



ENHANCE · PROTECT · CONSERVE

ANNUAL REPORT

FISCAL YEAR 2023

July 1, 2022 - June 30, 2023

MESSAGE FROM THE EXECUTIVE DIRECTOR



Joe Spraggins

Joe Spraggins
Executive Director

At the Mississippi Department of Marine Resources, we are dedicated to enhancing, protecting and conserving the state's marine interests by managing all marine life, public trust wetlands, adjacent uplands and waterfront areas to provide optimal commercial, recreational, educational and economic uses of these resources consistent with environmental concerns and social changes.

In the last year, MDMR continued work on four National Fish and Wildlife Foundation (NFWF) projects, which include an artificial reef construction project with Ingalls Shipbuilding, enhancing the barrier island artificial reefs, expanding Katrina Key and an assessment of Mississippi's inshore artificial reef complex. The Katrina Key expansion is currently under the engineering and design phase with construction expected to begin in 2024. The agency deployed 860 artificial reef ecosystem discs on Cat Island, FH-8, FH-9/11 and FH-10 to enhance the barrier island artificial reefs. The sidescan assessment for the inshore reef complex was awarded and work is expected to begin in the next few months.

MDMR assisted with the deployment of two 150-foot steel hulled fishing vessels, the F/V Mermentau and G.P. Chauvin on FH-13. The retired fishing vessels were donated by OMEGA Protein in Moss Point. The agency also assisted with the deployment of 3,000 tons of concrete rubble on FH-14. Through these offshore deployments, the MDMR continues to create habitat and fishing opportunities for Mississippi's offshore anglers.

In cooperation with the Secretary of State and the Mississippi Department of Environmental Quality (MDEQ), the MDMR acquired approximately 2,860 acres of additional property for the Jourdan River Coastal Preserve, Bayou LaCroix Coastal Preserve and Wolf River Coastal Preserve. The Coastal Preserves Bureau continues to actively participate in planning with MDEQ to discuss future acquisitions through the RESTORE Act, the NFWF-Gulf Environmental Benefit Fund and the Natural Resource Damage Assessment.

In partnership with the Mississippi Department of Agriculture, MDMR completed stakeholder assistance from the \$1.6 million Seafood Processors Pandemic

Response and Safety Block Grant program funded by the Pandemic Assistance provided in the Consolidated Appropriations Act of 2021 which was awarded to assist in the recovery efforts of Mississippi's seafood and catfish processing businesses. The agency also received NOAA's approval on MDMR's \$21 million 2019 Mississippi Bonnet Carré Spillway Fisheries Disaster Recovery Program to assist in the recovery efforts of Mississippi fisheries in the aftermath of the catastrophic twice opening of the spillway in 2019.

In response to Senate Bill 2544, the MDMR updated its shellfish regulations in order to provide additional opportunities for private individuals and businesses to lease water bottom and participate in shellfish cultivation and propagation. With more private entities getting involved in the shellfish industry, the Mississippi Gulf Coast should benefit greatly from the increased economic and environmental benefits of oyster reef restoration and harvest. In addition, the Off-Bottom Oyster Aquaculture program has grown to 71 total acres leased in the Deer Island Commercial Aquaculture Park employing 22 active off-bottom harvesters.

In FY2023, through the Tidelands Trust Fund, the MDMR received a total of \$12,455,247 which funded Public Access projects in Harrison, Hancock and Jackson counties. Through Gulf of Mexico Energy Security Act (GOMESA) funds, the MDMR was able to distribute \$25,615,993 across the Mississippi Gulf Coast for projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection and infrastructure directly affected by coastal wetland losses.

We take pride in our work, and it shows. We believe a healthy environment will provide for a healthy economy. Our mission is to enhance, protect and conserve the marine interests of Mississippi and we will continue to work to achieve this goal every day. This essential work would not be possible without your support. We look forward to many successes together as we manage Mississippi's marine resources.



MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

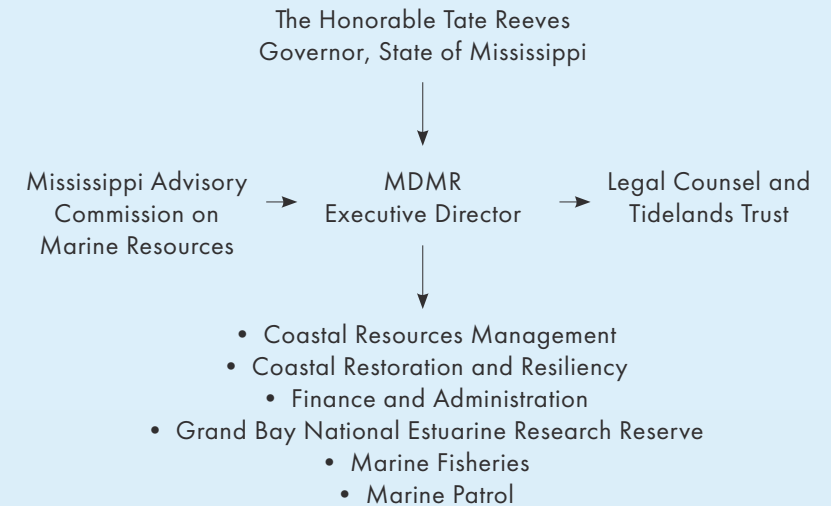
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This annual report was prepared by the Mississippi Department of Marine Resources, Office of the Executive Director, with contributions from staff.

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MDMR ORGANIZATIONAL CHART



AGENCY OVERVIEW

LEADERSHIP

Joe Spraggins,
Executive Director

Rick Burris,
Chief Scientific Officer

Patrick Levine,
Chief Operating Officer

Leslie Brewer,
Chief Financial Officer

Chief Kyle Wilkerson,
Chief of Marine Patrol

Jennifer Wittman,
*Coastal Resources
Management Director*

Rhonda Price,
*Coastal Restoration and
Resiliency Director*

Traci Floyd,
Marine Fisheries Director

Ayesha Gray, Ph.D.,
Grand Bay NERR Director

Christy Royals,
Human Resources Director

Brian Sherwood,
Information Technology Director

Charmaine Schmermund,
Public Affairs Director

Sonja Slater,
Tidelands Coordinator

Russell Weatherly,
GOMESA Coordinator

MISSISSIPPI ADVISORY COMMISSION ON MARINE RESOURCES

Ronnie Daniels (Chairman),
Harrison County | Charter Boat Operators

Cammack (Cam) A. Roberds, (Vice Chairman)
Jackson County | Recreational Sports Fishermen

Jonathan McLendon,
Harrison County | Commercial Seafood Processors

Jason Osborne,
Hancock County | Nonprofit Environmental Organizations

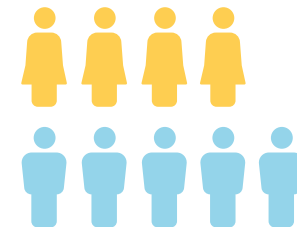
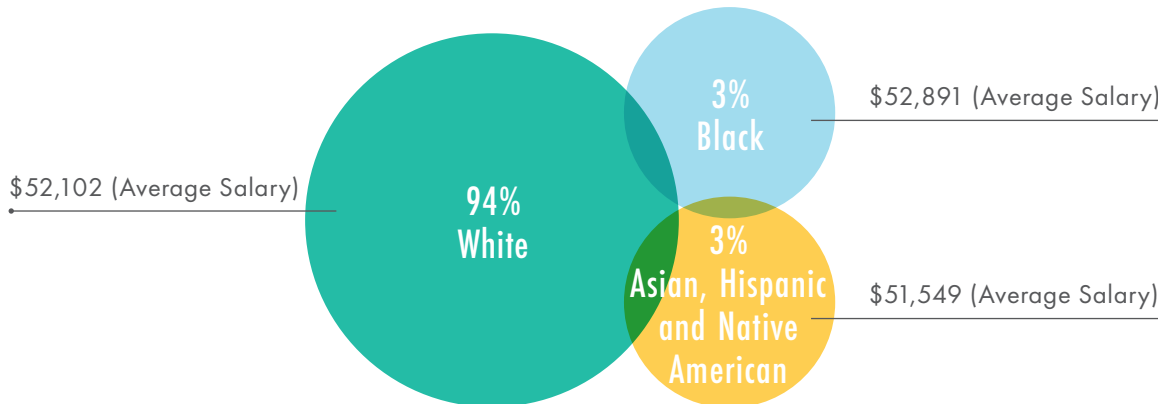
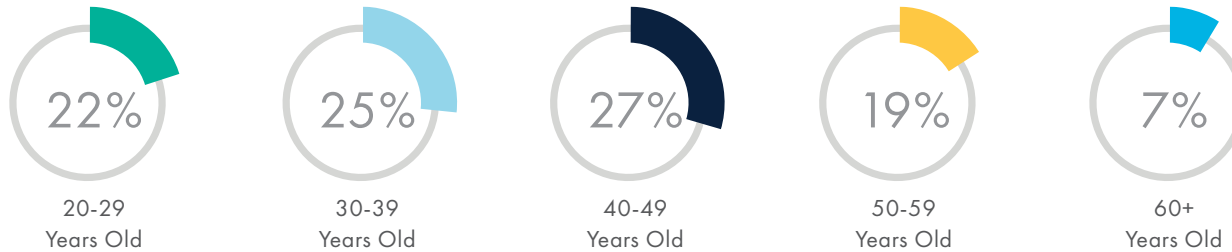
Vacant,
Commercial Fishermen

PERSONNEL OVERVIEW

Human Resources (HR) maintained compliance of personnel budget and expenditures required by Appropriation Bill and the Mississippi State Personnel Board (MSPB). Under MSPB Project SEC², processed salary adjustments for employees below salary minimum for new job classifications.

HR managed the MDMR Summer Intern Program by providing 10 interns to the Office of Coastal Resources Management, the Office of Marine Fisheries, the Grand Bay NERR, GIS/IT, Marine Patrol and the Office of Coastal Restoration and Resiliency. During the annual Benefits Open Enrollment process, HR staff communicated details of benefit plans, contact information and employee premiums.

During FY 2022, the agency completed staffing actions for 37 positions, resulting in 22 new hires and 15 internal promotions. Employee orientation was conducted for these hires and the on-boarding process for new employees was completed throughout the year. MDMR employed 158 total employees during FY 2023.

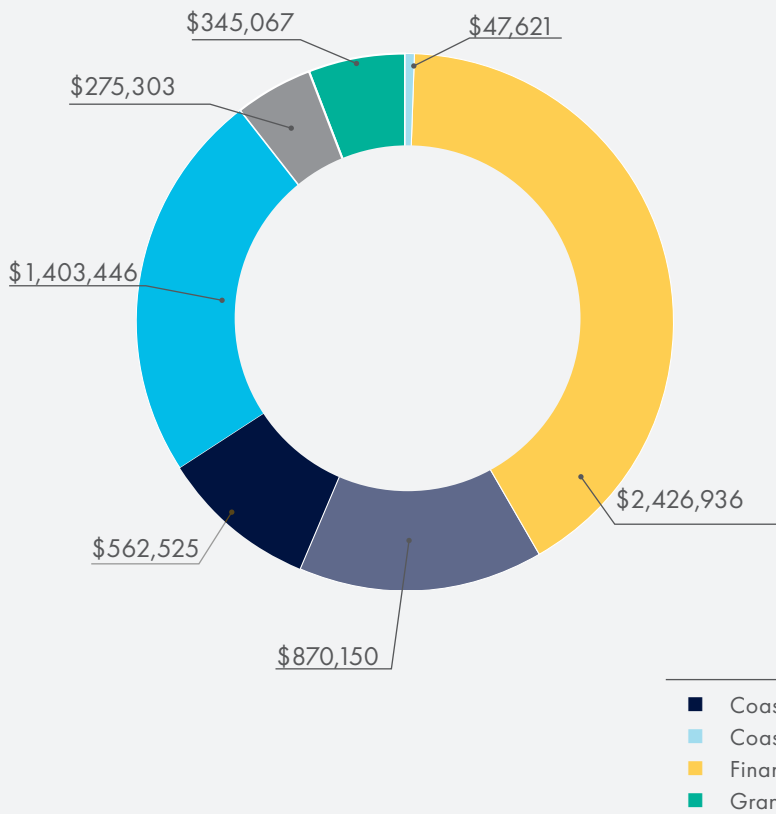


43% Female (Average Salary \$52,325)
57% Male (Average Salary \$52,189)

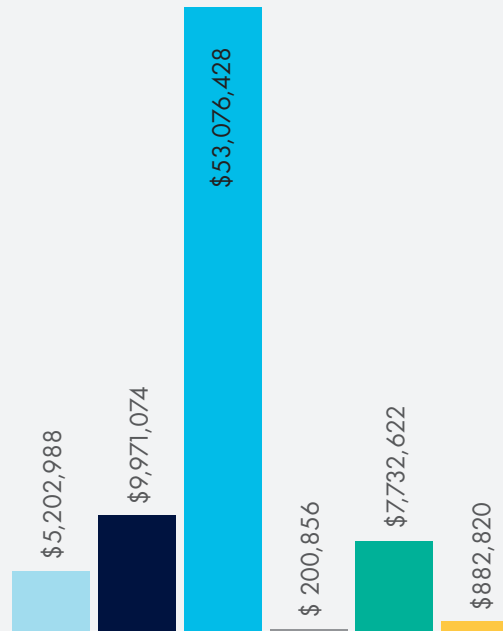
FINANCIAL SUMMARY

- The agency managed 66 grants, totaling \$77 million.
- There were 219 active agreements.
- 362 vendors were paid out a total of \$45.9 million dollars.
- Processed 211 travel authorizations
- 97,017 licenses sold: 2,642 Commercial, 790 Recreational and 93,585 MDWFP.

PURCHASE ORDERS BY BUREAU



FUNDS MANAGED BY GRANTS



AGENCY EXPENSES BY CATEGORY

Contractual Services	\$4,744,794
Commodities	\$1,770,220
Equipment	\$725,668
Federal Indirect	\$642,380
In-state Travel and Subsistence	\$121,027
Salaries, Wages and Fringe Benefits	\$10,816,258
Subsidies, Loans and Grants	\$17,517,211
Vehicles	\$328,796
TOTAL	\$36,666,354

GULF OF MEXICO ENERGY SECURITY ACT (GOMESA)

The signing into law of the unprecedented GOMESA in December 2006 created an opportunity for the State of Mississippi in terms of its potential magnitude and significance. This landmark legislation enables Mississippi and its neighbor offshore energy-producing states –Alabama, Louisiana and Texas – to share in royalties from revenues generated through federal oil and gas leases on the Outer Continental Shelf (OCS), royalties that prior to GOMESA’s enactment, were deposited in their entirety into the Federal Treasury. The intent of GOMESA’s revenue-sharing provision is to provide resources to the coastal states to offset the potentially harmful effects of energy production within - and adjacent to - the Gulf of Mexico, such as coastal erosion, habitat degradation and natural resources depletion.

CURRENT GOMESA PROJECTS

MSU/IMMS	Evaluate and monitor marine mammal and sea turtle abundance, population health, habitat delineation and restoration impacted from the opening of the Bonnet Carré Spillway. Continuing the work of the previous project.
NOARC-Cat Island	Baseline Inventory of Critical Seagrass Habitat. Work is ongoing and will continue for the next couple of years.
NOARC-Pelican Key	Baseline Hydrographic Survey to characterize bathymetry and bottom substrate of historic island footprint. Work is ongoing and will continue for the next couple of years.
NOARC-Wetlands Inventory	Baseline inventory of wetland habitats affected by upstream changes in natural hydrology. Work is ongoing and will continue for the next couple of years.
MDMR-Shrimp Processors Feasibility Study	Provide the requisite information to industry and MDEQ to allow selection of the type of wastewater treatment equipment necessary to treat effluent from shrimp processing facilities. Work is just beginning and will take about a year to complete.
Jackson County UA-Septic System Abatement	Extension of sewer collection systems to Jackson County’s underserved areas including Vancleave, Hurley, Three Rivers and Helena. Converting approximately 450 residences from on-lot septic to public systems at no cost to the resident.
USM-MS Coastal Fishery Resource Assessment	Support the capability of the Mississippi Stock Assessment Panel, established by an MOU between MDMR and GCRL. Develop and implement improved stock assessments for enhanced management of coastal finfish and shellfish resources.
MDMR-Katrina Key Expansion	Expand Katrina Key to the east, approximately 2,500 feet. The expansion will allow the key to extend its coverage and serve as a breakwater to the highest energy location of the island.
MDMR- Pelican Key Beneficial Use Site	Conceptual design and permitting of the Pelican Key BU Site. An opportunity exists to leverage GOMESA funds with RESTORE funding to design and permit a 900-acre habitat restoration site in the western Mississippi Sound.
Secretary of State’s Office-Broadwater Marina Restoration	Bulkhead restoration: drainage repair integral to the bulkhead, scour pad and necessary earthwork to the bulkhead.
Pass Christian- Sewer Pump Station Repairs	Repair two existing sewer pump stations (Shadowlawn Avenue and Emerald Avenue), which are located on the north side of U.S. Highway 90 across from the sand beach.
Diamondhead- Drainage, Flood Prevention, Water Quality	Three subprojects that will provide drainage infrastructure improvements, wetland restoration and improve detention facilities for future watershed events.

CURRENT GOMESA PROJECTS

MDMR/MSU- Mid Breton and Bonnet Carré Response	Provide management recommendations for oysters and brown shrimp built upon quantitative justifications for improving the water quality and ecology in the Western Mississippi Sound while accounting for the impacts from proposed Mid-Breton Sound and Bonnet Carré Spillway. Project is just getting under way.
Ocean Springs Front Beach Storm Water Mitigation	Initial demolition and disposal of the remaining structure, asphalt, concrete and existing bulkhead. Landscape property, provide a green parking lot and an improved bulkhead to support the proposed activity.
Pass Christian- Gravity Sewer System Improvements	Replace a portion of the existing gravity sewer system north of CSX Railroad within the City limits of Pass Christian. Project boundaries extend from Henderson Avenue eastward to Menge Avenue, along East and West North Streets.
MDMR- Off Bottom Oyster Aquaculture (OBOA)	Provide training for OBOA operations: business development, aquaculture methodologies and hands-on training on state-owned farms. Develop and implement a two-phase program for qualified and interested individuals to learn the ecological, economic and business components of initiating and maintaining an OBOA operation.
Pascagoula Beach Open Channel Outfalls	Improve existing outfalls at two locations; removing and replacing the bulkheads, so they can withstand additional weight from sand and prevent erosion due to water over-topping the bulkheads during normal tide and extreme flooding events such as hurricanes.

AWARDED GOMESA PROJECTS FOR FY 2024

Pascagoula- Live Oak Corridor Drainage	Replace and add additional drainage improvements to remedy flooding along the Live Oak Corridor, which includes north Market Street, Pascagoula Street and Magnolia Street.
Gulfport- North Gulfport Wastewater Treatment Plant UV Disinfection	The North Gulfport Wastewater Treatment Plant utilizes an ultraviolet (UV) system for disinfection of the liquid stream prior to discharge into Gulfport Lake. The existing UV system has remained in continuous operation for over 20 years and has reached the end of its useful life as indicated by persistent need for significant repairs during recent years.
Hancock County UA- Stennis Space Center Wastewater Conveyance	Transport wastewater from the John C. Stennis Space Center for treatment to be provided at the HANCUA Northern Regional Wastewater Treatment Facility.
Long Beach- Small Craft Harbor Eastern Bulkhead Improvements	Improvements to the eastern boundary of the Long Beach Small Craft Harbor with a vertical concrete wall/bulkhead at or near 10 feet above mean sea level, raising the existing structural protection in the area by nearly four feet.
Pass Christian- West Breakwater Wall Hurricane Mitigation Improvements	Replacement/stabilization of west bulkhead wall in the West Small Craft Harbor of the City of Pass Christian, which will allow for increased opportunities for the public to participate in recreational activities and for representatives of educational institutions to study the general health of the local ecosystem.
MDMR-Oyster Spat	Temporarily support the MDMR's Oyster Setting Facility Planning and Feasibility Project for the next one to two years while awaiting approval of an amendment to Phase 1 of the RESTORE Council-funded Remote Oyster Setting Facility Project (which will fund the program in the future).
IMMS- Monitoring of Sea Turtle Nesting	On Mississippi public beaches, there has been no consistent organized survey for sea turtle nesting activity despite the fact that Loggerhead sea turtles (<i>Caretta caretta</i>) and Kemp's ridley sea turtles (<i>Lepidochelys kempii</i>) have been documented to nest on mainland beaches as well as Mississippi's barrier islands.
USM-MS Coastal Fishery Resource Assessment	Bring together the independent scientific and management efforts that have been conducted annually for decades by the University of Southern Mississippi Center for Fisheries Research and Development, together under one overarching program.
USM-Oak Island Oyster Company	Demonstrate and validate Oak Island Oyster Company's system for production of oysters at high density in a stable, storm-resilient structure at the pilot scale.

AWARDED GOMESA PROJECTS FOR FY 2024

Jackson County-Coastal Roadway Hurricane Protection	The project involves improving and protecting the roadways to withstand the forces on them from hurricane and tropical storm events.
IMMS-Habitat Suitability for Dolphins and Turtles	By monitoring the population dynamics and health of the sentinel species and correlating it to the efforts in enhancing water quality will help us not only gauge the success of our efforts but also allow us to adjust plans accordingly.
Kiln Utility & Fire District-Jourdan River Shores Sewer Improvements	Installing approximately 21,150 LF of 3" PVC force main and installing a grinder pump at each house that would connect to the 3" force main. This new line would connect to a different discharge location that is far away from any natural body of water.
Harrison County-Sand Beach Outfall Coordination	Replacing three existing pipe culverts with box culverts to help with storm water run-off flow capacity. The project will include the removal of three existing pipe culverts and replacing each with larger box shaped culverts to increase storm water run-off.
Ocean Springs-Sewer Rehabilitation	Sewer infrastructure repairs and upgrades to both lines and manholes in Fort Bayou Estates and between Porter Avenue and Lafontaine between Dewey and General Pershing Avenues.
Pass Christian-Highway 90 Hurricane Mitigation	Expand on the existing hurricane mitigation measures for U.S. Highway 90 by constructing a concrete pathway along the south side of U.S. Highway 90 as an additional means of providing protection of the highway and storm drain utilities from the effects caused by storm surges generated from tropical systems.
Coastal Mississippi-Promotion of Seafood Industry	Coastal Mississippi will develop an effective marketing, advertising and promotions strategy that supports, educates and increases revenue for the Mississippi commercial fishing industries including, but not limited to, seafood-retailing establishments, shrimp, oysters, crabs and finfish.
Diamondhead- Drainage, Flood Prevention and Water Quality Phase II	Two sub-projects have been identified as critical components to Diamondhead's drainage and water quality program specific to Watershed A (the largest watershed in the City of Diamondhead).
Jackson County- East Beach Outfalls/ Shoreline Protection	Improving drainage outfalls at nine locations along Ocean Springs East Beach to handle storm water flows. Shoreline stabilization plantings will be placed adjacent to three of the outfalls where erosion is most prevalent.
Gautier- Hickory Hills/Lagrange Water Quality	Improving water quality and storm water runoff. The watershed's outfall is the Pascagoula River which directly impacts the Gulf of Mexico. The project location is the Hickory Hills area along Hickory Hills Drive, Lagrange Drive and Cotita Drive.
Biloxi- Keegan Bayou Restoration	Following the removal of debris and invasive/non-native plant species, environmentally appropriate measures, including re-establishing appropriate marsh plants, will be implemented to slow down and disburse road run-off and storm water discharged directly into the bayou to allow pollutants to settle before entering the Back Bay of Biloxi.
MDMR- Coffee Creek Outfall Pavilion	This project will involve the addition of a pavilion at the end of the newly constructed outfall to be available for educational and classroom purposes.
Long Beach- Small Craft Harbor Southern Quay Bulkhead	Construct improvements to the eastern boundary of the Long Beach Small Craft Harbor. The improvements will be in the form of a vertical concrete wall/bulkhead at or near 10 feet above mean sea level, raising the existing structural protection in the area by nearly four feet.
Harrison County- Bonnet Carré Spillway Mitigation (MS Sound Coalition)	The MS Sound Coalition seeks to restore, preserve and protect the ecosystem of the Mississippi Sound and the economy that depends on it. The Coalition will use scientific and engineering analyses to develop and implement mitigation strategies against adverse impacts of the Bonne Carré Spillway release.
D'Iberville- Working Waterfront and Seafood Harbor	The City of D'Iberville is seeking funds for the restoration, expansion and enhancement of the existing marina and public boat launch to create the Working Waterfront and Commercial Seafood Harbor (Working Waterfront).

TIDELANDS

The Tidelands Trust Fund is comprised of funds derived from the lease of tidelands and submerged lands and is administered by MDMR as mandated by state law. The Secretary of State’s Office presents the Tidelands check to Mississippi Department of Marine Resources (MDMR) officials and legislators each year. The state Legislature each year approves Tidelands funding for MDMR to administer through the Tidelands Program. This action is authorized through the Mississippi Code of 1971 Section 29-15-9 and Section 29-15-10. During the 2023 session, the Legislature approved \$12,455,247 in projects through HB 1636. Currently, Tidelands has 166 open projects, 103 public access projects and 63 managed projects.

THE LEGISLATURE APPROVED THE FOLLOWING PROJECTS DURING THE 2023 SESSION FOR FUNDING IN FY24:

HARRISON COUNTY

- Popp’s Ferry Causeway Park Pier Repairs (City of Biloxi)
- Eagle Point Park Improvements (City of Biloxi)
- Oak Street South Pier and Docking Facility (City of Biloxi)
- Courthouse Road Boat Launch and Jetties Improvements/Mitigation (City of Gulfport)
- Working Waterfront Harbor/Marina Phase II (City of D’Iberville)
- FY24- Long Beach Harbor Improvements (City of Long Beach)
- Small Craft Harbor Pier C-1 Improvements (City of Pass Christian)

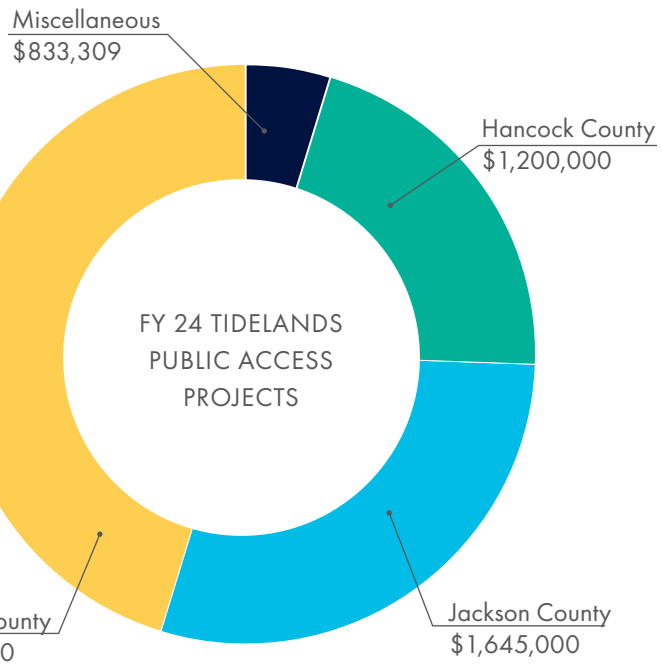
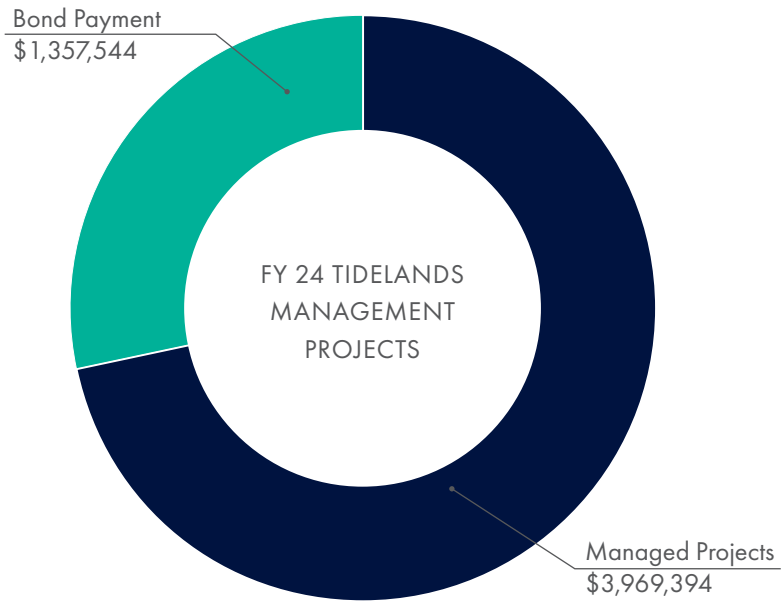
JACKSON COUNTY

- East Beach Multiuse Pathway (City of Ocean Springs)
- Shepard State Park Upgrades (City of Gautier)
- Fairway Drive Boat Launch and Pier (City of Gautier)
- Moss Point Riverfront Enhancement (City of Moss Point)
- Point Park Pier Expansion (City of Pascagoula)
- Race Track Road boat Launch Ph III (Jackson County BOS)

HANCOCK COUNTY

- Dredging for Noma Drive Boat Ramp Access (City of Diamondhead)
- Diamondhead Nature Trail and Nature Education Center Planning Phase (City of Diamondhead)
- BSL Municipal Harbor Beach Amenities and Improvements (City of Bay St. Louis)
- Beach Blvd. Pavilions (City of Waveland)
- Hydration Stations (City of Waveland)
- Derelict Pier and Vessel Removal (Hancock County BOS)

TIDELANDS FUNDING HISTORY			
2015	\$9,787,443	2020	\$11,000,000
2016	\$9,787,443	2021	\$7,349,277
2017	\$4,700,000	2022	\$12,226,497
2018	\$9,787,443	2023	\$12,455,247
2019	\$10,000,000	2024	\$12,455,247



OPERATIONAL SUPPORT



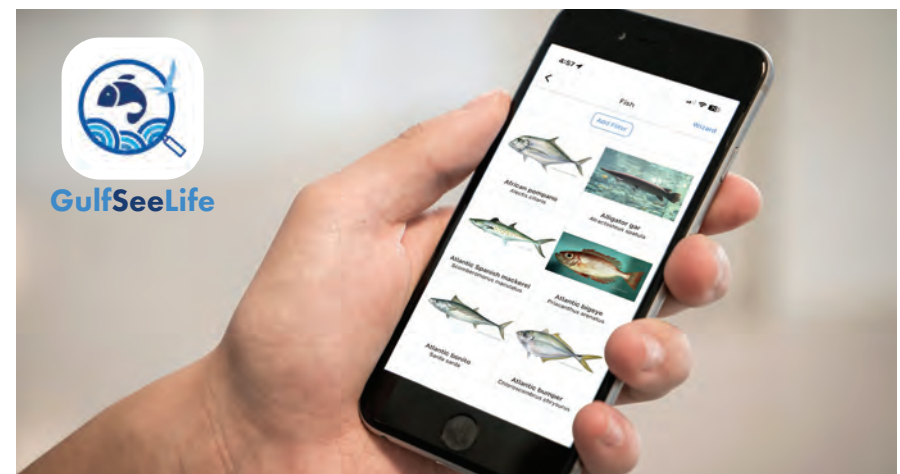
FACILITIES

- The Grand Bay NERR constructed a new 3-bay equipment storage building on-site. This will help keep vital equipment secure and out of the elements.

INFORMATION TECHNOLOGY

- Maintained and enhanced 12 custom GIS-based data collection and viewing solutions, which included four for public use.
- Developed and maintained rapid field data collection solutions for mapping and tracking treatment of invasive species and fisheries restoration efforts.
- Developed online solutions for multiple customer-facing programs, including Tidelands and Seafood Processors Pandemic Response.
- Managed five agency websites, including security, system updates, change requests and training of employee contributors.

- Continued to evolve and expand agency UAS operational capabilities.
- Engaged in external collaboration and partnership activities, such as hosting and participating in the 10th Annual statewide GIS conference, and participated in planning for the annual Mississippi Digital Government Summit.
- Through a joint project with the University of Mississippi's Center for Biodiversity & Conservation Research, successfully developed and launched the GulfSeeLife Citizen Science app on iOS, Android and web.



- Implemented new agency-wide Cybersecurity and IT Infrastructure hardware and software solutions.
- Continued modernization activities for agency IT infrastructure, including mobile, desktops, servers and network infrastructure.
- Completed 746 agency work orders.

PROPERTY MANAGEMENT

Property Management's mission is to maintain accountability for all state property under the control of the MDMR and maintain all pool vehicles and vessels to ensure their operational readiness. Property Management accounts for each inventory item with the State Auditor's Office. MDMR's costs to maintain the fleet is evaluated regularly and fleet is updated accordingly.

TOTAL VALUE OF PROPERTY

\$31,708,115

VEHICLES

89

BUILDINGS

25

LAND PARCELS

56

MARINE VESSELS

48

JET SKIS

2



COASTAL RESOURCES MANAGEMENT

The Office of Coastal Resources Management (CRM) is responsible for implementing the Mississippi Coastal Program, which was mandated by the Legislature in Section 57-15-6 of the Mississippi Code of 1972 and approved by NOAA. CRM also administers the following programs Coastal Preserves, Wetlands Permitting and Mitigation, Invasive Species and Beneficial Use.



COASTAL PRESERVES

- The Coastal Preserves Bureau continued to pursue a diligent program to monitor and treat Coastal Preserve Areas (CPAs) infested with invasive species. Through waterway surveys, aerial flight surveys and terrestrial surveys, over 20,000 acres were monitored for area wide invasive species assessments and treatment. Eradication efforts have resulted in the removal of almost 600 acres of aquatic and terrestrial invasive plant species, 14,332 giant applesnail egg masses and the elimination of 93 feral hogs. Public awareness signs have been installed at various boat ramp to help prevent the spread of aquatic invasive species.
- Coastal Preserves' restoration efforts continue at each CPA through prescribed burns, trail maintenance, debris removal and infrastructure repairs. Additionally, the bureau partnered with the Office of Information Technology at MDMR to conduct aerial surveys at two CPAs through drone usage, which covered 100 acres at each site. At the Secretary of State Eric Clark Coastal Preserve, a new bridge crossing was built on the Cherry Crossing Trail and a new trail, Yaupon Hill, was established. These efforts aid not only in restoration of our CPAs but also ensure public access and safety.
- The Coastal Preserves Bureau continued to work with the Audubon Coastal Stewardship Program to exchange information and provide support for the monitoring of shorebirds on the Deer Island Coastal Preserve. The bureau assisted staff from the University of Alabama with beneficial use and marsh regeneration research at the Greenwood Island Beneficial Use Site. Staff also assisted with Mississippi Power's "Renew Our Rivers Cleanup" campaign at Deer Island.
- Approximately 2,860 acres were acquired by the state, adding additional property to our Jourdan River Coastal Preserve, Bayou LaCroix Coastal Preserve and Wolf River Coastal Preserve. Staff continue to actively participate in planning with MDEQ to discuss future acquisitions within the coastal preserves' acquisition area through the RESTORE Act, the National Fish and Wildlife Foundation-Gulf Environmental Benefit Fund and the Natural Resource Damage Assessment.
- Mike Pursley, Invasive Species Program Manager, continues to serve as the Statewide Coordinator for the Mississippi Aquatic Invasive Species Council and as a member of the Mississippi Cooperative Weed Management Area. He also serves as MDMR's representative on the Gulf and South Atlantic Regional Panel on Aquatic Invasive Species. Sierra Ortiz represented the bureau on the Pascagoula River Basin Alliance at their quarterly meetings.
- Construction was completed on a 250-acre expansion of the Greenwood Island Beneficial Use Site, which will provide approximately 3 million cubic yards of capacity for dredged sediment.
- Coastal Preserve staff participated in various educational events, including the Biloxi Boat Show, National Invasive Species Awareness Week at the Mississippi Aquarium, Celebrate the Gulf Marine Education Festival, Camp Day at a Biloxi Shuckers game, Earth Day at INFINITY Science Center and Marine Education Day at the Mississippi Museum of Natural History.



WETLANDS PERMITTING

- Hosted three workshops on the state and federal wetlands permitting process for municipal employees, marine contractors and environmental consultants. These workshops brought together wetland regulatory experts from MDMR, the Mississippi Secretary of State’s Office, the Mississippi Department of Environmental Quality and the U.S. Army Corps of Engineers to explain the different levels of review each agency carries out and to educate the participants on the characteristics and important functions of wetlands.
- Participated in several working groups to assist with permitting for specific project proposals and streamline permitting review for categories of projects. These include the Bureau of Ocean Energy Management’s Renewable Energy Task Force, the Back Bay Living Shoreline Working Group and a group working to mitigate flood risks on the Mississippi Gulf Coast by obtaining grants for stormwater management projects.
- Presented at a training workshop for surveyors who perform mean high tide surveys to educate on when these surveys would be required as part of the application process and how the surveys are used in the application evaluation.
- Met with engineering and public works employees from the City of Bay St. Louis to educate on coastal wetlands, regulated activities and the overall wetlands permitting process.
- Attended training and workshops on emerging wetland science, including the Restore America’s Estuaries Coastal and Estuarine Summit, the Bays and Bayous Symposium, wetland delineation training and invasive species identification training.

COMPLETED ACTIONS (application evaluations, compliance actions and project reviews)	
Regulated Activities/Coastal Zone Consistency Determinations	616
Potential Violations Investigated	41
Pre-Project Reviews	69
TOTAL	726



COASTAL RESTORATION AND RESILIENCY

BOAT ACCESS

- Award City of Gautier, MS- Shepherd State Park Boat Launch Project- Repair of existing launch- \$72,440. Project completed on August 14, 2023.
- Award City of Bay St. Louis, MS- Bayou Lacroix Boat Launch Project- Replacement of boat ramp \$105,562. Project completed on May 9, 2023.

BOATING INFRASTRUCTURE GRANT PROGRAM

- Award City of Waveland, Hancock County - \$200,000
- Blue Moon Properties, LLC, Ridgeland, MS - \$103,710

CLEAN VESSEL ACT

- Main Harbor Store- Ridgeland, MS- \$54,000; Replacement of pump-out system, pump-out vessel and trailer on the Ross Barnett Reservoir.
- Captain's Wharf Marina- Gulfport, MS- \$25,990; installation of pump out system on Bayou Bernard.

GULF OF MEXICO ALLIANCE

- Funded two Gulf Star projects - \$60,000
- Provided coordinator position for Coastal Resilience Team

NATIONAL HERITAGE AREA COMMUNITY GRANTS:

- Walter Anderson Museum of Arts - \$15,250.00
- MS Aviation Museum - \$17,000
- MSU University Television - \$47,250
- 100 Men Hall - \$25,000
- Maritime & Seafood Industry Museum of Biloxi, Inc. - \$15,000
- Mississippi Heritage Trust - \$36,000
- City of Ocean Springs - \$16,500
- Alice Mosley Museum - \$5,000
- Stone County, MS - \$15,000
- Diamondhead, MS - \$75,000
- Jackson County Board of Supervisors (Nature-based Tourism Coordinator) - \$20,000
- MSU Crosby Arboretum (Nature-based Tourism Coordinator) - \$20,000

NATIONAL HERITAGE AREA SPONSORSHIPS

- Shaw Homestead Remember the Past Festival: Land Trust MS Coastal Plain
- Mississippi Small Museum Conference: MS Humanities Council
- Paddle Paradise: City Of Diamondhead
- Tall Ships Festivals: Seafood & Maritime Museum
- Gulf Coast History Expo: City of Biloxi
- James Booker Music Festival: 100 Men Hall
- Listen Up Conference: Mississippi Heritage Trust
- The Love of Christmas: Gulfport Historical Society
- Historic Homes Inside & Out: Harrison County Library System (non-cash support)
- Old Biloxi Cemetery Tour: Preserve Biloxi (non-cash support)

EPA GRANT

- Digitize the Homeowners' Handbook to make a mobile app for citizens preparedness in storm hazard areas- \$274,262.00



GRAND BAY NATIONAL ESTUARINE RESEARCH RESERVE

The Grand Bay National Estuarine Research Reserve (NERR) is a program of the Mississippi Department of Marine Resources. Designated in 1999, the NERR is one of 30 reserves in the National Estuarine Research Reserve System (NERRS), which is a state-federal partnership operated by NOAA's Office for Coastal Management.





- Began work on stormwater management using green infrastructure with partners from the City of Moss Point.
- Community education programs with home schools and veterans continue and expand accessibility of the reserve comes into focus with programs for Jackson County's Exceptional School.
- Continuation of our participation in the MDMR internship program to provide exceptional and varied on-the-job experiences to Mississippi college students.
- Celebrate the Gulf Marine Education Festival receives nearly 8,000 visitors.
- Gulf coast families continue to make the Star Party at Grand Bay NERR part of their Christmas tradition.
- New external education grant focuses on Moss Point and Pascagoula eighth graders.
- Dramatic changes to the landscape continue from the NRDA Grand Bay Land Acquisition and Habitat Management project, our partnership with MDEQ and USFWS and almost 2,000 acres are burned with prescribed fire.
- Many new scientific efforts, including several new publications are initiated or completed, including surveys of mammals in the reserve and investigations into the use of Gopher tortoise burrows by other animals.

MARINE FISHERIES

The Office of Marine Fisheries provides for the effective management of the state's commercial and recreational marine fisheries, including oysters, shrimp, crabs and finfish. It includes conservation and overall management of marine resources through research and data collection as modified by relevant social, economic and biological factors. Marine Fisheries uses the most appropriate methods for management including, but not limited to, regulating harvesting, habitat enhancement, water quality monitoring for molluscan shellfish harvesting, setting of catch limits and seasons and seafood safety inspections of processing and distribution facilities.

- Received NOAA's approval to proceed with implementation MDMR's over \$21 million 2019 Mississippi Bonnet Carré Spillway Fisheries Disaster Recovery Program plan fund to assist in the recovery efforts of Mississippi fisheries and participants in the aftermath of the catastrophic twice opening of the spillway that year, first through the current emergency direct payment program poised to aid the most impacted of Mississippi's seafood industry.
- Coordinated with the Food and Drug Administration (FDA) and installed a new laboratory director equipping the agency with advanced technology for refined protocols and processes, as required, to establish certification for the Office of Marine Fisheries dry laboratory to improve the state's capability to complete complex seafood sample analysis and safety testing.
- In partnership with the Mississippi Department of Agriculture, MDMR completed stakeholder assistance from the \$1.6 million Seafood Processors Pandemic Response and Safety Block Grant program funded by the Pandemic Assistance provided in the Consolidated Appropriations Act of 2021 which was awarded to assist in the recovery efforts of Mississippi's seafood and catfish processing businesses.
- The Office of Marine Fisheries Protected Species coordination was valuable in addressing the extremely unusual stranding of a rare 34-foot fin whale on January 7, 2023, in Pass Christian. That agency program also continues to provide cooperative assistance through the NFWF Skimmer Trawl Turtle Excluder Device (TED) Reimbursement Program, issuing payments to Mississippi shrimpers who purchased TED gear to protect sea turtles by excluding the threatened and endangered species from their nets.
- Served on regional management committees of the Gulf States Marine Fisheries Commission (GSMFC), including Technical Coordinating Committee, Fisheries Information Network Committee, Menhaden Advisory Committee and Shellfish Committee, as well as the Artificial Reef, Blue Crab and Data Management Subcommittees, and the State/Federal Fisheries Management Committee. Marine Fisheries personnel also served on the Gulf of Mexico Fishery Management Council through their Standing Scientific and Statistical Committee (SSC), Red Drum SSC and Shrimp SSC.



ARTIFICIAL REEF BUREAU

- 68 loads of material, consisting of 2,150 concrete culverts, were donated to the program.
- 64 inshore reef assessments were performed, which yielded 684 individual specimens spanning 27 species.
- Eight offshore reef assessments which included the tagging of juvenile reef fish were conducted. Data was collected from a total of 371 juvenile reef fish from five different species.
- A permit application was submitted for two new artificial reef complexes approximately 25 miles south of Pascagoula.
- Four deployments of 860 artificial reef ecosystem discs were constructed on Cat Island, FH-8, FH-9/11, and FH-10 to enhance the sites and provide habitat for juvenile finfish.
- The engineering and design phase for the Katrina Key expansion is underway with sediment analysis and modeling ongoing.





FINFISH BUREAU

- Conducted a total of 1,644 angler surveys across 58 public access sites throughout the three coastal counties of Mississippi.
- Provided Mississippi anglers 36 days throughout May and June 2023 to fish for Red Snapper.
- Processed a total of 3,418 tickets from the commercial fishery and monitored the quotas for Red Drum, Spotted Seatrout and Southern Flounder.
- Processed, presented and approved 23 total state records, including six youth state records.
- Conducted 30 observer trips across the Mississippi offshore fleet as part of a collaborative multi-state discard monitoring program.
- Tagged and monitored a total of 60 Southern Flounder through passive acoustic telemetry.
- Conducted >200 fishery independent sampling events across the Mississippi Sound and worked cooperatively to assist other bureaus in monthly monitoring.
- Continued three Southern Flounder-focused projects aimed at monitoring relative abundance, movement patterns and habitat preferences across the three coastal drainages.
- Funded numerous projects through the USFWS Sportfish Restoration funds. These projects focus on monitoring sportfish populations and gathering tag recapture information for many important recreational species.
- Collected a total of 582 otoliths from nine different species through the Biological Sampling Program.

SALTWATER FISH RECORDS

AUGUST 2022

Leatherjacket	2.4 ounces	Rodie Armes (youth)
Ladyfish	2 pounds, 7.68 ounces	Rodie Armes (youth)

SEPTEMBER 2022

Redfin Needlefish	2.9 ounces	Rodie Armes (youth)
Hardhead Catfish	1 pound, 3.5 ounces	Rodie Armes (youth)

OCTOBER 2022

Blacktip Shark	58 pounds, 6.4 ounces	Rodie Armes (youth)
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NOVEMBER 2022

Dog Snapper	24 pounds, 2.4 ounces	Mark Kleinpeter (all tackle-spear)
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JANUARY 2023

Scrawled Filefish	3 pounds, 2.45 ounces	Tommy Phelps (all tackle-spear)
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FEBRUARY 2023

Mutton Snapper	5 pounds, 8.8 ounces	John Montgomery (conventional tackle)
Sheepshead	8 pounds, 1.6 ounces	Doug Borries (fly fishing)

MARCH 2023

Gulf Smoothhound	23 pounds, 15.99 ounces	Cooper Seibert (youth)
Blueline Tilefish	12 pounds, 5.6 ounces	Joshua Taylor (all tackle)

JUNE 2023

Cownose Ray	30 pounds, 5.6 ounces	Rodie Armes (youth)
Atlantic Needlefish	7.06 ounces	Rodie Armes (youth)
Gray Triggerfish	5 pounds, 15.2 ounces	Thomas Brown (youth)



Leatherjacket



Dog Snapper



SEAFOOD TECHNOLOGY BUREAU

REGULATORY ACTIVITIES

- Conducted 196 inspections of seafood processing and dealer facilities.
- Transitioning from paper inspections to digital inspections using ArcGIS Survey123 Application.
- Hosted Seafood Hazard Analysis and Critical Control Point (HACCP) training for the seafood industry and the public.

MICROBIOLOGY LABORATORY

- The MDMR received a grant from the Gulf of Mexico Energy Security Act (GOMESA) to construct a Microbiology Laboratory to support the Shellfish Sanitation Program for the State of Mississippi. The laboratory has been constructed and fully equipped to perform analyses. Laboratory staff are currently working with the Food and Drug Administration, Lead Evaluation Officers to receive certification to process seawater and shellfish tissue samples for fecal coliform analysis. Certification is expected in spring 2024.





SHELLFISH BUREAU

- Completed 88 one-minute dredge tows and 115 square meter dive samples for reef assessments.
- 22 active off-bottom harvesters as of June 2023 and 71 acres leased in the MDMR Commercial Aquaculture Park.
- Commercial aquaculture operations harvested approximately 247,405 oysters from July 1, 2022 – June 30, 2023.
- Completed 2022/2023 Off-Bottom Oyster Aquaculture training class with five participants.
- Water Quality Analysis performed through monthly water sample collection and fecal coliform analysis for FDA Compliance. The bureau collected 841 water samples for fecal coliform analysis from 89 sites across the Mississippi Sound.
- Harmful Algal Bloom Analysis performed through monthly seawater samples are collected at 15 locations for cell identification. Collected 108 samples and completed in-house qualitative analysis for HAB presence.
- Sanitary Surveys completed through annual evaluation of all environmental factors that affect the water quality of shellfish growing waters. Collected data monthly to determine environmental factors and fecal coliform results.



SHRIMP AND CRAB BUREAU

- Derelict Crab Trap Clean Up Program – 62 derelict crab traps were removed and recycled by MDMR staff. Since 1999, MDMR programs have recovered 22,404 derelict traps from Mississippi state waters.
- Special Permits - Issued 43 scientific research permits, three marine brood stock permits and one special transport permit.
- Live Bait Shrimp Dealer Licensing - Processed applications, inspected and provided assistance to 12 live bait camps.
- National Fish and Wildlife Foundation (NFWF) Skimmer Trawl Turtle Excluder Device (TED) Reimbursement Program - Issued payment to two commercial trawl fishermen. In total, 52 shrimpers have been reimbursed for skimmer trawl TEDs since the start of the program.
- Distributed 1,972 crab trap escape rings to commercial and recreational crab fishermen. Since the project began in October 2015, 79,568 escape rings have been distributed to 782 fishermen. 224 terrapin excluder devices (TEDs) were also distributed through this program. Since the project began, 7,800 TEDs have been distributed to 327 fishermen.
- Provided coordination and administrative support of eight Sport Fish Restoration (SFR) Act grants and sub-grants. This included formulating and submitting proposals, budgets, reports and ensuring compliance with all federal rules and regulations. Attended the 51st Annual Wildlife and Sport Fish Restoration (WSFR) Program Coordinators' Meeting for the Southeast Region.
- Assisted the MSU Extensions Program with the Deer Island Coastal Clean-Up event. Attended the Jackson County Sand Jam to educate the public on the use of turtle excluder devices in shrimp trawls and crab traps.



FISHERY INDEPENDENT TRAWL SAMPLING:

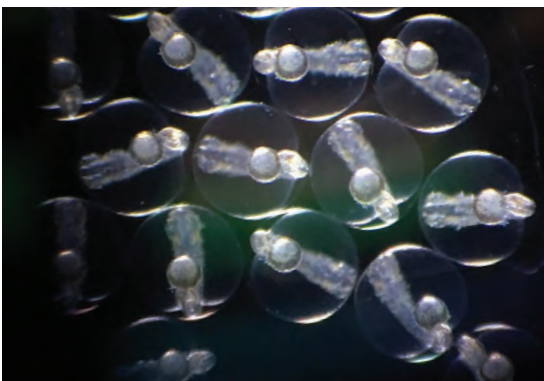
- Collected 207 standardized trawl samples at historical shrimp monitoring stations to observe shrimp growth and abundance, as well as determining an appropriate opening date for shrimp season.
- Collected 173 standardized trawl samples at historical Biloxi and expanded western sound sample sites to monitor finfish and invertebrate abundance. This includes 168 fixed station trawls and five randomly selected stations sampled from within the Mississippi Winter Crab Sanctuary (December to April only).
- Continued experimental use of trawl sampling in estuarine waters for monitoring of abundance and migratory patterns or early life stage finfish and crustaceans – 144 trawls were collected using two small trawl sizes.

FISHERY INDEPENDENT BLUE CRAB TRAP SAMPLING:

- Set 216 blue crab traps in three major bay systems to monitor Blue Crab abundance, sex and size composition and incidental catch composition in recreational harvest waters.
- Set 216 traps in commercial blue crab harvest areas to monitor seasonal abundance and sex and size composition of market-size blue crabs and also evaluate incidental catch composition.

HATCHERY BUREAU

- Spotted Seatrout broodstock tanks produced 2 million fertile eggs weekly during spawning cycles.
- Raised and released 250,000 Spotted Seatrout fingerlings and 4,000 six to eight inch Spotted Seatrout. Releases were conducted in eight different locations, spanning all three coastal counties.
- Continued collaboration with the Gulf Coast Research Laboratory (GCRL). Hatchery reared fingerlings were transferred to the Thad Cochran Marine Aquaculture Center for grow out to target release of 30,000 six inch to eight inch Spotted Seatrout.
- Tagged 1,200 larger Spotted Seatrout with Visible Elastomer Implants (VIE) for improved monitoring of success.
- Transported 60 wild-caught Southern Flounder to the Lyman Hatchery in conjunction with GCRL for future broodstock work at the MDMR Hatchery and Thad Cochran Marine Aquaculture Center.
- Assisted Gulf Coast high school programs to help the advancement of student aquaculture studies.



MARINE PATROL

- Body worn cameras have been issued to every patrol officer and are proven instrumental in every interaction with stakeholders. The increased quality of evidence has been noted in many successful criminal prosecutions since implementation. Furthermore, officer accountability is evident through a significant reduction in complaints against officers.
- The purchase and implementation of a squadron of three UAVs (drones), one of which has thermal capabilities, have been added to daily patrol efforts and special missions. The Office of Marine Patrols now employs six, FAA-licensed pilots to meet mission needs. The UAVs have been a part of the apprehension of one murder suspect, several Search and Rescue operations and natural resource investigations.
- The Office of Marine Patrol hosted several days of in-house training led by senior officers from both patrol and criminal investigations divisions. The training focused on the proper procedures for conducting boating under the influence (BUI) investigations, multijurisdictional case development, evidence collection and submission and federal fisheries case development and submission.
- Purchased an additional Avid 23Mag (aluminum bayboat) to augment quick response to shallow-water events. Marine Patrol has also purchased three 400-horsepower outboard engines to re-power the agencies largest offshore response vessel and flagship, the "Admiral Dewey."
- Procured three Chevrolet 1500 pickup trucks and one F-150 pickup truck, to replace aging emergency response vehicles.
- The Office of Marine Patrol cooperates with state and federal taskforces using officer liaisons. This provides timely and accurate information to safeguard the public and for the protection of critical infrastructure along the marine waterways.
- Responded to 24 boating accidents, including seven with injury and five fatalities.
- Responded to one drowning.
- Processed 21 public information requests.
- Officers and/ or staff participated in 5,205 training hours and 474 Reserve hours.



NOTABLE FISHERIES VIOLATIONS

Possession of Red Snapper during a closed season	1
Possession of undersized Red Snapper	3
Red Snapper seized for no Tails N' Scales	10
Undersized Spotted Seatrout	42
Undersized Red Drum	10

CITATIONS AND WARNINGS:

Fisheries Violations	328
Boating and Water Safety Violations	345
Boating Under the Influence	23
Wetlands Violations	2
Miscellaneous Violations	112
Courtesy Citations	137
Marine Litter Citations	17
Commercial Fishing Violations	33

The Derelict Vessel Program was established by the Legislature in Section 49-27-71 of the Mississippi Code of 1972, giving MDMR the authority to remove certain vessels determined to be a public safety or environmental hazard.

During FY23, the Mississippi Legislature's updated Derelict Vessel Act went into effect on July 1, 2022. The MDMR Derelict Vessel Program was moved under MDMR's Office of Marine Patrol enabling MDMR to proactively locate vessel owners and work with them to remove the derelict vessels themselves. There have been 42 derelict vessels removed with 10 of these removed by contracted vendors.

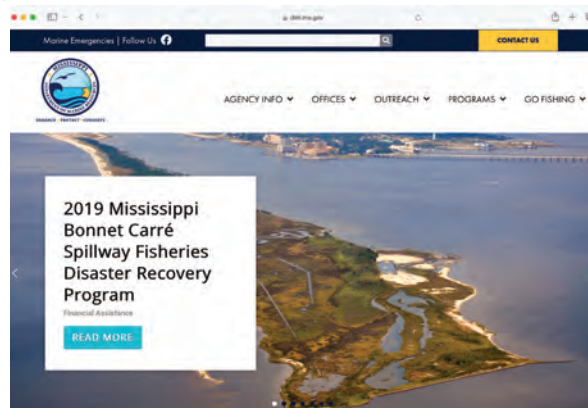
When vessels are abandoned in Mississippi's coastal wetlands or areas of heavy use by commercial and recreational boaters, the derelicts are hazardous to navigation and detrimental to the wetland environment. This program enforces state laws through the removal and disposal of derelict vessels, which protects the environment and keeps coastal wetlands and navigable waterways safe for the general public.



PUBLIC OUTREACH

The Public Affairs Bureau provides a proactive program of community outreach, education, public information and legislative and media relations. These outreach efforts promote awareness of the MDMR and its roles, responsibilities and programs in balancing economic interests with enhancing, protecting, managing and conserving Mississippi's marine resources. This bureau participates in events throughout the community and distributes information through news releases, social media sites, brochures, a rules and regulations book, calendar, photographs and content for the MDMR website. Public Affairs also provides support to other offices and programs within the agency to create consistent, professional materials to further the agency's mission. The Seafood Marketing program is contained within Public Affairs, and it markets the sale and consumption of Gulf seafood to people throughout Mississippi and the southeastern region of the country.

- Broadcast 30-second videos promoting the MDMR and the Mississippi Seafood program on social media and television throughout the southeast region.
- Printed 82,000 brochures and promotional items, which are used to increase awareness of the MDMR brand and educate the public about coastal resources, fishing rules and regulations and Mississippi Gulf-Fresh Seafood.
- Coordinated participation at 72 events where MDMR staff promoted the agency and its mission. Events included Celebrate the Gulf Marine Education Festival, Pathways 2 Possibilities and the Mississippi Deep Sea Fishing Rodeo, to name a few.
- Partnered with the Gulfport Chamber of Commerce for their Taste, Rattle and Roll event to host the 2023 Mississippi Seafood Cookoff. The cookoff was held in May at Centennial Plaza and Chef Calvin Lipe with Dockside Deli at Island View Casino in Gulfport won the title of Mississippi Seafood King.
- Assisted MDMR staff with promoting meetings and events on MDMR's website, social media and licensing screen.





ENHANCE • PROTECT • CONSERVE

The Mississippi Department of Marine Resources is dedicated to enhancing, protecting and conserving the state's marine interests by managing all marine life, public trust wetlands, adjacent uplands and waterfront areas to provide optimal commercial, recreational, educational and economic uses of these resources consistent with environmental concerns and social changes.





MISSISSIPPI DEPARTMENT
OF MARINE RESOURCES

1141 Bayview Avenue • Biloxi, MS 39530
228-374-5000 • dmr.ms.gov

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