction for Commission activities. Of these voting members, one-third are appointed by the state legislatures, one-third are private citizens with a knowledge of and interest in marine fisheries who are appointed by the states' governors, and the remaining third are state fishery resource agency directors. The offices of chairman, first vice-chairman, and second vice-chairman of the Commission are rotated annually among the states.

One of the most important functions of the Commission is to serve as a forum for the discussion of various problems and programs of marine management, industry, research, etc., and to develop a coordinated policy to address those issues for the betterment of the resource and all who are concerned. The annual meeting of the Commission is held each year during the third week in the month of October. The spring meeting is held each year during the third week in the month of March. Upon written request of a majority of the Commissioners of each state from three or more states, the Chairman shall call a special meeting of the Commission. The regular meetings are rotated among the states in order that the Commission may better familiarize themselves with the fisheries and coastal areas of the entire Gulf of Mexico.

STAFF

Located in Ocean Springs, Mississippi, the Commission staff administers Commission programs and participates in public forums and other councils, commissions, and committees, and inter-organizational efforts. When the Commission is joined by the Atlantic States and Pacific States Marine Fisheries Commissions on national fisheries issues, a 24-state voice is raised in unison to foster the needs of coastal fisheries.

EXECUTIVE DIRECTOR'S REPORT

Executive Director – David M. Donaldson

I was hopeful that I was going to report that activities had gotten back to normal, or at least the new normal for 2021 and we were past the COVID-19 pandemic. Unfortunately, that was not the case and we continued to struggle with the hardships and difficulties due to the pandemic. To a certain extent, my 2021 report is very similar to my 2020 report since we continued to adapt our approaches and methods on how to accomplish the goals and objectives of our various programs and projects. Many of us continued to work from home and conduct our business via email, phone and virtual meetings.

On the positive side, there were a few in-person and/or hybrid meetings held in 2021 and the Commission office was officially reopened in early 2021. These activities gave us a glimmer of hope that we were heading back to normal albeit the term “normal” has forever changed because of COVID-19. It gave us anticipation that we would be meeting in-person in the not-too-distant future and that there was light at the end of the tunnel. And while virtual meetings allow us to accomplish our identified tasks, there is no substitution for human interaction to help enable discussions and come up with solutions in a cooperative manner. As in the past and continuing into the future, the Commission will provide that forum to facilitate these discussions and hopefully lead to positive solutions to the issues and challenges we face in conservation of the marine resources in the Gulf of Mexico.

FISHERIES INFORMATION NETWORK (FIN)

Program Manager – Gregg Bray

In the 1980s and 1990s, state and federal fishery managers in the southeast region (the region) agreed that there was an urgent and compelling need for coordinated collection of comprehensive data on the region's marine commercial and recreational fisheries resources, and recommendations were made through a series of workshops and meetings. These recommendations of the Gulf States Marine Fisheries Commission (Commission) and the Atlantic States Marine Fisheries Commission (ASMFC) led to the development of the Fisheries Information Network (FIN). The purpose of this state-federal cooperative program is to collect, manage, and disseminate statistical data and information on the commercial and recreational fisheries of the region. The programs are the result of combined efforts of program partners which include states and territories of the region, the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFW), the National Park Service, the Gulf of Mexico and Caribbean Fishery Management Councils, and the Commission. The FIN Program Coordinator, Gregg Bray, is assisted by Ashley P. Lott.

In 2021, FIN continued the coordination of the MRIP survey in Mississippi, Alabama, and Florida for shore, for-hire, and private modes. The program provided for coordination of the survey, a field-intercept survey of shore, for-hire and private boat anglers to estimate angler catch using the existing MRIP methodology, and entry of the data. In 2021, almost 34,000 angler interviews were collected across all three states. In addition, the states conducted supplemental sampling of the intercept portion for the MRIP for charter boats in Mississippi, Alabama, and Florida (east and west coasts). In 2021 FIN in collaboration with Gulf States, NOAA Fisheries, and ACCSP implemented electronic tablets to collect MRIP APAIS data. This greatly increased the speed and accuracy which data are provided to FIN databases. The states also conducted weekly telephone calls to a 10% random sample of the Mississippi, Alabama, and Florida (east and west coasts) charter boat captains to obtain estimates of charter boat fishing effort. In 2000, NMFS adopted this method as the official methodology for estimation of charter boat effort. FIN also provided partial funding to help support implementation of the LA Creel Survey in Louisiana.

FIN obtained some additional NOAA Southeast Fishery Science Center funding mid-year in 2018 to support our biological sampling program. GulfFIN was able to support sampling for all of 2021 with this additional money. These data are essential to accurately assessing the status of commercial and recreational species. FIN provided funding for collection, processing and analysis of these data. The primary target species include Black Drum, Gag, Gray Snapper, Gray Triggerfish, Greater Amberjack, King Mackerel, Red Drum, Red Grouper, Red Snapper, Sheepshead, flounders (Gulf & Southern), Spotted Seatrout, Striped Mullet and Vermilion Snapper. The secondary target species include Spanish Mackerel, Scamp, Yellowtail Snapper, Cobia, Black Grouper, Black Sea Bass, Red Porgy, Snowy Grouper, Speckled Hind and Warsaw Grouper. In 2021, the states were

able to collect almost 11,000 age structures from important managed species in the Gulf of Mexico and East Florida.

FIN continued the coordination of commercial trip ticket programs in Texas, Louisiana, Mississippi, Alabama, and Florida. This task provided for collection of components for a commercial trip ticket system to census the commercial fisheries landings using the data elements and standards. In addition, FIN provided funding to contract for continued operation of electronic reporting for the trip ticket systems as well as reporting of data for the quota monitoring and IFQ programs. FIN also continued to support the development of a new electronic reporting tool from Bluefin Data called VESL. This is being developed to support web-based technology and allow for access through mobile applications like tablets and smartphones. This new reporting system is almost complete for Florida and Texas and work is ongoing to customize the application for the other states. For 2021, there were approximately 1,200 commercial dealers and processors in Florida, Alabama, Mississippi, Louisiana, and Texas who were utilizing the electronic reporting option.

FIN continued to support the development and implementation of the FIN Data Management System. This provided funding for continued work on developing more data modules for FIN. Responsibilities included further development of data module structures, routine loading of all five states' commercial catch and effort data, Gulf biological data, Gulf recreational data, and maintenance of the Data Management System. GulfFIN received two NOAA Fisheries FIS proposals to improve aspects of the Data Management System. Commission staff are working with the contractor and development is almost complete on new data entry and access products on the biological sampling database. Work is ongoing to implement record tracking systems on our trip ticket and biological sampling databases and to provide higher levels of quality control at the point of data entry or data loading.

FIN provided coordination for the sampling of catches, collection of catch reports from head boat personnel, and gathering of effort data on head boats which operate primarily in the Exclusive Economic Zone from ports along the coasts of Texas, Mississippi, Alabama and Florida. Unfortunately, the COVID-19 pandemic impacted the U.S. right at the point where headboat field sampling was starting to increase as headboat operators increased fishing activity. In July 2021, field work resumed as restrictions from the COVID-19 pandemic were lifted for field staff.

In 2021, FIN assisted in the administration of funds to support two additional research programs. GulfFIN assisted with a project to better validate commercial landings data from the Caribbean. Utilizing an independent contractor and extensive field work, a sampling design is being developed to better estimate total landings of several managed species in that region.

GulfFIN assisted with a cooperative project with Gulf state partners to possibly improve the quality and accuracy of commercial data by collecting and analyzing shrimp samples to validate, verify, and update conversion factors used to determine whole (live) weight of commercial landings from reported units (ex. Gutted to whole, bushels to pounds, units to pounds). This will allow for commercial landings to be reported accurately in common currency for use in stock assessment and management.

INTERJURISDICTIONAL FISHERIES PROGRAM (IJF)

Program Coordinator – Steven J. VanderKooy

Since the 1970s, the Commission has had the responsibility of administrative support and coordination of the Gulf State-Federal Fisheries Management Program. This program was designed to develop management plans for trans-boundary stocks that migrate freely through state and federal jurisdictions. In 1986, that program was replaced with the Interjurisdictional Fisheries Program. This program promotes interjurisdictional fisheries management among the Gulf states through the cooperative development of fishery management plans (FMPs). The states are requested to implement FMP recommendations through consistent regulations wherever possible and to address research and data needs with cooperative collection efforts. The Commission has completed FMPs for Gulf Menhaden, Flounder, Spotted Seatrout, Spanish Mackerel, Striped Bass, Blue Crab, Eastern Oyster, Black Drum, and Striped Mullet. The IJF Program Coordinator, Steven J. VanderKooy, is assisted by Debora K. McIntyre.

Continued pandemic issues through most of 2021 extended the expected completion date for the *Management Profile for Gulf of Mexico Red Drum* until 2022. The TTF met online several times during the year but finally met in person in December in Gulf Shores, Alabama. That meeting was a great opportunity for the members to get away from the office and not only review the work to date but also have time to do more writing. The draft was nearly complete despite the loss of several sections due to computer issues which required portions of the biology chapter to be recreated. It was expected that the TTF would hold one last meeting in early 2022 to wrap up the final draft and begin the final formatting to present to the TCC for review and approval later in the year. As the Red Drum Profile wraps up, the profile for Mangrove Snapper will begin.

The Crab Subcommittee only met once virtually in 2021. The state agencies presented a “Status of Current Terrapin Research by State” as the majority of their half-day meeting with an invited audience of two Diamondback Terrapin Work Groups from the region. The group had little to cover in October and deferred to wait to meet again until March 2022 hoping their meeting would then be in person.

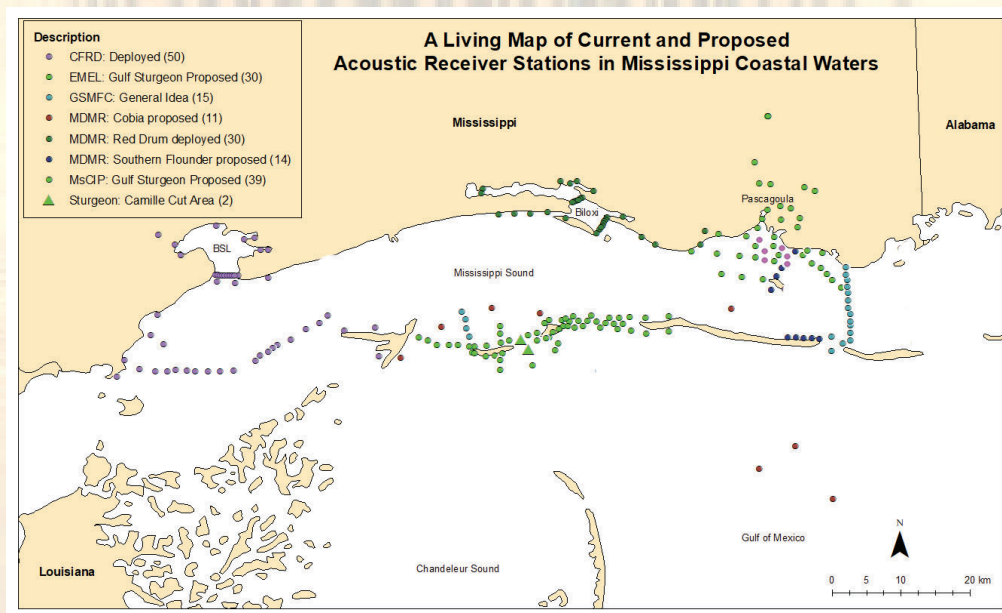
The Law Enforcement Committee (LEC) met virtually in 2021 in March and October. They discussed a number of items related to their continued work toward regional enforcement goals and objectives. The Joint LEC and Gulf Council’s Law Enforcement Technical Committee (LETC) approved the 2021-2024 Strategic Plan and the 2021-2022 Operations Plans but will discuss their utility and need in the future. If the documents are no longer helpful, they may elect to eliminate them. This issue will be on the agenda for the coming year.

The Menhaden Advisory Committee (MAC) met virtually in the spring and fall of 2021 with the biggest item being the update to the Gulf Menhaden Stock Assessment (GDAR03). Due to COVID-19, the entire process was conducted through webinars and conference calls beginning

in June and was completed in September in time for the MAC, TCC, and Commission to review and approve. The stock status for the updated assessment remained the same as the stock status from the benchmark assessment (SEDAR63). The assessment indicated that fishing mortality rates decreased during the 1990s and have remained at a low level through today. Additionally, spawning stock biomass (measured as fecundity) has increased steadily since the 1990s and remains at a high level. In summary, the update concluded that the Gulf of Mexico Gulf Menhaden stock is not experiencing overfishing and is not overfished.

The IJF supplemental funding provided to the five state agencies was renamed the State Research Funding (SuRF). Each state had been provided \$280,000 in 2021 to initiate otherwise unfunded research and data projects tied to IJ species in their respective waters. The projects included research and data collection for Blue Crab, Southern Flounder, and Eastern Oysters with three states adding acoustic tagging and expanding receiver arrays. The states will have additional funds available in 2022 to initiate new work or to continue existing work.

The IJF staff, in collaboration with USM/GCRL, continued to monitor the acoustic tags deployed in Tripletail during 2019 and 2020. Receivers that were deployed in the eastern Gulf experienced heavy damage and loss due to vessel traffic and storms so they were recovered and redeployed using U.S. Coast Guard navigation structures along the Pascagoula Ship Channel. Other receivers in the western Sound were recovered and redeployed by the Gulf Coast Research Lab also working with the U.S. Coast Guard. Several other receiver gates have been placed between the barrier islands using a combination of Commission, GCRL, and the Mississippi Department of Marine Resource receivers. The enclosing of Mississippi Sound is nearing completion, supporting a number of projects ongoing by the collaborators and neighboring states and universities. Species expected to be encountered in the array include Gulf Sturgeon, Tripletail, Southern Flounder, Cobia, Red Drum, and Spotted Seatrout. In addition, more acoustic tags were purchased by the Commission to deploy in Tripletail in 2021 and beyond.



AQUACULTURE

Program Coordinator – Steven J. VanderKooy

In 2016, the Commission began a cooperative effort with NOAA's Office of Aquaculture to develop and manage a small grants program to address the technical and regulatory opportunities and challenges of oyster farming in the Gulf region. In 2017, the program expanded to include additional regional funding opportunities. The NOAA Office of Aquaculture provided additional funds for a second small grant program to support commercial start-ups beyond our near-shore waters with production in mind, not necessarily research and development. The new 'pilot' program was coordinated with the sister Commissions on the Atlantic and Pacific. The Aquaculture Program is coordinated by Steven J. VanderKooy.

Oyster Consortia

In 2019, the Commission began funding the Gulf Oyster Consortium and 2021 was year two of the project referred to as SALT (Selection of Aquaculture Lines with improved Traits). The multi-partner project has three primary objectives: 1) to develop improved lines of Eastern Oyster with superior genetic values for traits critical to the industry based on regional genotypes; 2) to generate a repository of genetic resources from regional populations and selected lines adapted to environmental conditions to support ongoing and future restoration efforts and the industry; and 3) to transfer platforms in each state to disseminate genetically improved seeds to the industry. 2021 focused on growing out seeds deployed on the seven selected growout sites, preparing for harvest and evaluation of the F1 generation, preparing experiments to evaluate breeding values for *Perkinsus marinus* resistance and thermal tolerance, and continuing development of the genotyping platform. Samples needed for genotyping on the 600K SNP array developed in collaboration with the SASMFC were assembled and extracted. Tissue samples were sent to USM and DNA was isolated and shipped for assay to ThermoFisher. The data will be used to design a medium-density assay platform to be used for estimation of genomic breeding values in future generations of the program.

The main problem during the period was Hurricane Ida and the turbidity event which affected oysters kept for experiments at USM. The thermal tolerance challenge could be maintained but the *Perkinsus marinus* challenge needed to be rescheduled. Impacts of the storm on oysters grown out on test sites at LSU's Grand Isle, Louisiana and Deer Island in Mississippi were minimal.

Aquaculture Pilot Projects

The NOAA Office of Aquaculture continued to provide funding through the Commission to support commercial start-ups with production in mind and demonstration projects intent on moving forward with offshore aquaculture. No new projects were awarded in 2020 considering all the delays on existing projects due to COVID-19 so 2020 and 2021 funds were combined and a

new RFP was released in late 2021 to fund \$1.45M in awards to begin in 2022 and included work on Atlantic Croaker, oysters, Tripletail, and seaweed as well as education and outreach related to integrated multi-trophic aquaculture (IMTAs) and aquaculture broadly.

As of December 2021, the majority of previously funded pilots had been completed with the exception of the USM Red Drum Broodstock project and the College of the Florida Key's grouper project. Both encountered additional COVID-19 and general setbacks and were provided some supplemental funds from the other pilots that had left money unexpended. Both projects must be completed in early 2022.

Integrated Multi-Trophic Aquaculture (IMTA)

In 2021, Congress authorized and provided funds to the NOAA Office of Aquaculture for a demonstration project in the Gulf to explore the utility of IMTA in the region. An RFP was released in the fall of 2021 to support a multi-year demonstration project culturing native species of finfish, bivalve mollusks, and macroalgae. The Commission will award the \$1,800,000 grant sometime in early 2022. The proposed projects should grow and harvest multiple seafood species, train a workforce, and provide outreach to the public while testing the IMTA concept in the Gulf of Mexico using local species.



SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM

Program Coordinator – Jeffrey K. Rester

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a state/federal/university program for the collection, management, and dissemination of fishery-independent data and information in the southeastern United States. The overall program consists of three operational components: SEAMAP-Gulf of Mexico (began in 1981); SEAMAP-South Atlantic (implemented in 1983); and SEAMAP-Caribbean (formed in 1988). The SEAMAP-Gulf component is coordinated through the Commission. SEAMAP resource surveys include the Fall Shrimp/Groundfish Survey, Spring Plankton Survey, Reef Fish Survey, Summer Shrimp/Groundfish Survey, Fall Plankton Survey, and plankton and environmental surveys. Publications of the SEAMAP program include environmental and biological atlases of the Gulf of Mexico for each year from 1983 through present. The SEAMAP Program Coordinator, Jeffrey K. Rester, is assisted by Ashley P. Lott.

In 2021, SEAMAP continued fishery-independent sampling for the 40th consecutive year. SEAMAP resource surveys in 2021 included the Spring Plankton Survey, Summer Shrimp/Groundfish Survey, Reef Fish Survey, Bottom Longline Survey, Vertical Line Survey, Fall Plankton Survey, and Fall Shrimp/Groundfish Survey.

During 2021, SEAMAP worked to improve the identification of invertebrates captured during sampling activities. SEAMAP held several invertebrate identification workshops online in 2021 to help field staff in the identification of various invertebrates including commercial shrimp, non-commercial shrimp, lobsters and lobster-like shrimp. The workshops were part of a larger effort to enact quality controls at all stages of SEAMAP sampling.

Since SEAMAP did not conduct their normal surveys in 2020, the Commission, with help from the Fish and Wildlife Foundation of Florida, Inc., was able to acquire acoustic cameras and hardware for reef fish sampling. The Commission purchased two Kongsberg Flexview HF Sonar cameras, underwater housings, and peripherals for FWRI to use during SEAMAP reef fish sampling. FWRI will use the cameras to develop techniques and protocols for reef fish sampling that SEAMAP can use in the western Gulf of Mexico. The equipment will be inventoried and managed by the FWRI's Fisheries Independent Monitoring program.

SEAMAP continued to discuss the future of the Vertical Line Survey. The SEDAR data workshop for Red Snapper will be held in early May 2022. If data from the Vertical Line Survey are not used in the next Red Snapper stock assessment, the survey will be discontinued. The Subcommittee has discussed several options for how SEAMAP partners can contribute to existing or new surveys. Possibilities include more partners participating in the Reef Fish Survey through video sampling, acoustic sampling, or habitat mapping.

SEAMAP Joint Meeting

The SEAMAP Subcommittee held a Subcommittee meeting on July 26 and also participated in the SEAMAP Joint Annual Meeting with the South Atlantic and Caribbean SEAMAP components. At the Subcommittee meeting, the group discussed FY2022 budget needs, 2021 survey activities, the trawling and bottom longline operations manuals, a possible habitat mapping survey cruise, and potential options for SEAMAP if the Subcommittee decides to discontinue the Vertical Line Survey. Discontinuing the Vertical Line Survey has been an ongoing discussion for the past few months.

At the joint SEAMAP meeting with the South Atlantic and Caribbean components, the Subcommittee discussed the SEAMAP budget and budget needs for all three components and NMFS. SEAMAP has been level funded for the past seven years, so everyone based their FY2022 budget on level funding of \$5.125M.

In 2021, SEAMAP data were submitted for use in SEDAR stock assessments for Scamp, Greater Amberjack, and Gag, as well as for us in the process of identifying stock boundaries for Red Snapper.

The Commission handled the data management responsibilities for SEAMAP in the Gulf of Mexico. All data collected during 2021 were uploaded to the appropriate SEAMAP database and made available to the public via the Commission's web site. SEAMAP data were used for a variety of purposes during 2021. These include:

- 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 the Deepwater Horizon oil spill on marine fish stocks; and
- Compiling the 2021 SEAMAP Environmental and Biological Atlas.

SPORT FISH RESTORATION ADMINISTRATIVE PROGRAM (SFRP)

Program Coordinator – James R. Ballard

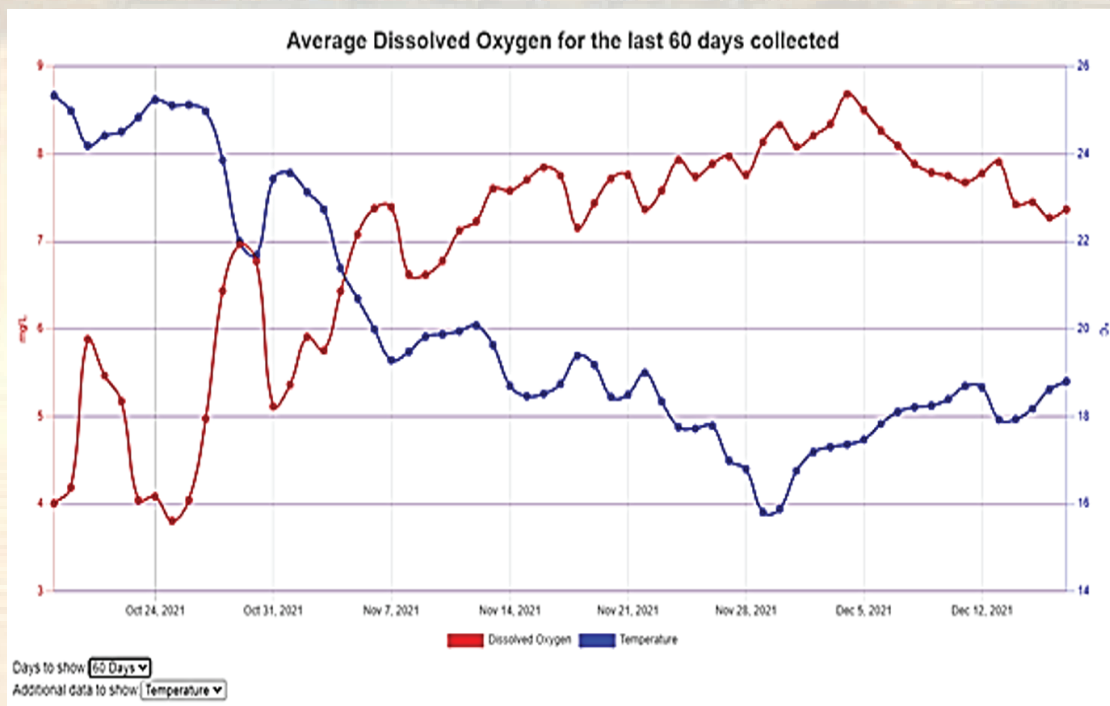
The Sport Fish Restoration Administrative Program (SFRP) was established by the Commission in 1987, under the authority of the U.S. Fish and Wildlife Service's Federal Aid in Sport Fish Restoration Program through the administrative portion of that program's enabling legislation. The primary goal of the program is to provide coordination of the recreational fisheries programs in the five Gulf states. Historically, there were three major components of this program, including anadromous fish restoration, artificial reefs, and fisheries data, all of which supported interstate fisheries management. As these individual components developed and expanded, the fisheries data portion became a new and separate program within the Commission called the Fisheries Information Network (FIN). The original efforts conducted through the SFRP with respect to anadromous fish focused on recovery work for Gulf Sturgeon and Gulf race Striped Bass restoration. Today, the primary focus of the SFRP pertains to artificial reefs and has established regional policies and planning documents. These documents are available from the Commission's office and can be accessed from the Commission's website (www.gsmfc.org) under Publications. The SFRP Coordinator is James R. Ballard, assisted by Alice R. Wilhelm.

The Program Coordinator continued to work in conjunction with the National Aquatic Nuisance Species Task Force (ANSTF) to determine appropriate actions and roles for the Commission and its member states in addressing invasive species issues. In addition, the Commission provided administration for, and participates in, the Gulf and South Atlantic Regional Panel on Aquatic Invasive Species (GSARP). During this reporting period, the SFRP helped support meetings of the GSARP.

The Program Coordinator continued to pilot test the Gulf Artificial Reef Monitoring and Assessment Program. In an effort to better assess the water quality, including dissolved oxygen levels at artificial reef sites off the coast of Mississippi, the Program Coordinator employed water quality monitoring multiparameter datasondes at several offshore sites. These datasondes were deployed on the bottom and utilized an acoustic release system so there is no entanglement issue associated with a surface buoy and mooring line system. The Program Coordinator deployed the first three units in October of 2021. In December, the Coordinator was able to retrieve the units utilizing the acoustic releases, change out the datasondes, and redeploy the units in the same location. The units all functioned as planned and the anti-fouling modifications worked to keep all probes clean and the area around the datasonde clear of biofouling. The three datasondes collected over 11,000 data records during the first deployment. Readings were collected every 30 minutes and included temperature, conductivity, salinity, dissolved oxygen, turbidity, and pH. We were also able to partner with the Commission's IJF Program and incorporate acoustic fish tag receivers in each of our units which recorded about 1500 fish tag detections on this first deployment. The collected data was added to the GARMAP database and website (<http://garmap.gsmfc.org/>) by

the Commission's System Administrator where it was available to the public. The website allows people to view the collected data in graphical form over a 30, 60, or 90-day time series and also allows for the graphical comparison of two different parameters.

Following the first successful three-month deployment, the Coordinator purchased the equipment to build three more units to be deployed in offshore waters in 2022. All of the datasondes will be deployed year-round in order to assess seasonal changes in water quality in the marine waters off the coast of Mississippi and to determine the prevalence and duration of low dissolved oxygen events. The long-term goal of this effort is to develop a program that will provide standardized baseline data for artificial reefs across the Gulf of Mexico. This will allow states to assess impacts from natural and man-made disasters in the future, and to understand how their reefs are functioning over time, compared to natural reefs.



Graphical representation of the average daily dissolved oxygen and temperature readings over a 60-day period at one of the sampling locations (<http://garmap.gsmfc.org/>).

AQUATIC NUISANCE SPECIES (ANS)

Program Coordinator – James R. Ballard

In September 2002, the Commission began administration of the Gulf and South Atlantic Regional Panel (GSARP) on Aquatic Invasive Species (AIS), under the National Aquatic Nuisance Species Task Force (ANSTF/Task Force), authorized by the Non-Indigenous Aquatic Nuisance Protection and Control Act of 1990. GSARP helps to coordinate AIS activities in the region through information sharing which permits states and agencies to learn about what has already been tried in the region and what species are posing the greatest risk to native species and environments. This information allows them to focus their limited resources on the most threatening species and on control measures with the highest probability of success. The GSARP is made up of approximately 35 members from federal and state agencies, NGOs, universities, industry and one international member representing Mexico. The Aquatic Nuisance Species (ANS) Program Coordinator is James R. Ballard who is assisted by Alice R. Wilhelm.

The GSARP met twice (virtually) in 2021 and the minutes for those meetings are available on the Panel website (www.gsarp.org).

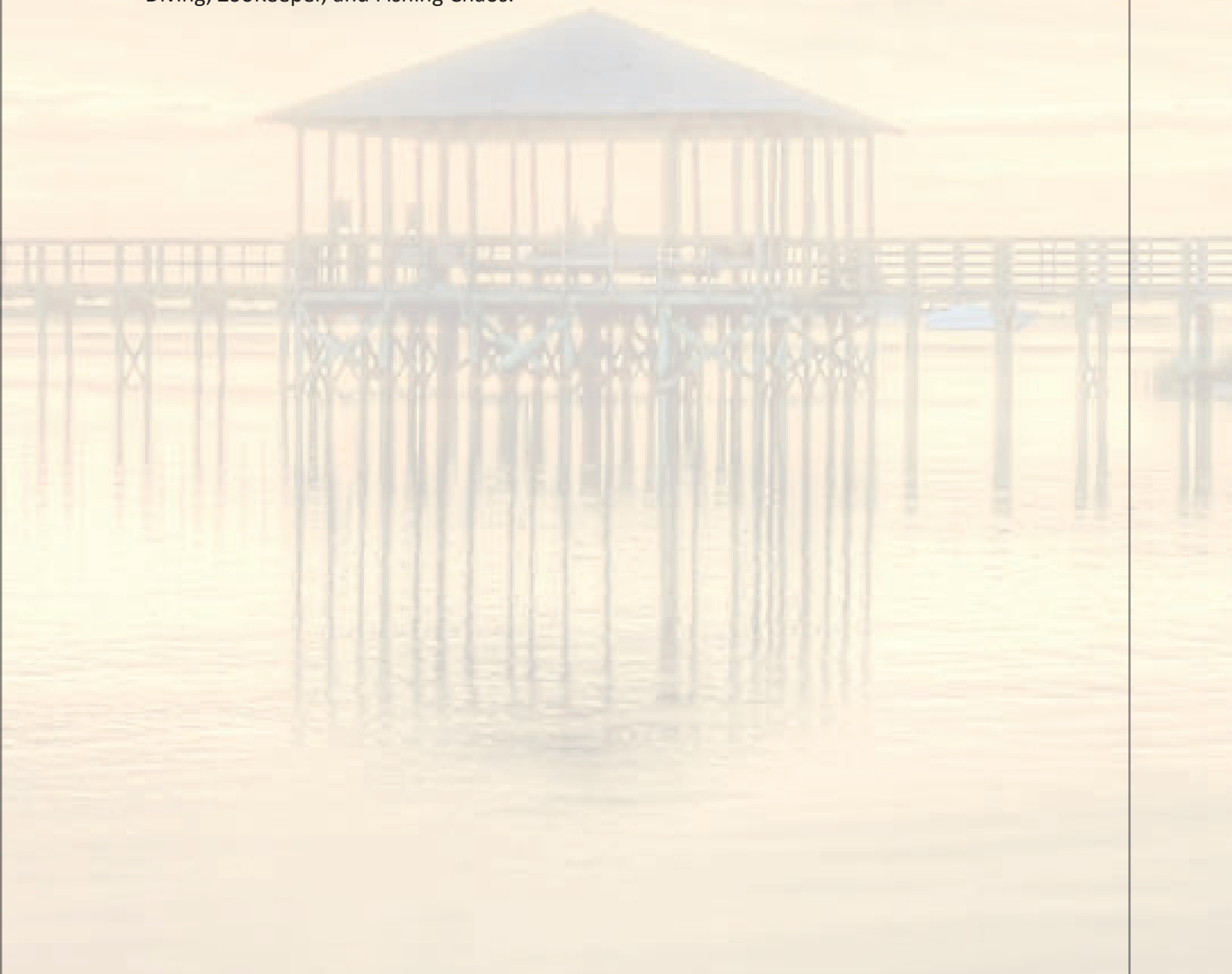
The Program Coordinator continued to help administer the Region 4 U.S. Fish and Wildlife Service's (USFWS) AIS Small Grants Program and provides administrative oversight of all non-federal projects funded through the program. Over the last seven years, the program has been able to fund 39 projects totaling over \$1,000,000. These projects have addressed invasive species eDNA data standards, model bait regulations, risk analysis of injurious fish species, lionfish, human health risks from AIS, apple snails, Giant Salvinia, Hydrilla, Phragmites, Didymo, invasive carp, Rusty Crayfish, Speckled Crayfish, Red-rimmed Melania, Asian Clam, American Eel swimbladder parasite, whirling disease, Snakehead, invasive Black Bass, and novel cyanotoxin. In this reporting period, the Program Coordinator worked with FWS regional staff to get the RFP for the 2021 funding opportunity distributed in May. The program received 23 proposals totaling \$1,094,399. Following the review and ranking of all proposals by the GSARP's review committee, four projects were selected for funding, totaling \$177,693.

- USGS - Leveraging habitat suitability modeling to inform management of nonnative fishes in a changing climate.
- UF - A horizon scan to collaboratively identify invasive species threats to the islands of Puerto Rico and the U.S. Virgin Islands.
- UT and NCSU - Invasive armored catfish (*Pterygoplichthys* spp.) and Midas Cichlid (*Amphilophus* spp.) in Puerto Rico rivers: Evaluations of invasion extent and efficacy of a physical control method.
- MSU - Integrating chemical and biological controls for the aquatic weed *Alternanthera philoxeroides* (alligatorweed).

The program resulted in increased collaboration and communication between FWS, GSARP, and the academic community.

The Program Coordinator continued to support the Invasive Species Traveling Trunk Outreach Program that was developed by the GSARP. The GSARP's Education and Outreach workgroup will continue to explore other materials that can be added to the trunks to keep them new and relevant. They will also look at developing lesson plans to make it easier for teachers to incorporate the materials in the trunks into their science curricula. The trunks have been utilized 1,590 days since they were made available to the public in the summer of 2012.

In 2021, the Program Coordinator worked with MDMR to carry out the fourth year of the Jimmy Sanders Memorial Lionfish Challenge. Due to current circumstances, this was held as a virtual tournament utilizing Fishing Chaos. 31 Lionfish were collected in 2021 and all prizes were distributed in December (1st place - Mark Miller, 2nd place – Asa Latham, most trips – Charles Martin). These efforts are made possible by the support from sponsors like Engel Coolers, Neritic Diving, ZooKeeper, and Fishing Chaos.



CORONAVIRUS AID, RELIEF AND ECONOMIC SECURITY ACT (CARES)

Program Coordinator – Jeffrey K. Rester

The CARES Act Program is a program that the Commission started in 2020. It was created to help administer funds from the Coronavirus Aid, Relief and Economic Security Act (CARES Act) that was signed into law on March 27, 2020. On May 7, 2020, the Secretary of Commerce announced the allocation of \$300 Million in fisheries assistance funding provided by Sec. 12005 of the CARES Act to states, Tribes, and territories with coastal and marine fishery participants who were negatively affected by COVID-19. Fishery participants included Tribes, persons, fishing communities, aquaculture businesses, processors, or other fishery-related businesses, who incurred a loss, as a direct or indirect result of the coronavirus pandemic. The CARES Act Coordinator is Jeffrey K. Rester, assisted by Ashley P. Lott.

In 2021, the Commission continued to work with Alabama, Mississippi, Louisiana, and Texas to provide direct payments to eligible fishery participants.

Mississippi sent the Commission 223 eligible applicants on January 28, 2021 and \$1,414,684.83 in claims were paid on February 11. Funding originally budgeted for Mississippi project administration was repurposed in August to pay claims. These funds paid 169 applicants \$22,721.18 on August 24.

Alabama submitted their applicant list to the Commission on February 24. The Commission paid 72 applicants \$3,254,064 on March 10. This expended all of the Alabama funds dedicated to help qualified fishery participants.

The Texas Spend Plan was approved on January 26, 2021. The Texas CARES Act application process began on February 1 and closed on March 18, 2021. One hundred thirty-four applicants were deemed eligible. The Commission paid these 134 applicants \$8,968,804.98 between July and October. This expended all of the remaining funds dedicated to direct payments to fishery participants in Texas.

Due to not knowing how many participants would apply for funding, Louisiana paid all participants the same amount in their first round of payments that were made during late 2020 and early 2021. The last of the first-round payments went out on May 20, 2021. Once Louisiana knew how much funding they had left after first round payments, they made final payments to all qualifying applicants based upon a percentage of the total remaining funds. Final payments to all applicants were made on June 1. The Commission paid 991 Louisiana applicants \$14,397,430.90 in total, expending all of the Louisiana CARES Act funds.

With the Texas payments made on October 13, 2021, the Commission finished distributing all CARES Act payments. Overall, the Commission received 1,712 applications and sent out

\$28,057,705.89 in CARES Act payments to qualified fishery participants.

As part of the CARES Act Program, the Commission helped the states with another round of funding. The Consolidated Appropriations Act, 2021 was signed into law on December 27, 2020. The Act provided an additional \$300M for fisheries disaster assistance. The funding was intended to respond to fishery-related COVID-19 impacts previously authorized under section 12005 of the CARES Act. As previously specified in the CARES Act, fishery participants must have incurred an economic revenue loss greater than 35% as compared to the prior five-year average revenue to be eligible for funding. The Commission referred to this new program as CARES Act 2.0. A list of the funding amounts for each state is below.

Texas	\$7,795,841
Louisiana	\$12,477,165
Mississippi	\$3,000,000
Alabama	\$3,000,000
Total	\$26,273,006

Each state had to submit a new spend plan to NOAA Fisheries for approval. The Texas spend plan was approved on June 16, 2021. In their original CARES Act spend plan, Texas provided payments for losses incurred from January 1 to December 31, 2020. Therefore, Texas did not open a new application period. Texas simply paid all of their original approved applicants the remaining balance of their claims. The Commission paid 99 applicants \$946,234.76 on November 1, 2021. The remaining CARES Act 2.0 funds will be used for oyster reef restoration and a seafood marketing campaign designed by the Texas Department of Agriculture.

The Louisiana spend plan was approved on June 17. Louisiana proposed that applicants must have shown a greater than 35% loss of revenue between January 1, 2020 and December 31, 2020. Louisiana began accepting applications on August 9 and closed the application period on August 29. Louisiana sent their first CARES Act 2.0 approved applicant list representing 657 applications to the Commission on November 10, 2021. These 652 applicants were paid \$11,475,510.01 on December 9, 2021. LDWF sent their second approved applicant list to the Commission on December 2, 2021. These 23 applicants were paid \$340,063.13 on December 22, 2021.

Alabama's spend plan was approved on June 21, 2021. The spend plan provided direct payments to eligible fishery participants who suffered COVID-19 related losses between March 1, 2020 and December 31, 2020. Alabama opened their application period on June 28 and closed it on August 6. Alabama approved 65 applications for 63 applicants during their CARES Act 2.0 application period. The Commission paid \$2,948,417 to these applicants on November 3, 2021.

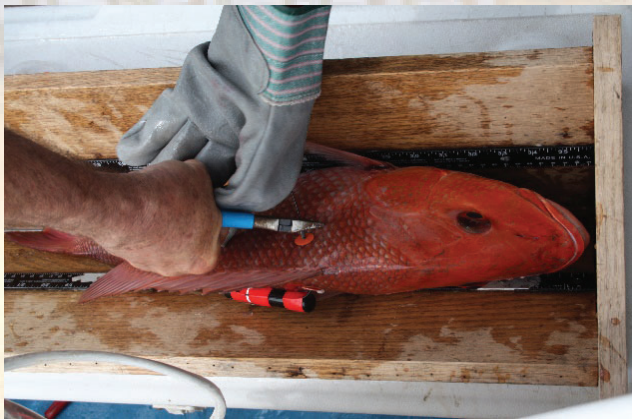
Mississippi's spend plan was approved on September 23, 2021. Mississippi compensated affected participants who suffered a greater than 35% loss over at least a 28 consecutive day period between January through June 2020 and/or July through December 2020, as compared to the average revenue earned during the same period from 2015-2019. Mississippi held their CARES Act 2.0 application period from October 20 through November 19, 2021. If applicants were not fully compensated for their losses from the original CARES Act, their application was automatically enrolled in the CARES Act 2.0 program.

FISHERIES RESTORATION PROGRAM (FRP)

Program Coordinator – Charlie E. Robertson

The Fisheries Restoration Program (FRP) was established in 2020 through a cooperative agreement with NOAA and the Gulf States Marine Fisheries Commission (Commission) to help restore recreational fish species impacted by the Deepwater Horizon oil spill. This program is funded under NOAA's Damage Assessment, Remediation and Restoration Program (DARRP), which was established in 1992 after the Exxon Valdez oil spill to protect and restore natural resources by collecting settlement funds after pollution events to implement projects to restore losses. Currently, the Commission has the capacity to assist the DARRP where their two missions align, particularly as it relates to the conservation and restoration of fisheries resources. The FRP Coordinator is Charlie E. Robertson, assisted by Alice R. Wilhelm.

The Program Coordinator continued working with the Project Management Team (PMT) on the administrative tasks associated with managing the Return 'Em Right program (RER). The program's goals are to reduce mortality in reef fish resulting from barotrauma and release, to increase the health of reef fish fisheries, and improve angler experiences. This program was originally known as the "Reduction of Post-release Mortality from Barotrauma in Gulf of Mexico Recreational Reef Fish Fisheries." The Commission's primary responsibility under this program is to manage and oversee the various activities related to research and monitoring to evaluate restoration success.



During 2021, the Program Coordinator worked in conjunction with the PMT and various state and federal stakeholders to select and fund four collaborative studies in the Gulf of Mexico. The studies are being led by Auburn University, Mississippi State University, University of Florida, and Louisiana Department of Wildlife and Fisheries, respectively. The total amount awarded for the studies was \$864,621. The four studies will evaluate several key research needs, while also providing broad geographic

coverage in offshore waters across the northern Gulf of Mexico, ranging from the West Florida Shelf to Texas. Some of the needs the studies will evaluate include: 1) mortality and survival of Red Snapper and Gag caught and released using fish descending devices, 2) predation on recreationally caught reef fish Gulf-wide, and 3) recreational anglers' preferences for various fish descending devices.

As part of the monitoring and research for the FRP, the Commission worked with Southwick Associates and state resource management agencies to develop and implement a series of human dimensions surveys targeting Gulf of Mexico recreational reef fish anglers. This survey will aid in understanding and measuring the changes in reef fish anglers' perceptions and knowledge

regarding best handling and release practices for reef fish in the Gulf. The baseline survey was administered in several waves throughout the month of December, and over 4,200 (>650 per state) responses were received from recreational reef fish anglers Gulf-wide. The final analysis and report from the baseline survey will be finalized by summer 2022, and made available to the public and practitioners. The follow-up survey will be administered in December 2024 to measure changes that may have resulted from the RER outreach campaign.

The Program Coordinator also worked closely with state partners from Florida, Alabama, and Mississippi to expand fishery-dependent monitoring off the coasts of each respective state through at-sea observer programs as well as through state reef fish validation surveys. The FRP will be providing up to \$1M each year to support these efforts for the next four years. At-sea observer programs have already been collecting data in Florida and Mississippi; however, Alabama will be re-establishing their at-sea observer program which was discontinued several years ago. All three states have been coordinating closely to make efforts to improve and standardize data collection through the at-sea observer programs to the extent possible for each state. Key data elements collected by at-sea observers include rates of use of fish descending devices, discard mortality rates from mark-recapture, and fish barotrauma codes.

Information collected through these programs will be valuable to help measure the success of the RER program, but may also help to inform fisheries managers on the changing trends in fisheries, and the effects best handling practices may have on discards.

In conjunction with the PMT, a two-day hybrid workshop was organized and hosted in December to develop a set of standard best release practices informed by scientific data and input from fishing stakeholders to increase survival of reef fish upon release by recreational anglers in the Gulf. Recommendations derived from the workshop will be compiled into a manual that will be used to develop outreach efforts through RER.

Led by Florida Sea Grant (FSG), the RER team also created a logo and developed style and branding guidelines to help boost the project's profile within the Gulf reef fish angling community. A web page was launched to serve as a hub to host outreach and education materials, details about the project, and provide access to resources for the general public to learn about "best release practices" in the Gulf. Logistics are also being finalized for the development of an education module that will be hosted within the web page. Once anglers have completed the module, they can provide their information and receive a free package of fish descending gear which contains a standard SeaQualizer pre-rigged on a three-way swivel with a three pound lead weight, as well as a SeaYaLater inverted hook release device.



FSG has also developed materials for an outreach toolkit, which includes photos, sample social media posts, brochures, business cards, and other print materials. The goals of the outreach toolkit are to promote best release practices with a focus on fish descending devices, increase anglers' knowledge and awareness, and communicate project results with the public. The Program Coordinator is helping coordinate distribution of the toolkit and other outreach to state partners.

ANNUAL MEETINGS

The annual meeting of the Commission is held each year during the third week in the month of October. The spring meeting is held each year during the third week in the month of March. Upon written request of a majority of the Commissioners of each state from three or more states, the chairman shall call a special meeting of the Commission. The regular meetings are rotated among the states in order that the Commissioners may better familiarize themselves with the fisheries and coastal areas of the entire Gulf of Mexico.

MARCH 2021

The 71st Annual Spring Meeting of the Gulf States Marine Fisheries Commission (Commission) was held virtually. Below is a summary of some of the topics and actions taken by the various subcommittees. The complete minutes of all Commission meetings are available on the Commission's website at www.gsmfc.org.

The FIN Committee met virtually in July after attempting to wait for the COVID-19 numbers to drop enough so that they could meet in-person. When that did not happen, they met via GoToMeeting in July and received an update from the Return 'Em Right project focused on restoring injured reef fish populations from the Deepwater Horizon Oil Disaster. This project is working to educate anglers on best handling practices and provide eligible anglers with descending devices and venting tools coupled with education to help increase the survivability of released reef fish species. The Committee also received an MRIP update to discuss the implementation of the economic SEAS survey in 2022. The Committee discussed progress on the Southeast For-Hire Integrated Electronic Reporting (SEFHIER) program. State and federal partners provided updates on fishery-dependent sampling activities and issues they are observing. The Committee also had an in-depth discussion of FIN funding priorities for 2022.

The SEAMAP Subcommittee discussed the future of the Vertical Line Survey. SEAMAP has been conducting the survey for over 10 years and SEAMAP needs to start looking at how the data are being used or not used for management purposes. This discussion was just the first step in multiple discussions. So far, the vertical line data have not been used for stock assessments. Over 90% of the catch is Red Snapper and, if the Red Snapper stock assessment is not using the data, SEAMAP needs to question the purpose of the survey.

Also, at the meeting, the SEAMAP Subcommittee recommended that all work groups get together to review the operations manual and protocols for their respective surveys before beginning sampling this year. The Bottom Longline Work Group met on April 14 while the Shrimp/Groundfish Work Group met on May 14. Both work groups reviewed their respective operations manuals and went over sampling protocols.

During the morning session of the March meeting of the Molluscan Shellfish Subcommittee, members learned about an inventory of oyster models to support restoration of oyster reefs in the U.S. Gulf of Mexico. This was followed up with an update about an inventory of oyster restoration projects that was being developed in the Gulf. The group also discussed current protocols for each state for importation of shell stock.

A special session was held in the afternoon to discuss current topics related to oyster hatcheries in the Gulf. Each state provided an extensive overview of issues, including physical production limitations, biologic impedances on production, seed supply priorities, and regulation restrictions reducing seed availability. States then provided oyster hatchery projections anticipated for the upcoming 2021 season. The special session closed with a moderated discussion between a group of panelists representing academic, public, and private hatcheries in the Gulf.

The Crab Subcommittee focused their entire agenda on the status of current terrapin research by state. A number of presenters provided information related to state agency and academia projects related to terrapins.

The Technical Coordinating Committee (TCC) members were given updates on the progress of renewable wind energy in the Gulf of Mexico, NOAA's strategic plan for the DWH Fish and Water Column Invertebrate Restoration Plan, and the results from the Great Red Snapper Count. They also discussed IJF research funding and the SEAMAP 2021-2025 Management Plan, which they voted to approve as amended by the Caribbean and South Atlantic SEAMAP.

OCTOBER 2021

The Commission's 72nd Annual Meeting was held virtually. Below is a summary of some of the topics and actions taken by the various subcommittees as well as the full Commission. Complete minutes of all Commission meetings are available on the Commission's website at www.gsmfc.org.

The SEAMAP Subcommittee discussed the trawling and bottom longline operations manuals, a possible habitat mapping survey cruise, and potential options for SEAMAP if the Subcommittee decides to discontinue the Vertical Line Survey. The Subcommittee discussed the SEAMAP Trawl Shrimp Data and Index Estimation Work Group Report. The report developed best practice recommendations for the abundance indices calculated from the SEAMAP Summer and Fall Groundfish Surveys for brown shrimp, white shrimp, and pink shrimp in the Gulf of Mexico. The report also verified that the SEAMAP Groundfish Survey was operating across the same temporal and spatial scales as the commercial shrimp fisheries. The report found that the SEAMAP trawl surveys aligned pretty well with where the shrimp fishery operates in most areas of the Gulf of Mexico in the summer and fall months. The Subcommittee also discussed attaching cameras to the CTD to photograph the bottom habitat at every SEAMAP station during all sampling. Stock assessment and ecosystem-based modelers have been requesting more and better habitat information for use in assessment and ecosystem-based models. SEAMAP hopes to be able to supply valuable habitat data without a huge increase in workload or additional expense.

The Molluscan Shellfish Subcommittee received an update on the DWH Regionwide TIG Restoration Plan, which had just been published a few days prior to the meeting. The group also took some time to listen to an overview of the project by Dr. Tom Soniat concerning the use of the Gulf-wide Oyster Shell Budget. A review of more recent literature evaluating oyster reef connectivity was provided, and several projects from the Gulf were highlighted.

The Menhaden Advisory Committee (MAC) approved the Gulf Menhaden Stock Assessment Report (GDAR03) which had been worked on all summer. The results were presented and the stock assessment showed that the stock was not overfished and overfishing was not occurring. Research recommendations included some which were high priority, i.e. stock structure and genetics as well as more ecosystem-based methodologies for data.

The Technical Coordinating Committee (TCC) was updated by the Bureau of Ocean Energy Management (BOEM) on the status of renewable wind energy in the Gulf, which was made a priority by the Biden administration. They also received state-by-state updates on projects funded by the IJ State Research Funding Program (SuRF), which was formerly referred to as the IJ Small Grants Program. All states, except Florida, have a project focusing on assessing Southern Flounder and their movement patterns. Other projects highlighted included eDNA analysis, blue crab commercial landings, database creation, and a pilot study to survey recreational scallop fishermen. The upcoming 2022 SuRF funding cycle was also discussed with \$194,960 available per state. An update was given regarding the CARES Act Program. During the election of officers, the TCC debated how to hold elections and asked staff to present alternatives for a rotational chairmanship for consideration at the next meeting.

STATE AGENCY PARTNERS

Texas, Louisiana, Mississippi, Alabama, Florida

The five Gulf state agencies continued to work through the Commission on projects such as the FIN Data Program, IJF, and SEAMAP. Below are some of the highlights of those various Commission related activities in 2021.

FIN: In 2021, Mississippi, Alabama, and Florida actively participated in coordination of the MRIP survey for recreational harvest and effort estimation. All states in the Gulf of Mexico assisted with the collection of ageing structures for the biological sampling program to address stock assessment needs. The commercial trip ticket program was also developed and ongoing for all states in the Gulf of Mexico.

SEAMAP: SEAMAP operations continued for the 40th consecutive year. After cancelling several surveys and reduced effort in other surveys 2020, state partners were able to fully participate in all SEAMAP surveys in 2021. State partners participated in work group meetings and also in several invertebrate identification workshops online throughout the year.

FRP: Members from the TCC and representatives from each of the Commission's state agency partners participated in the selection and review processes for the collaborative studies funded by the Return 'Em Right (RER) program. Ultimately, four collaborative studies were selected for funding with awards totaling \$864,621. State agency representatives also assisted in the development of survey questions and sampling frames for the human dimensions survey for their respective states. In some cases, they even administered the survey on behalf of the Commission. Florida, Alabama, and Louisiana provided representation during the Best Release Practices Workshop hosted by the Commission. Florida, Alabama, and Mississippi also began developing proposals for the first year of their at-sea observer programs to support additional data collection to assist the objectives of RER program.

IJF: The five state agencies provided representation on the Red Drum Technical Task Force. The states also continued work on IJ specific projects under the SuRF (State Research Funds) program. These included new monitoring and data collection activities intended to fill gaps in data for various IJF species in the region.

SPORTFISH: The Commission continued to work in conjunction with the National Aquatic Nuisance Species Task Force to determine appropriate actions and roles for the Commission and its member states in addressing aquatic invasive species issues. In addition, the Commission provided administration for, and participation in, the Gulf and South Atlantic Regional Panel on Aquatic Invasive Species on which all of the Gulf states have representation.

ARTIFICIAL REEFS: The Commission's TCC Artificial Reef Subcommittee, which is made up of the state Artificial Reef Coordinators from the five Gulf states, worked collaboratively with the Atlantic States Marine Fisheries Commission's Artificial Reef Subcommittee through a joint meeting. This coordination provided the opportunity to address issues of national scope and importance.

LYLES-SIMPSON AWARD

The Charles H. Lyles Award was given annually by the Commission to an individual, agency, or organization recognized for contributing to the betterment of the fisheries of the Gulf of Mexico through significant biological, industrial, legislative, enforcement, or administrative activities. In 2014, this award was renamed to include Larry B. Simpson, longtime Commission Executive Director. The recipient is selected by the full Commission from open nominations made at the spring March meeting. The selection is by secret ballot. The recipient is awarded this honor at the Commission's annual meeting in October of each year.

Due to COVID restrictions and virtual meetings, a Lyles-Simpson award recipient was not chosen for 2021.

LYLES-SIMPSON AWARD RECIPIENTS

Charles H. Lyles	1984	Andrew J. Kemmerer	2003
Theodore B. Ford	1985	Hal Osburn	2004
J.Y. Christmas	1986	Leroy Kiffe	2005
John Breaux	1987	Robert P. Jones	2006
John Ray Nelson	1988	Wayne E. Swingle	2007
I.B. "Buck" Byrd	1989	Ralph Rayburn	2008
Hugh A. Swingle	1990	W. "Corky" Perret	2009
John A. Mehos	1991	Albert L. King, Sr.	2010
J. Burton Angelle	1992	Virginia "Ginny" Vail	2011
Louis A Villanova	1993	R. Vernon Minton	2012
Theodore H. Shepard	1994	Larry B. Simpson	2013
Edwin A. Joyce, Jr.	1995	Michael C. Voisin	2014
Tommy D. Candies	1996	Ellie F. Roche	2015
Walter M. Tatum	1997	Michael S. Ray	2016
Thomas L. Heffernan	1998	Joseph I. Gill, Jr.	2017
Trent Lott	1999	Christopher M. Blankenship	2018
James Barkuloo	2000	William Borden Wallace	2019
Walter Fondren, III	2001	Harriet Perry	2020
Jerald K. Waller	2002	No recipient chosen	2021

PUBLICATIONS

The Commission staff accumulates data, research papers, and other materials critical to the further development of publications of the Commission including those from the Profiles and FMPs in progress. An electronic repository for papers referenced in these documents is continually expanded as additional literature from outside sources as well as the Commission is added. The database is searchable from the Commission website and provides keywords and complete abstracts when available. All Commission publications are housed electronically and limited paper copies are available upon request. Below is a list of the publications completed by the Commission in 2021.

- No. 309 April 2021. Annual Report of the Fisheries Information Network in the Southeast Region (FIN). January 1, 2020 - December 31, 2020. Gulf States Marine Fisheries Commission.
- No. 308 October 2021. GDAR03 Gulf Menhaden Stock Assessment – 2021 Update. Dr. Amy Schueller, Editor. Gulf Data, Assessment, and Review. Gulf States Marine Fisheries Commission.
- No. 307 October 2021. SEAMAP Subcommittee Annual Report to the Technical Coordinating Committee of the Gulf States Marine Fisheries Commission October 1, 2020 to September 30, 2021. Jeffrey K. Rester, Editor. Gulf States Marine Fisheries Commission.
- No. 306 September 2021. Licenses and Fees for Alabama, Florida, Louisiana, Mississippi, and Texas in Their Marine Waters for the Year 2020. Debbie McIntyre (Editor). Gulf States Marine Fisheries Commission.
- No. 305 May 2021. Annual Report of the Southeast Area Monitoring and Assessment Program (SEAMAP) October 1, 2019 – September 30, 2020 (online only).
- No. 304 May 2021. Law Summary 2020. A Summary of Marine Fishing Laws & Regulations for the Gulf States. Debbie McIntyre (editor). Gulf States Marine Fisheries Commission (online only).
- No. 303 March 2020. Annual Report of the Fisheries Information Network in the Southeast Region (FIN). January 1, 2019 - December 31, 2019. Gulf States Marine Fisheries Commission.
- No. 302 Aug 2021. Gulf of Mexico Cooperative Law Enforcement Operations Plan 2021-2022. Gulf States Marine Fisheries Commission Law Enforcement Committee and Gulf of Mexico Fishery Management Council's Law Enforcement Advisory Panel. Steve VanderKooy, editor. Gulf States Marine Fisheries Commission.
- No. 301 Aug 2021. Gulf of Mexico Cooperative Law Enforcement Strategic Plan 2021-2024. Gulf States Marine Fisheries Commission Law Enforcement Committee and Gulf of Mexico Fishery Management Council's Law Enforcement Advisory Panel. Steve VanderKooy, editor. Gulf States Marine Fisheries Commission.

FINANCIAL REPORT

The Commission has a Single Audit conducted annually in compliance with the Single Audit Act and the Office of Management and Budget (OMB) Circular A-133. The audit is performed by an independent certified public accounting firm and encompasses both financial and compliance components. A segment of the audited financial statements is published below. The full audit report is available by request from the Commission.

YEAR IN REVIEW

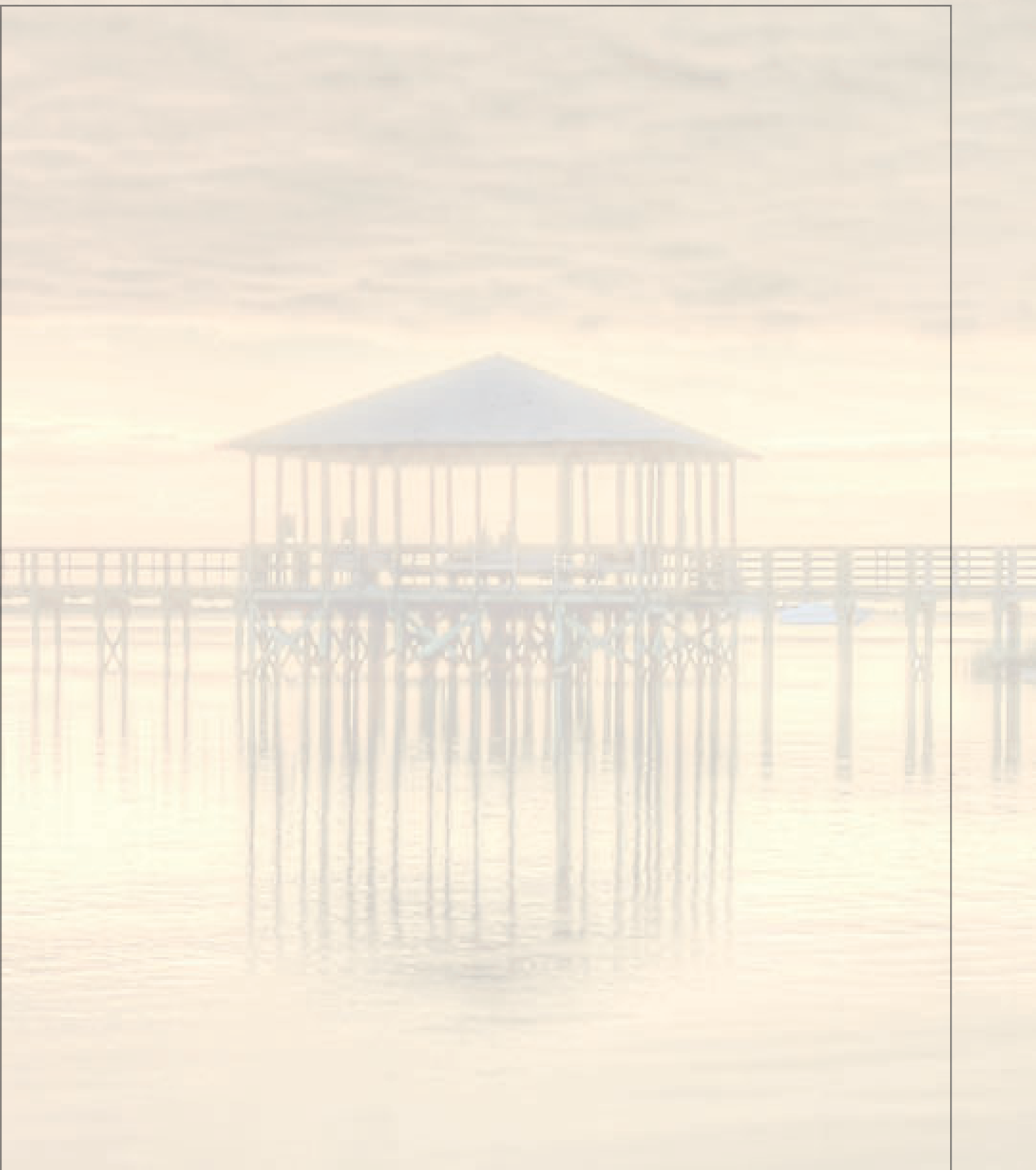
The following presents a summary of the Commission's net position for the years ended December 31, 2021 and 2020. Detailed financial statements are available from the Commission office by request from Ms. Angela Rabideau.

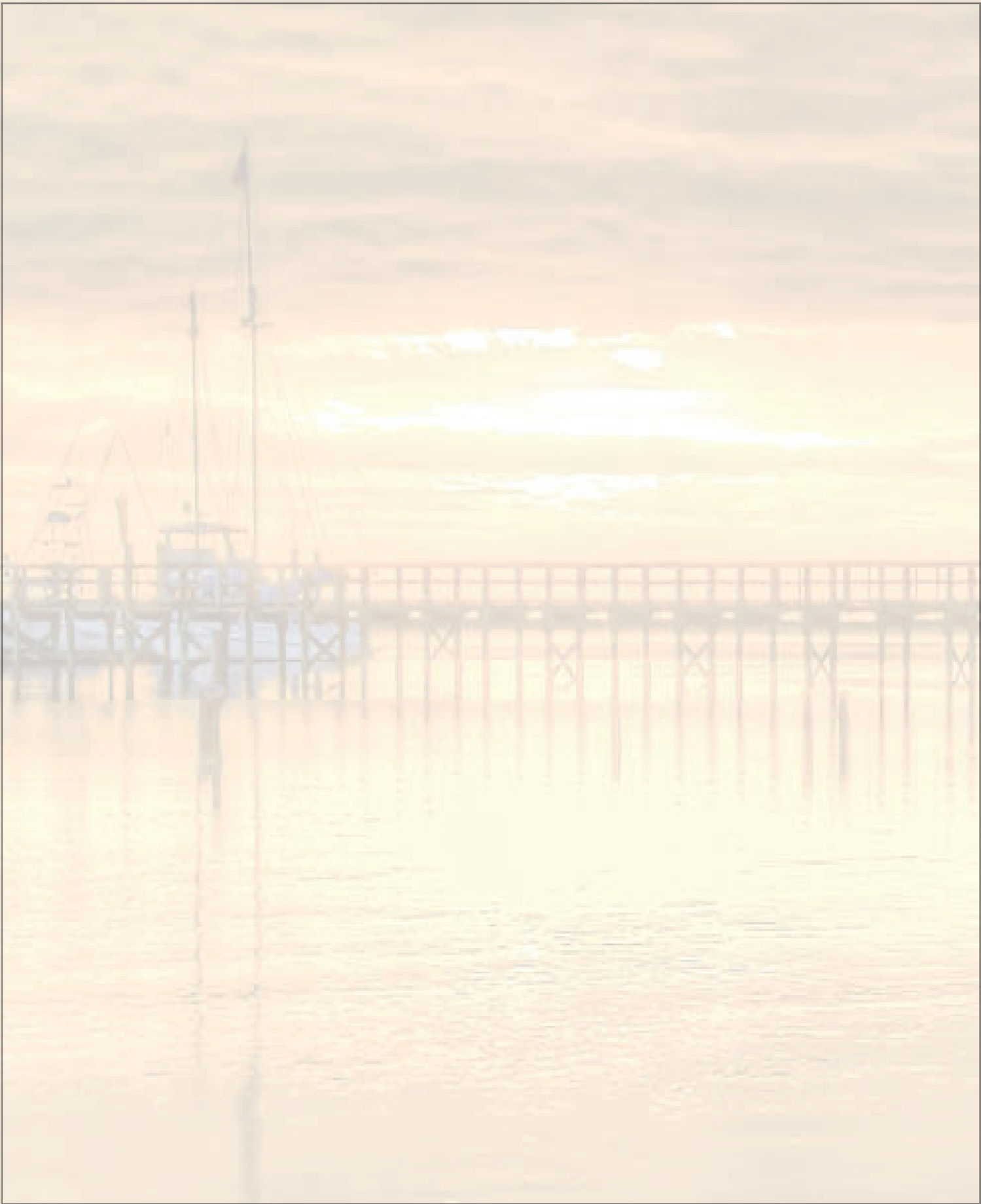
GULF STATES MARINE FISHERIES COMMISSION CONDENSED STATEMENT OF FINANCIAL POSITION FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

	DECEMBER 31,	
	2021	2020
Current Assets	\$384,680	\$459,067
Non-Current Assets		
Post Employment Health Plan Investment Account	369,977	318,348
Capital Assets	214,823	258,729
Total Non-Current Assets	<u>584,800</u>	<u>577,077</u>
Total Assets	<u>969,480</u>	<u>1,036,144</u>
Current Liabilities	17,209	12,308
Non-Current Liabilities	8,079	23,702
Total Liabilities	<u>25,288</u>	<u>36,010</u>
Net Position		
Invested in Capital Assets	175,496	220,090
Unrestricted Net Assets	768,696	780,044
Total Net Position	<u>\$944,192</u>	<u>\$1,000,134</u>

GULF STATES MARINE FISHERIES COMMISSION
CONDENSED STATEMENT OF ACTIVITIES
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

	DECEMBER 31,	
	<u>2021</u>	<u>2020</u>
General Revenues		
Member State Appropriation	\$112,500	\$90,000
Council Activities	45,000	45,000
Other Income	150	350
Interest Income	265	5,441
Dividend Income	26,919	10,760
Post Employment Health Plan Revenue	7,867	7,147
Registration Fees	0	6,894
Realized/Unrealized Gain (Loss) on Investments	14,186	32,232
Gain (Loss) on Sale of Assets	7,370	3,106
Program Revenues		
Collection & Decimation of Recreational & Commercial Fisheries Information Network	5,604,276	4,788,348
Biological Sampling & Head Boat Sampling	1,080,930	1,333,225
Unallied Science Programs	1,476,573	1,069,898
Interjurisdictional Fisheries Management	866,337	582,113
Coordination of Recreational Fisheries Programs	188,626	187,680
Collection & Decimation of Fishery-Independent Data & Information	377,935	251,853
SEAMAP Supplemental	65,965	67,907
Multiplier/Net Gains	0	60,500
Fisheries Restoration Project	139,291	1,045,848
CARES Act Recovery	43,169,984	24,340
Study of Aquatic Nuisances	73,694	101,273
Total Revenues	<u>53,257,868</u>	<u>\$9,713,915</u>
Expenses:		
Programs	\$53,180,897	\$9,560,732
General and Administrative	132,913	432,343
Total Expenses	<u>\$53,313,810</u>	<u>\$9,993,075</u>
Change in Net Position	\$(55,942)	\$(279,160)
Net Position, Beginning	1,000,134	1,279,294
Net Position, Ending	<u>\$944,192</u>	<u>\$1,000,134</u>





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Inside Photo Spread

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