

Mississippi Department of Marine Resources Strategic Plan



2019-2023

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Table of Contents

I.	Mission Statement and Core Values	3
II.	Philosophy	4
III.	Relevant Statewide Goals and Benchmarks	5
IV.	Overview of Agency Five-Year Strategic Plan	7
V.	Agency's Internal/External Assessment	9
	A. Internal Factors	9
	1. Doing the right things, better	9
	2. Planning for a changing workforce	9
	3. Looking at our community as a whole	9
	B. External Factors	10
	1. Natural/Man-made Disasters and Resiliency	10
	2. Coastal Restoration after Deepwater Horizon	10
	3. Oyster Production	11
	4. Changing Federal Priorities	12
	C. Management Systems	12
	D. Description of MDMR Programs	13
VI.	Agency Goals	15
	A. Quality and Safety of Mississippi Seafood	15
	B. Marine and Estuarine Habitat	17
	C. Native Marine Species	21
	D. Coastal Resiliency	24
	E. Public Safety and Emergency Response	27
	F. Public Use of Marine Environment	31
	G. Outreach, Research, Training and Education	33
	H. Efficient and Effective Public Service	35

I. Mission Statement and Core Values

The Mississippi Department of Marine Resources, (hereafter referred to as “MDMR”), is dedicated to enhancing, protecting and conserving the marine resources of Mississippi for present and future generations.

MDMR commits to the following core values that govern the work we do. They clarify who we are, articulate what we stand for and guide us in making decisions. They express what we stand for and how we do business with each other and our constituents.

- A. We act with honesty and honor without compromising the truth.
- B. We use sound science and financial principles to fulfill our mission.
- C. We pursue innovative ideas that make positive changes.
- D. Our employees take initiative and give their best.
- E. We acknowledge and assume responsibility for our actions, decisions and policies, both individually and as an agency.
- F. We respond promptly, courteously and as completely as possible to every question, complaint or request for assistance.

We are dedicated to our mission.

II. Philosophy

The MDMR is a recognized leader and innovator in marine resource management. This reputation has been earned through the Agency's efforts to:

- A. Ensure healthy habitat and water quality that sustains marine fisheries at optimum yield levels.
- B. Promote safe seafood products of the highest quality.
- C. Effectively balance economic development with ecological and environmental conservation.

The MDMR seeks to satisfy the diverse needs and desires of all our customers, resolving user group conflicts whenever possible. Through proactive public education and outreach, the work of MDMR will increase the knowledge of the public and the various constituents on the process and importance of marine resources and conservation.

To realize this vision the Agency will monitor and improve the management system to support an ever-increasing sustainable use of these marine resources. The decision making by staff and Agency leaders will continue to be based on the best available science and information and accurate up-to-date needs assessments. MDMR will leverage available human and financial resources and knowledge through interagency and intra-agency cooperation, collaboration and teamwork (including reducing instances of duplication of research and management efforts) and effective use of available technology.

III. Relevant Statewide Goals and Benchmarks

(Source: Building a Better Mississippi: The Statewide Strategic Plan for Performance and Budgetary Success, July 2014)

Statewide Goal 1: Natural Resources. To ensure that current and future generations have access to the state's abundant natural resources through restoration, protection, conservation and wise development of those resources.

Relevant benchmark: Percentage of oyster production acreage that currently is limited due to pollution.

Relevant benchmark: The estimate of population of invasive species.

Relevant benchmark: Measures of condition of the state's marine species.

Statewide Goal 2: Infrastructure. To ensure the construction and maintenance of infrastructure (including roadways, waterways, railways, airports, water and sewer systems, pipelines, electricity lines, broadband connections, public buildings) are adequate to meet the needs of citizens and the business community and to foster economic growth.

Relevant benchmark: Port utilization, capacity and connectivity.

Statewide Goal 3: Health. To protect Mississippians from risks to public health and to provide them with the health-related information and access to quality healthcare necessary to increase the length and quality of their lives.

Statewide Goal 4: Economic Development. To develop a robust state economy that provides the opportunity for productive employment for all Mississippians.

Relevant benchmark: State business tax climate (comparison of more than 100 variables across five major areas of taxation: business taxes, individual income taxes, sales taxes, unemployment insurances rates and property taxes).

Relevant benchmark: Percentage contribution of agriculture, forestry, fishing and hunting sector to the state's gross domestic product.

Statewide Goal 5: Public Safety and Order. To protect the public's safety, including providing timely and appropriate responses to emergencies and disasters, and to operate a fair and effective system of justice.

Relevant benchmark: Average emergency response time to natural and man-made disasters.

Relevant benchmark: Average time for businesses to recover following a natural or man-made disaster.

Statewide Goal 6: Government and Citizens. To create an efficient government and an informed and engaged citizenry that help to address social problems through the payment of taxes, the election of capable leaders at all levels of government and participation in charitable organizations through contributions and volunteerism.

Relevant benchmark: Percentage of state employees leaving state service within five years of employment.

IV. Overview of Agency Five-Year Strategic Plan

MDMR, created by the Legislature in 1994, manages our coastal resources through the authority of the Commission on Marine Resources. The MDMR is dedicated to enhancing, protecting and conserving the marine interests of Mississippi for present and future generations. We manage all marine life, public trust wetlands, adjacent uplands and coastal areas for the long-term recreational, educational, commercial and economic benefit of the citizens of Mississippi.

The Gulf Coast is home to some of the nation's most productive shellfish and finfish waters and their supporting coastal wetlands and is rich in natural resources on which many generations have depended for their livelihoods. Our coastal resources have not only sustained a growing economy, but have contributed greatly to the culture, heritage and quality of life that define Mississippi Gulf Coast residents as a people.



The MDMR is pleased to submit this Strategic Plan for 2019-2023 as a guide for the proper and best use of Mississippi's coastal and marine resources. The MDMR and the CMR are committed to implementing the program goals identified in this strategic plan. We look forward to managing Mississippi's marine life, public trust wetlands and waterfront areas for the long-term recreational, educational, commercial and economic benefit of everyone in the state. MDMR continues to focus on the following:

- Ensure safe, high quality Mississippi seafood products.
- Restore, protect and conserve marine and estuarine habitats.
- Enhance, protect and conserve native marine species.
- Enhance community and ecosystem resiliency.
- Prevent, prepare for and respond to public safety and emergencies of the coastal marine environment.
- Encourage and educate individuals, businesses and communities to engage in behaviors that restore, protect and conserve marine resources.
- Enhance the public uses of the marine environment.
- Being a good steward of the human, financial and physical resources provided to the agency by the citizens of the state.

These goals can only be achieved with a well-thought-out plan for the future. This strategic plan articulates what we want to do and how we plan to do it. It charts our path for meeting the wide variety of needs of Mississippi's diverse communities, particularly those on the Mississippi Gulf Coast. We have listened to stakeholders in public hearings, at formal and informal meetings and in workshops on various aspects of marine resources management. We are committed to a balanced approach in addressing individual and community needs, while keeping in mind the requirements for the Mississippi Gulf Coast's long-term health and viability of the coastal marine environment. The agency's senior management, staff and all personnel are committed to supporting the Agency's major programs and meeting the goals and objectives set forth in this Strategic Plan. With their full commitment, we are certain that we will succeed in realizing the common vision shared by our community leaders and the general public for the future of the Mississippi Gulf Coast.

The CMR and the MDMR have identified five priority areas for 2019-2023. Those include addressing natural and man-made hazards and improved resiliency, continued coastal restoration due to the Deepwater Horizon oil spill, challenges associated with oyster production and the potentially changing federal priorities. The Agency also wants to restructure its strategic planning process to maximize the staff's effectiveness in achieving the mission.

V. Agency's Internal/External Assessment

MDMR has identified several internal and external factors that will influence the Agency's ability to achieve its targeted performance goals. The agency has been strategically planning for these possibilities and will, as it has in the past, meet these challenges proactively.

A. Internal Factors

1. Doing the right things, better.

MDMR has restructured its strategic plan to more effectively and efficiently address the way in which the Agency processes the work it does. Through the use of sound science and interdisciplinary thinking, the MDMR will have a better understanding of the various actions affecting marine resources and the best way to address challenges.

2. Planning for a changing workforce

The marine environment is constantly changing, but so are the systems and resources that MDMR uses to manage that environment. MDMR must continue to adapt to this changing work environment. Part of that changing environment is a changing workforce. Succession planning is the process whereby an organization ensures that it recruits and develops employees to fill each key role within the agency. MDMR will recruit, recognize and retain the best talent and provide its highly qualified and capable staff with the proper equipment and resources to manage the marine environment efficiently.

3. Looking at our community as a whole

A holistic view of our community is necessary. Through an integrated approach, the MDMR will address the biological and physical controls of the marine resources, as well as those economic factors that impact the health of the marine environment. The agency will use this approach to achieve a vibrant community with a robust economy, a good quality of life and a productive ecosystem.

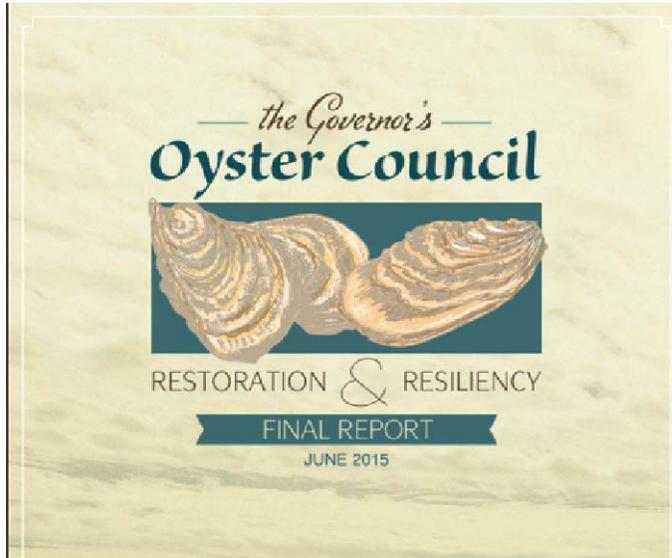
B. External Factors**1. Natural/Man-made Disasters and Resiliency**

Coastal counties nationwide make up only 17 percent of America's land area, but they are home to 53 percent of the population. Residents are drawn to the natural beauty, recreation opportunities, seafood and lifestyle at the water's edge. This growth, while positive economically, puts more people in the path of hurricanes and other coastal storms and flooding. Also, as communities spread, pressure grows on wetlands and other natural protective systems. Most Mississippi coastal communities have been planning for greater resilience - the ability to bend without breaking and bounce back from a natural or manmade disaster or environmental change. In an effort to enhance, protect and conserve the Mississippi coastal marine environment, MDMR has recognized its role as a leader in community and ecosystem resiliency.

More than 84 percent of Mississippi's coastal shoreline is vulnerable to erosion, and the primary causes are coastal storms and flooding. The threat of shoreline erosion is greatest with coastal storms and associated storm surge. Coastal erosion from recreational boating, maritime navigation and poorly designed shoreline protection systems also can lead to erosion issues in bays, bayous and rivers. MDMR is aware of the damage caused by shoreline erosion. While there are many factors that exacerbate erosion, including natural forces, MDMR is focused on shorelines along bays and bayous and along the shorelines in three of major industrial parks in coastal Mississippi.

2. Coastal Restoration after Deepwater Horizon

The Gulf Coast region was significantly impacted by the Deepwater Horizon oil spill. Restoring an area as large and complex as this is challenging and costly. To add to these challenges, Gulf restoration funding is distributed among a number of entities and programs, each with its own set of guidelines and decision processes. Inter-governmental coordination, engagement and transparency are crucial for ensuring that the available funding is used in the most effective and efficient way possible. The task of restoring the Gulf environment is a multi-generational undertaking. A comprehensive approach to Gulf restoration must include the engagement of a wide and diverse array of stakeholders, including federal, state and local governments, tribes, private businesses, non-governmental organizations (NGOs) and the general public. In late 2016, the Gulf Coast Ecosystem Restoration Council released a proposed update to its 2013 Comprehensive Plan. The draft provides important additional strategic guidance for the Council to follow as it makes decisions on funding projects and activities aimed at restoring the Gulf of Mexico.



3. Oyster Production

The oyster seasons since the early 2000s have been low-producing ones in Mississippi and throughout the Gulf. In 2004, over 400,000 sacks of oysters were harvested from Mississippi waters. Since then, the resource has endured Hurricane Katrina, the BP Oil Spill and the Bonnet Carré Spillway opening. In the 2013–2014 season, oystermen harvested about 70,000 sacks of oysters. The 2014–2015 season was an even slower year, with production of 26,000 sacks. The

reefs were stressed, and industry representatives and MDMR biologists debated if Mississippi should open a season at all. On Feb. 2, 2015, Gov. Phil Bryant created the “Governor’s Oyster Restoration and Resiliency Council” with a mandate to develop a comprehensive report recommending actions and management strategies based on best practices in the oyster industry, and regulatory framework. These recommendations would outline resiliency strategies to respond not only to disasters such as the Bonnet Carré Spillway opening or the BP Oil Spill, but also to other forces, including hurricanes and sudden shifts in economic and environmental conditions. These recommendations also were to address environmental and economic factors and influences, as well as aquaculture and emerging technologies. The Oyster Council also was to propose any regulatory or statutory revisions necessary or advisable to implement actions contained in the report. Another of the Council’s responsibilities was to propose one or more projects and programs, including aquaculture (pilot or ongoing), with sufficient information and clarity to be implemented as part of initial actions to be taken in accordance with those recommended in the report. Several of the recommendations in the report rely heavily on MDMR’s resources and staff. For instance, the report called for an Oyster Extension Agent within MDMR to facilitate and coordinate aquaculture and private leasing requirements, processes and activities. It also recommended MDMR serve as the umbrella leaseholder with intent to sublease to farmers, thus streamlining the private leasing process for off-bottom oyster farming. Finally, as part of a proposed “Oyster Stewardship Program,” the report recommended MDMR and Secretary of State of Mississippi work closely with the University of Southern Mississippi’s Gulf Coast Research Laboratory and the Mississippi State University Coastal Research and Extension Center to provide research of the oyster resource and hands-on assistance for further training in the field of aquaculture as it relates to oyster farming.

4. **Changing Federal Priorities**

As these changes occur, MDMR will need to work with public officials to evaluate priorities and clearly communicate the impact.

C. **Management Systems**

1. **Management Policies in Place**: MDMR's management policies are issued as a numbered set and maintained for quick reference in each office. All new employees are required to review and acknowledge in writing that policies have been read and understood. As new employees begin work and/or as policies are added or modified within the management series, it is the responsibility of each office supervisor to review contents with their employees. An annual review session is scheduled to re-emphasize the importance of these policies to all employees. Included within this series are policies covering personnel management, travel records management, duty hours, procurement, correspondence, conduct of public hearings, etc.
2. **Operational Procedures**: A management operations policy series is in place that addresses MDMR operations, security and property procedures. These procedures are reviewed in a similar manner to those for management policies, explained in the above paragraph. Included in the operational procedures series are instructions and policy guidance applicable to property use and management, aircraft, vehicle and boat usage, security, computer and software management, business continuity and disaster recovery, media releases and safety.

D. Description of MDMR Programs

1. **Marine Fisheries:** Marine Fisheries are important and highly visible renewable natural resources of Mississippi. MDMR places high priority upon supporting sustained finfish and shellfish resources for the enjoyment and consumption of all citizens. This public trust is carried out to ensure the protection of these resources and the economic and recreational viability of both commercial and recreational fishing for current and future generations. Marine Fisheries personnel are wholly dedicated to keeping Mississippi's commercial and recreational fishery resources healthy and sustainable. It is comprised of the following bureaus: Finfish, Shellfish, Seafood Technology, Artificial Reef and Shrimp and Crab. This office uses the most appropriate methods for management, including, but not limited to, regulating harvesting, habitat enhancement, water quality monitoring for shellfish harvesting, setting catch limits and seasons and seafood safety inspections or process and distribution facilities.

2. **Coastal Resources Management:** The Coastal Resources Management Program addresses the legislative mandates of the State of Mississippi Coastal Wetlands Protection Act and the federal Coastal Zone Management Act. This is done through coastal wetlands permits, the Mississippi Coastal Program and wetlands acquisition, preservation, conservation, enhancement and management. This Program includes the Coastal Preserves Bureau and the Coastal Wetlands Permitting Bureau.

3. **Tidelands Trust:** The Tidelands Trust Fund Program began in 1994 and is supported by funds derived from the lease rentals of tidelands and submerged lands. The Tidelands Trust Fund Program's mission is to utilize public trust funds in the manner allowed by law to develop, protect and conserve coastal resources and to increase the public's access and enjoyment of all coastal waters.

4. **Marine Patrol:** The Marine Patrol Program is responsible for the enforcement of all laws and regulations for the protection, propagation, preservation or conservation of all saltwater aquatic life in the marine area, which includes over 1,080 square miles of state and federal waters, 369 miles of shoreline and 66,933 acres of marsh and land associated with the three coastal counties – Harrison, Hancock and Jackson. This office also enforces the ordinances passed by the Commission on Marine Resources for the protection, preservation and conservation of Mississippi's seafood, aquatic life and associated coastal wetlands habitats. Marine Patrol also carries out state and federal laws pertaining to boating safety and provides emergency assistance to boaters.

5. **Administrative Services:** The Finance and Administration Program is designed to provide operational support and perform as an integral part of all other program efforts of the MDMR, including the Office of the Executive Director and the Commission on Marine Resources. Services are provided through the Finance and Administration Office or through functions that report directly to the Executive Director. Administrative services includes Human Resources, Public Affairs and Finance and Administration.

6. **Coastal Restoration and Resiliency:** The mission of this program is to develop a plan to restore Mississippi coastal resources and to provide for healthy and resilient communities and economies in the coastal area. This mission is accomplished through the following areas: Coastal Impact Assistance Program, Boating Infrastructure Grant Program, Clean Vessel Act, Gulf of Mexico Alliance and Mississippi Gulf Coast National Heritage Area.

7. **Grand Bay National Estuarine Research Reserve:** The mission of Grand Bay NERR is to practice and promote informed stewardship of the NERR and Mississippi coastal resources through innovative research, education and training. It was established in 1999 under the provisions of the Coastal Zone Management Act of 1972 and is one of 28 research reserves in the U.S. The NERR is managed through a unique local, state and federal partnership designed to promote estuarine research and education. It sits on 18,400 acres and is situated in southeast Jackson County.

VI. Agency Goals

GOAL A: Quality and Safety of Mississippi Seafood. Ensure sustainable, high-quality Mississippi commercial seafood products.

Program Areas: Marine Fisheries, Seafood Marketing, Marine Patrol.

MDMR is responsible for ensuring that suitable, sanitary conditions exist for harvesting, processing and distributing seafood in Mississippi; for assisting the seafood industry with compliance on HACCP and ISSC/NSSP regulations; for ensuring that seafood dealers and processors comply with laws regarding sale and storage of seafood; for encouraging the purchase and use of wild-caught Gulf seafood.



Photo – Michael Touchet

OBJECTIVE A1: Ensure that suitable sanitary conditions exist for processing and distributing seafood in Mississippi.

Outcome: Fewer negative food safety incidents related to Mississippi seafood.

Outcome: Economic worth of MS shrimp fishery (in excess of millions).

Outcome: Time to write license (minutes).

A.1.1: STRATEGY: Inspect seafood processing and distribution facilities on a quarterly basis to ensure compliance with state and federal seafood sanitation safety regulations.

Output: Number of seafood processing and distribution facilities in compliance with regulations.

Output: Number of seafood inspections conducted.

Output: Number of seafood units inspected.

Task: Ensure the processing procedures of all new seafood dealers, new buildings and new equipment are validated.

Task: Annually evaluate effectiveness of inspections.

Task: Meet the requirements associated with the highest level of certification for the Seafood Technology program through the Food and Drug Administration's P.E.E.R. audit process.

Task: Implement and meet the requirements of the State Vibrio Risk Management Plan through the FDA's Vibrio P.E.E.R. process.

Task: Ensure all health and safety guidelines are adhered to during seafood shop inspections.

A.1.2: STRATEGY: Enforce laws and regulations to ensure compliance with state and federal seafood sanitation safety regulations.

Output: Number of water samples collected to monitor shellfish season.

Output: Number of shrimp trawls sampled.

Output: Number of licenses sold.

Efficiency: Average cost per shrimp trawl per sampling trip.

Efficiency: Average cost per water sample.

Efficiency: Total license revenue collected.

Task: Routinely inspect refrigerated carriers for proper regulated cooling.

Task: Ensure proper licenses are maintained by seafood dealers and recreational and commercial harvesters

A.1.3: STRATEGY: Promote local seafood safety and quality

Task: Promote the reputation and safety of our seafood locally and throughout the state and the region.

Task: Work with local restaurants and chefs who use local seafood and promote it.

GOAL B: Marine and Estuarine Habitat. Restore, protect and conserve the marine and estuarine habitats of Mississippi using sound science and responsible regulation.

Program Areas: Marine Fisheries, Coastal Resources Management, Tidelands Trust, Coastal Restoration and Resiliency, Grand Bay National Estuarine Research, Reserve, Marine Patrol.

Bays, estuaries and near-shore coastal waters provide essential habitat for 96 percent of the marine fisheries species in the Southeast, and coastal and inland productivity play an important role in supporting offshore fisheries. MDMR increases fish habitat through artificial reef development and by supplying derelict steel hull vessels for use as artificial reef material. Wetlands serve as habitat for many marine species, but also play an important role in protecting sensitive marine and estuarine habitats.



Through issuing coastal wetlands permits, MDMR ensures that wetlands are managed in a manner that is protective of sensitive marine and estuarine habitats. Wetlands serve as habitat for many marine species, but also play an important role in protecting sensitive marine and estuarine habitats. Through issuing coastal wetlands permits, MDMR ensures that wetlands are managed in a manner that is protective of sensitive marine and estuarine habitats.

OBJECTIVE B1. Protect, restore, conserve and create coastal, marine and estuarine habitat.

Outcome: Coastal wetlands permitting time (days).

Outcome: Average coastal preserves under active management plans (acres).

Outcome: Increase in completed scientific research studies each year at the Grand Bay NERR.

Outcome: Increase in habitat protected by the Grand Bay NERR.

B.1.1: STRATEGY: Increase fish and shellfish habitat through artificial reef development in Mississippi coastal and adjacent federal waters.

Output: Number of acres of artificial reefs for fish and shellfish habitats created, restored or maintained.

Since the decimation of nearly all of Mississippi's artificial reefs in 2005, MDMR has managed to restore most of the inshore and offshore artificial reefs. These artificial reefs provide valuable marine habitat, help reduce shoreline erosion and are estimated to have an economic value of over \$78 million annually.

Task: Create, restore and maintain artificial reefs.

Task: Maintain long-term monitoring of fish and shellfish habitats and allow staff to evaluate these productive habitats and their ability to support marine species.

B.1.2: STRATEGY: Increase the number of acres of public oyster reefs through cultch planting in the Mississippi Sound.

MDMR has seen much success in many areas, including continued effort to revitalize the oyster fishery through cultch planting and artificial reef enhancement. The agency has made a substantial effort to restore Mississippi's valuable oyster fishery through cultch plants that — since Katrina — have dispersed more than 281,000 cubic yards of limestone and oyster shell over 5,000 acres on the St. Joe, Pass Marianne, Telegraph, Henderson Point and Pass Christian reefs.

Output: Number of acres of oyster reef created by cultch planting.

Task: Deposit oyster cultch material.

Task: Survey and monitor potential cultch-planting sites.

B.1.3: STRATEGY: Enhance the state's 20 Coastal Preserve areas.

One of the agency's conservation efforts, the Coastal Preserves Program, involves acquiring, protecting, and enhancing tidal wetlands along the coast. The Grand Bay National Estuarine Research Reserve in Jackson County is further facilitating wetland research and education by making its resources available to researchers from all over the country. Many federal, state and local agencies are participating in this program, as well as community organizations, economic development interests and local environmental groups.

Output: Number of acres of wetlands acquired or restored.

Output: Number of coastal wetland permits issued.

Output: Coastal wetlands permits and consistency.

Output: Number of scientific research studies completed by the Grand Bay NERR.

Output: Number of community members served by the outreach programs at Grand Bay NERR.

Output: Acreage of habitat protected and managed by the Grand Bay NERR.

Efficiency: Costs supported by the Grand Bay NERR to accomplish the partnerships in scientific research studies.

Efficiency: Cost of acquisition of land to increase the acres of habitat protected by the Grand Bay NERR.

Efficiency: Dollars spent for wetlands acquisition.

Task: Maintain the Grand Bay National Estuarine Research Reserve.

Task: Acquire land meeting criteria for additional coastal preserve wetland areas.

Task: Maintain monitoring of wetland habitats that allow staff to evaluate the health and long-term viability of habitats and their effects on marine species.

Task: Conduct a variety of research projects to better understand the health and potential changes in these habitats.

Task Work with partners to extend protections through land acquisition, and engages in a variety of restoration projects to improve estuarine habitat function and resiliency.

B.1.4: STRATEGY: Restore beach, dune, maritime forest and marsh habitat.

The loss of over 200 acres annually of coastal wetlands and related habitats has resulted in corresponding losses in ecological functions important for the sustainability of commercial and recreational fisheries as well as for water quality, storm protection and wildlife habitat. The Coastal Preserves staff works with local, state and federal agencies and stakeholders to formulate objectives, then conceives, designs, and implements restoration projects in coastal Mississippi. As Mississippi's Coastal Zone Agency, MDMR is the primary source of expertise, guidance, coordination and implementation of this strategy. Two major components that support this strategy are our Permitting Bureau and our Restoration Coordination Team.

Coastal Preserves also coordinates the efforts of the Beneficial Use of Dredged Material Group and works with various stakeholders and regulatory agencies to maximize implementation of the MDMR's Beneficial Use of Dredged Material Master Plan. Also, the primary obstacle to restoring these habitats back to their natural states has been the control of non-native invasive species that have spread rapidly across the state-owned lands and waters of the coastal preserves since Hurricane Katrina.

Output: Number of acres of beach, dune, maritime forest and marsh habitat restored.

Task: Restore tidal marsh through the beneficial use of dredged material.

Task: Restore our islands and other critical landforms.

Task: Remove storm debris and trash from Coastal Preserve sites.

Task: Conduct derelict crab trap removal programs.

Task: Control and eradicate non-native invasive species.

Task: Provide primary habitat restoration expertise for the Mississippi Coastal Zone, including design, planning, coordination and implementation.

Task: Restore marshes and supporting habitats to buffer and filter coastal waters to reduce nutrient and bacterial loading. Clean water equals healthier seafood.

B.1.5: STRATEGY: Issue coastal wetlands and scientific permits that ensure compliance with appropriate state and federal laws and regulations.

The permitting staff administers the regulatory program under the Coastal Wetlands Protection Act. Under the regulatory program, MDMR provides information to the public, evaluates applications for proposed coastal wetland impacts, and reviews comments from state, federal and local agencies and from the general public and conducts on-site inspections of proposed project locations. The staff evaluates applications and compiles information gathered during the review. An MDMR recommendation is made to the CMR to issue, condition or deny major permits. Permitting staff also verify compliance of permitted activities and investigate potential wetlands violations as well as violations of U.S. Army Corps of Engineers Section 404 jurisdictional wetlands.

Output: Preserves acquisition (acres).

Task: Process all requested coastal program permits annually (approximately 1,000) and determine federal consistency as applicable.

Task: Provide technical assistance to prospective permit requesters regarding the process, requirements and access to useful information to aid in processing permits.

Task: Provide recommendations for mitigation to compensate for wetlands loss.

Task: Educate public officials and contractors.

Task: Regulate wetlands impacts through partnerships with other federal and state agencies.

Task: Issue Scientific Research Permits for marine waters, coastal preserves and GBNERR.

B.1.6: STRATEGY: Enforce laws and regulations to ensure compliance with Marine Litter Act and the Wetlands Act.

Task: Enforce Marine Litter Act.

Task: Patrol wetlands areas for violations of the Wetlands Act.

GOAL C: Native Marine Species. Enhance, protect, and conserve native marine species using sound natural science and enforcement of responsible regulation.

Program Areas: Marine Fisheries, Tidelands Trust, Marine Patrol, Grand Bay National Estuarine Research Reserve



Marine fisheries are an important and highly visible renewable natural resource in Mississippi. The MDMR places high priority on supporting sustained finfish, shrimp, crab and oysters for the enjoyment and consumption of all citizens. This public trust is carried out to ensure the protection of these resources and the economic and cultural viability of both commercial and recreational fishing for current and future generations. The Office of Marine Fisheries provides effective commercial and recreational management of the state's marine fisheries, including oysters, shrimp, crab and finfish. Some species are managed in conjunction with federal agencies. The program includes conservation and overall management of living marine organisms through research and data collection as modified by relevant social, economic and biological factors. Marine Fisheries staff use the most appropriate methods to manage each marine species, including, but not limited to, regulating, habitat enhancement, water quality monitoring for oyster harvesting, setting of catch limits and seasons for many species and seafood inspections of processing and distribution facilities.

OBJECTIVE C1: Ensure marine fisheries management activities are protective, sustainable and beneficial to the citizens of Mississippi.

Outcome: Economic worth of MS shrimp fishery (in excess of millions).

Outcome: Sacks of oysters harvested.

Outcome: Economic value of industries aided (in excess of millions).

Outcome: Economic estimate of 13,000 Charter Boat trips (in excess of millions).

Outcome: Increase the survival and success rates of aquaculture species released into the Mississippi Sound.

C.1.1: STRATEGY: Maintain maximum sustainable yield finfish, shrimp, crab, and oyster populations through effective regulation in Mississippi coastal waters.

Task: Maintain monitoring of finfish, shrimp, crab and oyster populations that allow staff to evaluate the health and long-term viability of habitats and their effects on marine species.

Task: Assess finfish, oyster, shrimp and crab populations.

Task: Collect and interpret biological information relative to stock assessments for marine finfish.

Task: Monitor and report commercial and recreational landings data.

Task: Perform long-term study of fishery disaster recovery and implications for Mississippi coastal waters through cooperative efforts with fishermen.

Task: Collect shell retention fees for reef revitalization. Revise, improve and maintain the electronic trip-ticket/tagging program.

Task: Maintain oyster farm lease program.

Task: Collect and analyze catch/unit data, catch/sales data; real-time hydrological monitoring data.

Task: Inspect and license live-bait camps.

Task: Issue collection permits for individual research projects.

C.1.2: STRATEGY: Enforce laws and regulations to ensure compliance with state laws and regulations related to native marine species populations.

Task: Patrol all fishing piers to provide an enforcement presence.

Task: Conduct routine inspections of recreational harvesters ensuring compliance of size and creel limits.

Task: Conduct patrols of fishing reefs and other known harvest locations ensuring compliance of size and creel limits.

Task: Conduct outreach programs reminding harvesters of size and creel limits and opening and closing of seasons.

OBJECTIVE C2: Restore, enhance and alleviate pressure on native marine species populations through aquaculture facilities and processes.

Globally, the demand for seafood is increasing, while wild fish harvest is challenged and is predicted to have reached maximum yield. Aquaculture production is not only necessary to meet the current seafood demand; but it also offers growth potential, helps address food security, and creates jobs. The MDMR Aquaculture Facility is situated on 214 acres in Lyman, Mississippi.

C.2.1: STRATEGY: Maintain the Lyman Fish Hatchery and support aquaculture efforts.

The Lyman Fish Hatchery in North Gulfport works with GCRL on the Spotted Seatrout Project. GCRL scientists have worked in partnership with MDMR to replenish the coastal Spotted Seatrout population since the 2016 stock assessment identified them as overfished.

Task: Support the early stage growth of Spotted Seatrout and Atlantic Croaker as part of an on-going stock enhancement program for GCRL.

GOAL D: Coastal Resiliency. Enhance resiliency and minimize vulnerability of the Mississippi Gulf Coast.

Program Areas: Coastal Resources Management, Coastal Restoration and Resiliency, Grand Bay National Estuarine Research Reserve

Over 60 million people in the U.S. call the Gulf of Mexico their home and about a third of those live in the coastal counties and parishes. Our warm climate, low cost of living and natural beauty continue to attract people to the region. The population of the five Gulf States is expected to increase by an additional 14 million people by 2030. With these population increases, homes, businesses and infrastructure are at a greater risk of damage from hazards such as hurricanes, coastal storms and flooding. Communities that prepare for short- and long-term impacts and consider hazard risks in land-use planning, architecture development and management of natural habitats are able to recover from disasters more quickly. Resilience is the capacity of human and natural/physical systems to adapt to and recover from change, such as a natural disaster.

OBJECTIVE D1: Provide enhancements for coastal communities, ecosystems and economies to become more resilient to coastal hazards.

Outcome: Projects or programs (number of projects or programs receiving funds).

Outcome: Reduced damages, lower costs and quicker recovery from coastal hazards.

Outcome: Coastal communities utilizing resilience indicators to assess their vulnerabilities and track progress toward greater resilience.

Outcome: Increased ecosystem resilience.

Outcome: Public served (number of cities and counties awarded grants).

D.1.1: STRATEGY: Develop and provide tools to coastal communities to better understand the risks and impacts associated with coastal hazards.



The Coastal Resilience Team of the Gulf of Mexico Alliance (GOMA) is led by the MDMR, but has active participation from all five Gulf States, federal agencies working in the region, as well as academia, businesses and non-profit organizations. GOMA, in partnership with the Mississippi-

Alabama Sea Grant Consortium, has developed tools to assist coastal communities in better understanding the risks and impacts associated with coastal hazards. The Coastal Resilience Index, Fisheries Resilience Index Tourism Resilience Index and Ports Resilience Index are self-assessment tools developed for the respective industry leaders. They serve as a simple and inexpensive method of assessing if sector facilities are prepared to maintain operations during and after disasters. Completing the PRI will assist these entities in developing actions for long-term resilience.

Task: Provide resiliency index tools to entities to self-assess their vulnerabilities and track progress towards greater resilience.

Task: Assess the gaps to quantify and reduce risks within the natural, built, socioeconomic, and human health systems of Gulf Coast communities.

Task: Collaborate on local, state and regional levels to enhance the ecological and economic health of coastal waters.

Task: Promote and expand resilient and environmentally responsible operations and best management practices at marinas and shorelines.

Task: Develop a voluntary certification program in partnership with the GOMA Resilience Team to establish guidelines and a certification program uniform over the five Gulf States for clean/resilient marina standards.

OBJECTIVE D2: Restore and create coastal features that serve to protect the built and natural environment.

D.2.1: STRATEGY: Restore barrier islands, wetlands and other coastal features for protection and resiliency purposes.

Output: Number of grants received.

Output: Number of grants awarded.

Efficiency: Dollar amount of grants received (\$ M).

Efficiency: Dollar amount of grants awarded (\$ M).

Through the Mississippi Coastal Improvements Program and the Integrated Programmatic Environmental Impact Statement (USACE, 2009a), USACE, MDMR and other stakeholders evaluated an array of measures to promote the recovery of coastal Mississippi from damages caused by the hurricanes of 2005 and to increase the resilience of the coast against damage from future storms. The record of decision for the MsCIP PEIS recommended key elements for phased implementation over the next 30–40 years. The Comprehensive Plan, as evaluated in the MsCIP PEIS, includes the comprehensive restoration of the Mississippi barrier islands, restoration of over 3,000 acres of wetlands and coastal forest habitat, acquisition of approximately 2,000 parcels, with relocation of residents, within the high hazard area,

improvement of a levee at the Forest Heights community in Gulfport, Miss., a flood-proofing demonstration in Waveland, Miss. and the study of 53 other hurricane- and storm-damage-risk reduction and ecosystem restoration options across the coastal area.

Task: Coordinate resiliency efforts by USACE, MDMR and other stakeholders to restore and protect habitat (Goal A) and native marine species (Goal B) to ensure a balanced approach that is consistent with the mission of MDMR.

Task: Identify projects on behalf of MDMR and the state of Mississippi for consideration for MSCIP and PEIS.

GOAL E: Public Safety and Emergency Response. Prevent, prepare for, and respond to public safety and emergencies of the coastal marine environment and strategic places of interest. Enforce the state’s marine resource policies to ensure sustainable use.

Program Areas: Marine Patrol

OBJECTIVE E1: Ensure safety of persons and property on the marine waters and islands.

Outcome: Number of boats registered in three coastal counties.

Outcome: Natural disasters covered (%).

Outcome: Reduced risk to life, health and property.

Outcome: Prevent unsustainable harvest of Mississippi’s marine resources and fewer instances of preventable harm to habitat, marine species and human life.

Outcome: Total calls answered (%).

Outcome: Total arrests.

E.1.1: STRATEGY: Reduce emergency or unsafe situations in the marine environment.

The Office of Marine Patrol operates and maintains 24-hour patrol of an area that encompasses over 1,000 square miles of marine waters, approximately 369 miles of shoreline, approximately 66,933 acres of marsh land and the land mass of Hancock, Harrison, and Jackson counties. The Derelict Vessel Program enforces state laws through removal and disposal of derelict vessels, thereby protecting our environment and keeping our coastal wetlands and navigable waterways safe for use by the general public.



Output: Number of derelict crab traps removed.

Output: Number of derelict vessels removed.

Output: Number of days that Mississippi oyster reefs are closed to commercial and recreational harvesting.

Output: Patrol of marine waters (man hours) - 29 officers.

Efficiency: Cost of outputs.

Task: Provide 24-hour radio dispatch to coordinate patrol response.

Task: Provide non-emergency assistance to the public when they are in distress on the water.

Task: Locate and recover derelict vessels and crab traps.

Task: Close and patrol Mississippi marine waters to commercial and recreational fishing during emergency and unsafe situations.

Task: Perform special emergency support functions.

Task: Plan and prepare in the pre-emergency period to ensure capabilities exist to effectively carry out emergency responsibilities.

Task: Ensure rapid response capabilities exist should assistance be required in the state.

E.1.2: STRATEGY: Respond to emergency situations related to the marine and coastal environment.

Mississippi's Emergency Response Plan assigns responsibilities to various state agencies. Agencies assigned the primary role are responsible for performing special emergency support functions and have been determined to have the appropriate resources and day-to-day operational expertise to provide guidance and leadership for supporting the Mississippi Emergency Management Agency, Homeland Security and other state, federal and local units of government. Agencies assigned supporting roles are responsible for supporting primary agencies with resources and personnel. State agencies assigned primary and supporting roles in the ERP are responsible for planning and preparing in the pre-emergency period to ensure capabilities exist to effectively carry out their emergency responsibilities and for ensuring rapid response should their assistance be required elsewhere in the state. In addition to primary and support duties, other tasks may be assigned by MEMA to state agencies based on the existing need. As provided in [MS Code Ann. § 33-15-11(1972)], all departments, agencies, offices and institutions of the state not assigned emergency responsibilities shall make their resources available in support of the emergency management program. MDMR's Emergency Support Functions under MEMA's Emergency Response Plan include Search and Rescue (ESF#9 – Primary) and Public Safety and Security (ESF#13 – Support).

Output: Number of emergency responses by MDMR staff.

Output: Total calls received (boat and water safety, emergency, seafood, warnings).

Output: Natural disasters covered.

Efficiency: Cost of outputs.

Task: Perform primary and support special emergency functions for MEMA, FEMA, U.S. Coast Guard, Homeland Security and other state, federal and local units of government during emergency responses.

Task: Conduct emergency response in the marine waters of the state and adjacent counties.

Task: Support the statewide emergency management plan as provided in MS Code Ann. § 33-15-11(1972).

OBJECTIVE E2: Enforce rules and regulations that enhance, protect and conserve the marine and estuarine habitat, native marine species and public health and safety.

Illegal harvest of marine resources can lead to populations of organisms reduced to levels that are not economically or recreationally stable. Unenforced harvest has the potential to cause population declines and jeopardize the future sustainability of marine resources in Mississippi. MDMR is responsible for enforcing rules and regulations regarding the transportation, processing and sale of Mississippi-landed seafood. Marine litter is known to cause the death of marine birds, finfish, mammals and reptiles and poses an increasing menace to navigation, fouling propellers and water intake structures. The Marine Litter Act of 1989 prohibits the dumping of wastes, garbage and other debris from vessels, both recreational and commercial, within Mississippi waters.

E.2.1: STRATEGY: Enforce the marine conservation laws of the State of Mississippi and CMR regulations.

Output: Number of violations recorded by Marine Patrol officers.

Output: Percentage change in the number of violations recorded each year.

Task: Investigate and pursue violations of seafood law, boating and other water incidents within MDMR's jurisdiction.

Task: Teach boat-and-water safety in the three coastal counties.

Task: Monitor transportation and processing of shellfish.

Task: Patrol to ensure compliance with state and federal regulations.

Task: Enforce the Marine Litter Act.

Task: Patrol wetlands areas for violations of the Wetlands Act.

OBJECTIVE E3: Maintain staff that is adequately trained and equipped to conduct an emergency response.

E.3.1: STRATEGY: Maintain training and technical expertise to provide guidance and leadership for supporting MEMA, Homeland Security, and state, federal and local governments.

Output: Number of staff with expertise to serve on the Emergency Response Team.

Task: Maintain a 10-member dive rescue and recovery team responsible for rescues of victims and/or recovery of victims and physical evidence.

Task: Maintain MEMA's ESF9 and ESF13 certification, so that officers are equipped to serve as first responders in the case of a disaster.

Task: Coordinate all specialized training and required certification of all officers and dispatchers, including, but not limited to, firearms qualifications and CPR certifications.

Task: Maintain records on all officers and dispatchers regarding training requirements and completed training.

GOAL F: Public Use of Marine Environment. Enhance the wise public uses of marine and coastal resources of the Mississippi Gulf Coast.

Program Areas: Tidelands Trust Fund, Coastal Resources Management, Coastal Restoration and Resiliency



Tidelands funds provide opportunities to the three coastal counties - Harrison, Hancock and Jackson - to restore, reclaim, and refurbish public access to coastal waterways and tidally influenced lands. Tidelands funding provides for the construction, renovation and maintenance of public-access areas, such as boat launches, harbors, beaches and some barrier Islands.

OBJECTIVE F1: Increase the public's access and enjoyment of all coastal waters by conserving, reclaiming, preserving, acquiring and enhancing these areas and by educating the public.

Outcome: Increased public use of coastal waters via public access projects.

Outcome: Increased public use of coastal waters via boat ramps, breakwaters, marinas, harbors and piers.

Outcome: Projects granted to Harrison, Hancock and Jackson Counties.

F.1.1: STRATEGY: Provide grants to install new access facilities or renovation and/or improvement of existing facilities.

MDMR's Boating Access Program funds projects that provide access to America's waterways by developing new access facilities or renovation and/or improvement of existing facilities. The Clean Vessel Act Program (CVA) provides grant funds for the construction, renovation, operation and maintenance of pump-out stations and waste reception facilities for recreational boaters

and for educational programs that inform boaters of the importance of proper disposal of their sewage. The Boating Infrastructure Program provides grant funds to construct, renovate and maintain tie-up facilities with features for transient boaters in vessels 26 feet or more in length.

Output: Number of public access projects approved.

Task: Use MDMR Boating Access Program funds to provide access to waterways by developing new access facilities or renovating current ones

Task: Use Clean Vessel Act Program funds for construction, renovation, operation and maintenance of pump-out stations and waste-reception facilities for recreational boaters. These funds also are used for educational programs to inform boaters of the importance of proper sewage disposal.

Task: Use Boating Infrastructure Program funds to provide grants to construct, renovate, and maintain tie-up facilities with features for transient boaters in vessels 26 feet or more in length.

F.1.2: STRATEGY: Acquire additional lands and provide public enhancements for the Mississippi Coastal Preserves Program.

MDMR's Mississippi Coastal Preserves Program acquires, protects and manages land within the 20 designated Coastal Preserves sites totaling roughly 77,000 acres. Management goals are designed to enhance and perpetuate important coastal wetland resources, provide compatible human recreational use, provide research and data applicable to coastal resource management both on-site and off-site, and protect specific habitat necessary for native, threatened, or endangered species. These state trust lands within the Coastal Preserve sites are effectively managed to perpetuate their natural characteristics, features, ecological integrity, social, economic and aesthetic values so that future generations may enjoy the benefits of viable wetland ecosystems.

Output: Number of managed projects approved.

Output: Number of acres of land acquired or enhanced annually for Coastal Preserves that are available for public access.

Efficiency: Cost of all programs.

Task: Pursue various opportunities for land acquisition.

Task: Work with federal, state and local partners focused on land acquisition within or adjacent to the Coastal Preserves boundaries.

Task: Develop and implement public access enhancements such as parking areas and trails.

GOAL G: Outreach, Research, Training and Education. Encourage and educate individuals, businesses and communities to engage in behaviors to restore, protect and conserve marine resources.

PROGRAM AREAS: All program areas.

Outreach to the public and stakeholders is important for raising awareness of the various roles of MDMR. Public and stakeholder education is valuable to communicating new rules and regulations in a timely manner, and engaging the public to help improve the coastal environment. MDMR is committed to integrating education and outreach agency-wide within existing budgetary capabilities.



OBJECTIVE G1. Promote the responsible use of marine resources.

Outcome: Public educated (number through events).

Outcome: Number of brochures distributed.

Outcome: Better understanding by the public and user groups of ways in which they can enhance, protect and conserve marine resources.

Outcome: Students certified in boat and water safety.

Outcome: Special events covered (%).

Outcome: Increase in community participation in outreach programs in the Grand Bay NERR.

Outcome: Average time to resolution.

Outcome: Respond to the public and stakeholders.

G.1.1: STRATEGY: Provide the general public and specific user groups with comprehensive, consistent education and information about the programs of the MDMR.

Output: Number of outreach events per year.

Output: Boat and water safety classes held.

Output: Special marine events covered.

Output: Number of public outreach events and other outputs.

Output: Brochures printed.

Output: Technical assistance visits (seafood, aquaculture, other).

Efficiency: Cost per public outreach event.

Efficiency: Cost per brochure printed (in cents).

Efficiency: Cost of outreach materials provided to the community as part of the Grand Bay NERR outreach programs.

Efficiency: Average cost per services action (technical assistance).

Task: Sponsor annual events that promote the mission of the agency to enhance, protect, and conserve marine resources. These include marine- and seafood-related events.

Task: Coordinate MDMR educational activities, exhibits and events with representatives from each program area and external partners to improve reach and frequency of message.

Task: Provide targeted outreach to local media, elected officials, state and federal legislative representatives and appropriate regulatory agencies.

Task: Promote the state's commercial seafood industries, including harvesters, processors, wholesalers, distributors, packers and market suppliers of shrimp, oysters, crab and finfish.

Task: Improve the awareness of "Mississippi Commercial Seafood Products" as a widely known symbol of quality with prospective national and international customers.

Task: Coordinate and enhance opportunities for Mississippi commercial seafood industries to participate in marketing events.

Task: Encourage dealers, wholesalers, restaurants and consumers to purchase and sell Mississippi seafood.

Task: Provide information to the public at events and through the website and social media about why Mississippi seafood should be purchased and consumed.

OBJECTIVE G2: Minimize user group conflicts through effective communication.

G.2.1: STRATEGY: Assess comments to the agency from all sources.

Output: Number of telephone surveys conducted.

Output: Number of field interview surveys conducted.

Efficiency: Average cost per interview site.

Efficiency: Total completed or resolved.

Task: Distribute comments to the appropriate program area for response.

Task: Conduct discussion forums with commercial and recreational fishermen through such methods as social media, public hearings and online surveys.

GOAL H: Efficient and Effective Public Service. To provide efficient and effective government services and be a good steward of the human, financial and physical resources provided to the agency by the citizens of the state.

Program Areas: All program areas



OBJECTIVE H1: The retention and professional growth of existing employees.

Outcome: Comprehensive professional development and training program.

Outcome: Annual review of policies and procedures.

Outcome: High-quality, reliable information technology service.

Outcome: Properly account for all equipment.

Outcome: Accurate and timely information to the general public and MDMR employees.

H.1.1: STRATEGY: Provide administrative support to MDMR personnel.

Task: Compensate employees appropriately and provide benefits.

Task: Facilitate professional growth and career development.

Task: Effective and timely communication.

OBJECTIVE H2: Employ competent personnel.

H.2.1: STRATEGY: Attract and retain the best talent.

Task: Ensure job classification integrity.

Task: Develop staffing plan and budget resources.

Task: Maintain consistent selection process.

OBJECTIVE H3: Provide innovative, business-driven information technology.

H.3.1: STRATEGY: Provide high-quality and reliable service.

Output: Total IT work requests submitted.

Task: Securely maintain data for the agency.

Task: Update the internal and external end-user needs.

Task: Continue to enhance the multi-lingual aspects of the agency's communications.

OBJECTIVE H4: Appropriate and efficient use of equipment and property.

H.4.1: STRATEGY: Equipment and property is procured and maintained properly.

Task: Conduct an annual inventory audit.

Task: Execute a replacement plan for vehicles and equipment.

OBJECTIVE H5: Efficient and effective policy and procedures.

H.5.1: STRATEGY: Provide ongoing support and communications to MDMR staff about policies and procedures.

Task: Annually review and update policies and procedures.