

Final Evaluation Findings

Mississippi Coastal Management Zone

September 2018 to May 2024

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Office for Coastal Management
National Ocean Service
National Oceanic and Atmospheric Administration
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Summary List of Findings

The Coastal Zone Management Act requires the National Oceanic and Atmospheric Administration's (NOAA) Office for Coastal Management to conduct periodic evaluations of the performance of states and territories with federally approved coastal management programs. This evaluation examined the operation and management of the Mississippi Coastal Management Program administered by the Mississippi Department of Marine Resources, the designated lead agency, for the period from October 2018 to May 2024. The evaluation focused on the following areas: program administration, coastal habitat, and resilience and coastal hazards.

The findings in this evaluation document will be considered by NOAA's Office for Coastal Management in making future financial award decisions concerning the Mississippi Coastal Management Program. The evaluation came to these conclusions:

Findings for Program Administration

Accomplishment: The Mississippi Coastal Management Program and the Department of Marine Resources implemented DMR-70, effective March 1, 2020, a policy requiring that monies from application fees, fines, dredging fees, public notice fees, and mitigation fees are no longer held in the state's general fund but are directed to an account to be used for coastal management activities.

Accomplishment: The Mississippi Coastal Management program staff demonstrated resilience, flexibility, support for each other, and dedication in maintaining operations and continuing to meet the needs of their partners and stakeholders while navigating challenges posed by both the pandemic and a period of significant transition in leadership and staffing capacity.

Accomplishment: The Mississippi Coastal Management Program has increased the efficiency and efficacy of its wetlands permitting program and built trust with stakeholders through innovative solutions, improved technology, and its continued practice of holding pre-application coordination meetings and proactive outreach with peer agencies throughout the permitting process.

Recommendation: The Mississippi Coastal Management Program and the Mississippi Department of Marine Resources are encouraged to prioritize and continue to build on the current efforts that support onboarding of new staff members and succession planning. The Office for Coastal Management recommends that the program consider strategies to proactively document institutional knowledge by developing and periodically updating knowledge transfer plans, especially for positions which have experienced frequent turnover and for those that are anticipated to become vacant as a result of retirement.

Recommendation: NOAA’s Office for Coastal Management encourages the Mississippi Coastal Management Program to leverage their improved partnership with the Mississippi Department of Archives and History and the State Historic Preservation Office to identify opportunities to streamline the state consultation process under the Antiquities Law of Mississippi while providing protection of cultural resources.

Recommendation: NOAA’s Office for Coastal Management encourages the Mississippi Coastal Management Program quantify the impact of the changes in the U.S. Army Corps of Engineers’ wetland permitting process by developing measures to track permit violations.

Necessary Action: The Mississippi Coastal Management Program must work with NOAA’s Office for Coastal Management to develop a program change that notes the change in the role of the Mississippi Advisory Commission on Marine Resources (formerly the Mississippi Commission on Marine Resources) pursuant to NOAA’s Coastal Zone Management Program regulations at 15 C.F.R. Part 923, Subpart H, as revised in 2019, and the Office for Coastal Management’s [program change website](#). After discussions between Mississippi Coastal Management Program staff and NOAA’s Office for Coastal Management, the state must submit the program change by *[date six months from approval date of findings]*.

Findings for Coastal Habitat Protection and Resilience to Coastal Hazards

Accomplishment: The Mississippi Coastal Management Program’s Coastal Preserves Program established *Rules and Regulations for the Use of State-Owned Coastal Preserve Areas* that were approved in 2019 by the Mississippi Commission for Marine Resources. These rules and regulations, found in [Title 22 Part 19](#), provide the Mississippi Coastal Management Program the ability to more effectively manage and steward these areas balancing protection of these lands with public access and use.

Accomplishment: The Mississippi Coastal Management Program continues to work with and through partners like the Mississippi-Alabama Sea Grant Consortium to understand and address factors that hamper awareness and to support broader adoption of alternative shoreline approaches among property owners.

Accomplishment: The Mississippi Coastal Management Program is regarded as a leader for the beneficial use of dredged materials and continues to enhance the success of these projects through engagement with affected communities and information exchange and knowledge transfer through support of regional networks like the Mississippi Beneficial Use Group.

Accomplishment: The Mississippi Coastal Management Program and the Grand Bay National Estuarine Research Reserve leverage resources and expertise between programs, easing the burden on both programs. For example, the two programs currently share equipment and collaborate to conduct prescribed burns on coastal preserves. Additionally, the coastal

management program and the reserve are interested in exploring opportunities for collaboration on habitat management research and monitoring efforts, for example, vegetation monitoring in coastal preserves to assess effectiveness of management activity.

Recommendation: NOAA's Office for Coastal Management encourages the Mississippi Coastal Management Program to address barriers to adoption of alternative shoreline approaches by private property owners by seeking additional avenues to support and fund the appropriate use of alternative shorelines. Some examples include increasing awareness of the Natural Resources Conservation Service's cost share program, adopting a neighborhood scale approach, and working to implement pilot demonstration projects on public property. Additionally, the coastal management program could draw inspiration from innovative, successful funding examples in other states and tap into training resources available from NOAA's Office for Coastal Management.

This evaluation concludes that the Mississippi Department of Marine Resources is successfully implementing and enforcing its federally approved coastal management program, adhering to the terms of the federal financial assistance awards, and addressing coastal management needs identified in section 303(2)(A) through (K) of the Coastal Zone Management Act.

Program Review Procedures

Section 312 of the Coastal Zone Management Act of 1972, as amended (16 U.S.C. 1451 *et seq.*), requires that state coastal zone management programs be evaluated periodically. Section 312 of the Coastal Zone Management Act and its implementing regulations found at 15 C.F.R. Part 923, Subpart L, require NOAA to periodically evaluate a state coastal program concerning the extent to which the state has 1) implemented and enforced the state coastal program approved by the secretary of commerce; 2) addressed the coastal management needs identified in section 303(2)(A) through (K) of the Coastal Zone Management Act; and 3) adhered to the terms of any grant, loan, or cooperative agreement funded under the Coastal Zone Management Act.

The National Oceanic and Atmospheric Administration (NOAA) evaluated the Mississippi Coastal Management Program in 2024. The evaluation team consisted of Pam Kylstra, evaluation team lead; Kristin Ransom, coastal management specialist; Hilliard Hicks, coastal management specialist from NOAA's Office for Coastal Management; and Steve Couture, New Hampshire Coastal Program manager. The support of the Mississippi Coastal Management Program's staff members was crucial in conducting the evaluation, and this support is most gratefully acknowledged.

NOAA published a notice in the *Federal Register* on April 5, 2024, in which it announced it would evaluate the Mississippi Coastal Management Program and host a public meeting and requested public comments (FR Doc. 2024-06885). The coastal management program posted five notices of the public meeting and opportunity to comment in the *Sun Herald* between April 5 and May 19, 2024.

As a part of the evaluation process, a review of relevant information was conducted, including annual federal financial assistance award reports, Coastal Zone Management Act Section 309 assessments, and information provided by the program documenting how they are implementing their program and addressing the programmatic requirements of the Act. A survey of interested parties was conducted.

The information review and survey results informed the identification of three focus areas for the evaluation: program administration, coastal habitat, and resilience and coastal hazards. A virtual site visit was conducted May 20–23, 2024, during which the evaluation team held meetings with staff members and group discussions with program partners and staff members to discuss the focus areas. Meeting participants helped identify issues and workable solutions to maintain and improve the implementation of the coastal management program. In addition, a virtual public comment meeting was held on May 21, at 12:00 noon (Central Time) to provide an opportunity for members of the public to express their opinions about the implementation of the coastal management program. Interested parties and members of the public were also given the opportunity to provide written comments via email through May 31, 2024. There

were no written comments received. NOAA's Office for Coastal Management then developed draft evaluation findings, which were provided to the Mississippi Department of Marine Resources. The department's comments were considered in drafting the final evaluation findings.

Final evaluation findings for all coastal management programs highlight each program's accomplishments in the focus areas and two possible types of findings that may require action by the program:

Necessary Actions address programmatic requirements of the Coastal Zone Management Act or its implementing regulations at 15 C.F.R. Part 923, and of the federally approved state coastal management program, and the terms of any grant or cooperative agreement funded under the Coastal Zone Management Act. Necessary actions must be carried out by the date specified. Failure to address necessary actions may result in a future finding of nonadherence and the invoking of interim sanctions, as specified in the Coastal Zone Management Act.

Recommendations are actions that the office believes would improve the program but which are not mandatory. The state is expected to have considered the recommendations by the time of the next evaluation or dates specified.

Evaluation Findings

The Mississippi Department of Marine Resources' Office of Coastal Resources Management continues to successfully implement the federally approved Mississippi Coastal Management Program. The evaluation team heard consistent support for the program and the value it brings to the state. In fulfilling its responsibilities, the office administers four primary programs:

- **Coastal Preserves Program**, which acquires, protects, and manages sensitive coastal wetland habitats along the Mississippi Gulf Coast in close partnership with the Mississippi Secretary of State's Office;
- **Wetlands Permitting Bureau**, which conducts federal consistency reviews and administers the regulatory program under the Coastal Wetlands Act, including permit review and issuance which is conducted in coordination with the Mobile and Vicksburg Districts of the U.S. Army Corps of Engineers;
- **Invasive Species Program**, which works with partners to monitor invasive species and conduct projects to control their spread across the Mississippi coastal zone; and
- **Beneficial Use Program**, which facilitates and coordinates use of suitable dredged materials in restoring wetland habitat.

Program Administration

The Mississippi Coastal Management Program continues to reflect the shift initiated in the previous evaluation period of moving toward a more strategic, forward-looking program that leverages projects and partnerships built over the preceding decade. In its 2016–2020 Section 309 Assessment and Strategy, the program identified wetlands, cumulative and secondary impacts, public access, and coastal hazards as all high priority. To address these priorities, the program pursued two strategies. The first strategy resulted in an updated permit application and the implementation of an online application system. These products have streamlined the permit process for all users including applicants and permittees. The second strategy incorporated comprehensive vulnerability assessment findings into the Coastal Preserves Program land use management plans for coastal preserve sites. In its 2021–2025 Section 309 Assessment and Strategy, the program again identified wetlands, cumulative and secondary impacts, and coastal hazards as high priorities with public access shifting to a medium priority along with marine debris and aquaculture. The strategy the program identified and is currently working toward is to develop a Beneficial Use Guidance document that will provide users with the tools necessary to design, permit, implement, and evaluate beneficial use projects effectively.

The coastal management program team has earned the respect of partners and communities they serve by building trust, working to streamline processes, providing outstanding technical expertise, and being committed to transparency. The evaluation team heard consistent support for the program and the value it brings to the state. Program staff members are recognized for

their collaborative approach, dedication, innovation, knowledge, and responsiveness. Stakeholders and partners also describe the program staff members as being “on top of their game” and that working with them is a “dream situation.” The program staff have demonstrated great resilience as they have successfully navigated concurrent challenges of the pandemic, changes in program leadership and staffing, and shifts in liaison support from NOAA’s Office for Coastal Management.

Federal Consistency

NOAA’s previous evaluation findings (2018) included a necessary action regarding the Mississippi Coastal Management Program’s program document:

The Mississippi Coastal Management Program must submit a routine program change updating its program document by February 28, 2020.

The program submitted a revision to Chapter 8 of the program document to NOAA on January 13, 2020, and the revision was approved on April 10, 2020.

The coastal management program has made changes to its federally approved program that shifted authority from the former Mississippi Commission on Marine Resources to the Mississippi Department of Marine Resources. The former commission had the decision-making authority, based on recommendations from the Mississippi Department of Marine Resources, to make permit decisions and approve policy and to adopt, amend, and repeal regulations, ordinances, and rules necessary for the operation of the Mississippi Department of Marine Resources, including regulations essential to the implementation of the Mississippi Coastal Management Program. In 2021, the commission was restructured and renamed the Mississippi Advisory Commission on Marine Resources. This change, enacted through [Mississippi House Bill 827](#), redefined the commission’s authority to a strictly advisory role. Under the new structure, the Mississippi Advisory Commission on Marine Resources provides recommendations and guidance to the executive director of the Mississippi Department of Marine Resources but no longer has independent regulatory or decision-making authority. The adjustment aims to streamline decision-making processes within the department and enhance responsiveness in marine resource management. This change to the Mississippi Advisory Commission on Marine Resources did not change the NOAA–approved authorities, enforceable policies, or other Coastal Zone Management Act program approval requirements for the Mississippi Coastal Management Program.

Coastal Nonpoint Source Pollution Control Program and Water Quality

Section 6217 of the Coastal Zone Management Act Reauthorization Amendments of 1990 requires Mississippi, like all coastal states participating in the National Coastal Zone Management Program, to develop coastal nonpoint programs to control polluted runoff to coastal waters. NOAA jointly administers the Coastal Nonpoint Pollution Control Program with the U.S. Environmental Protection Agency (EPA).

After carefully reviewing Mississippi's coastal nonpoint pollution control program submission to evaluate the extent to which Mississippi's program conforms to the requirements of the Coastal Zone Management Act, NOAA and the EPA approved Mississippi's coastal nonpoint pollution control program, with conditions, on November 18, 1997. The conditions outlined actions the state needed to take to fully satisfy all Coastal Zone Management Act requirements and receive full approval of its coastal nonpoint pollution control program. Mississippi's Department of Marine Resources and Department of Environmental Quality are the lead agencies with the responsibility to administer Mississippi's coastal nonpoint pollution control program.

NOAA's evaluation process is designed to assess how well a coastal state is implementing its federally approved coastal management program, part of which includes protection of water quality through the coastal nonpoint pollution control program requirements. In the last evaluation, the state received a necessary action requiring the coastal management program to submit:

1. By May 29, 2020, a work plan with interim benchmarks and a timeline for meeting the remaining conditions on its coastal nonpoint pollution control program, and
2. By November 29, 2024, documentation indicating how Mississippi met the outstanding conditions on its coastal nonpoint pollution control program.

Since then, for part 1 of the necessary action, the Mississippi Department of Marine Resources and Mississippi Department of Environmental Quality requested a three-month extension of the work plan deadline due to the pandemic. NOAA extended the deadline to August 29, 2020, and the program successfully submitted their work plan to NOAA and the EPA by the revised deadline.

For the second part of the necessary action, Mississippi has been working closely with NOAA and the EPA to address the outstanding conditions. As of September 2024, the state has submitted everything it believes is needed to address the conditions placed on its program. NOAA and the EPA are currently completing their review of Mississippi's coastal nonpoint pollution control program and preparing a proposed decision on whether the state has satisfied all conditions of approval that the federal agencies placed on the program in 1997. NOAA and the EPA will announce the proposed decision for public comment in the *Federal Register* before making a final decision.

Financial Support for Programmatic Activities

The Mississippi Coastal Management Program's Bureau of Coastal Preserves has had great success in obtaining funding to acquire key habitats to be added to the Coastal Preserves Program. The land managed by the Coastal Preserves Program increased from 40,000 acres to 44,783 acres since the last evaluation in 2018. As funding for acquisition does not allow for implementation of management activities such as restoration, invasive species control, and habitat management once the parcels have been acquired, the program has pursued

competitive grants and uses the ongoing funds from the Deepwater Horizon spill event to partially fill the gap. Recognizing that competitive grant awards are not guaranteed and the Deepwater Horizon funds will end once they're expended, the coastal management program acted on a recommendation from the previous evaluation findings to create a more reliable source of funds. The program was able to affect a change in internal policy so that application fees and violation fines go directly to coastal management program support rather than into the Mississippi Department of Marine Resources' general fund. The change and implementation of this policy would not have been possible without the support of the department's leadership and the expertise of the staff.

Staffing and Succession

The coastal management program director and deputy director both retired in 2020, and the department leadership decided to advertise internally and promote from within the department to provide greater continuity. The people stepping into the roles had been managers in the Coastal Preserves Bureau and brought expertise along with a strong familiarity with the program's goals and operations. Although the remote working posture due to the pandemic added to the time it took for both the staff members and new leadership to find their footing, the team has come together exceptionally well. Program staff members noted that they have a greater sense of purpose and contribution to a common mission with leadership demonstrating appreciation for their expertise. Throughout the transition, staff members often went above and beyond their typical roles, taking on additional responsibilities to keep progress on track. The department's transparent communication and ongoing support were instrumental in navigating this period of change, ultimately fostering a more united and resilient coastal management program.

In addition to the changes in leadership, the coastal management program's Wetlands Permitting Bureau experienced significant staff turnover among higher level permitters within a year and a half during the evaluation period resulting in a loss of over 30 years of collective institutional knowledge and relationships with partners and community. While the bureau has filled vacated positions with highly qualified, dedicated people, it will take time for them to build the level of proficiency and community connection previous staff members cultivated over their long tenure. After gaining a greater understanding of the factors, like salary levels, that contribute to team member decisions to seek opportunities outside of the department, the coastal management program leadership is prioritizing where it has greater influence: creating greater efficiency and effectiveness in onboarding new team members and supporting development of all team members. For instance, bureau leadership has been developing resources to guide new permitting staff members including clear standard operating procedures and example scenarios. The coastal management program could choose to pursue a succession planning strategy that emphasizes knowledge transfer and continues to facilitate connection building that might include:

- Identifying and pursuing the critical professional skill sets including technical and people skills as well as staffing needs of the coastal management program.
- Asking staff to document key work processes, protocols, practices, and partners and professional contacts.
- Identifying key records to transfer from senior to more junior or new staff members
- Identify opportunities for newer or more junior staff to lead while being mentored by more senior staff members.
- Developing an onboarding plan for new staff members that includes information, resources, and training opportunities needed to be successful.

Staff turnover also presents the coastal management program with opportunities for new strategic planning and partnerships. The coastal management program has valuable partnerships with the U.S. Army Corps of Engineers through a shared permitting position and with the Grand Bay National Estuarine Research Reserve on land management activities in the coastal preserves. The coastal management program could continue to build on these partnerships and the expertise brought by new leadership to identify strategic priorities for the coastal management program. In addition to building on existing partnerships, the coastal management program could leverage the planning efforts of other state agencies and partners to inform the development of a 309 Assessment and Strategy document or pursue funding for new wetland or coastal hazards initiatives through 309 Project of Special Merit funding.

Permitting and Regulatory Coordination

The Mississippi Coastal Management Program team is widely regarded by partners and stakeholders as a trusted source of information and guidance for navigating the sometimes complex regulatory landscape. Their expertise in the permitting process combined with their understanding of the local political and environmental context enables them to offer clear, reliable guidance to partner organizations.

Multiple partners and stakeholders expressed appreciation for the continued efforts by the coastal management program to improve the efficiency of its coastal wetlands permitting program. The coastal management program's wetland permitting bureau staff remain committed to holding pre-application meetings to help applicants gain an understanding of requirements and to identify potential issues early on. In June 2020, the Bureau of Wetlands Permitting implemented an electronic workflow management system that has helped to streamline internal coordination and processing of permitting and has aided new staff members to more quickly get up to speed on the "paperwork" side. Through the 2016–2020 Section 309 Assessment and Strategy, the introduction of the [Online Wetlands Permitting Portal](#) later in 2020 marked a significant advancement in streamlining permit application submissions. This digital platform, coupled with the electronic management system, has greatly improved the overall efficiency of the permitting and project approval processes allowing the program to respond more quickly to applications and improve overall workflow management.

The coastal management program actively coordinates with a network of designated coastal program agencies and federal partners to fulfill its regulatory responsibilities and advance coastal management goals. Improvements in coordination and cooperation between the coastal management program and these partners has resulted in increased efficiency of permit processing.

- Reinforcing the existing partnership, in 2020, the Mississippi Coastal Management Program entered a Memorandum of Understanding cooperatively with the **U.S. Army Corps of Engineers', Mobile District Regulatory Branch**, under the authority of Section 214 of the Water Resources Development Act 2000, to allow the U.S. Army Corps of Engineers to accept funds from the coastal management program in support of a regulatory project manager position. The Corps' project manager is housed at the department's offices and is dedicated to the review of permit applications for coastal restoration and enhancement activities led by the coastal management program. The coastal management program leverages their annual cooperative agreement funding with funding from the U.S. Army Corps of Engineers to support the position. The arrangement expedites the permit evaluation process by including effective pre-project meetings to address permitting issues as well as the availability of immediate technical assistance and review as permits make their way through the process. Annual analysis of the agreement consistently shows faster permitting times for the Water Resources Development Act 214-funded positions as compared to U.S. Army Corps of Engineers positions funded through the congressional appropriation.
- The program contributes to the **U.S. Army Corps of Engineers', Mobile District Regulatory Branch Mobile District Regulatory Branch** training about the general permit so applicants are aware of permit guidelines and more recent changes to the requirements. The program has informally observed fewer permit violations since engaging applicants through these workshops.
- The program's Bureau of Wetlands Permitting worked with the **U.S. Army Corps of Engineers' Mobile District Regulatory Branch** to incorporate living shoreline designs into Mississippi General Permit-1, shoreline stabilization to, once again, make the ease of authorization of living shorelines comparable with that of shoreline hardening approaches in the environmental review of the application. Combined with coastal management program-supported trainings and resources for contractors and property owners (*see more below on page 18*), this addition encourages the selection of the installation of living shorelines where appropriate.
- During the current evaluation period, through the coastal management program leadership team's dedication to improved coordination and recognition of the importance of cultural and historical resource preservation, the Mississippi Department of Archives and History and the coastal management program have fostered a stronger partnership. In 2022, the coastal management program and the Mississippi Department

of Archives and History entered into a Memorandum of Understanding to formalize data sharing, ensuring land management decisions also prioritize the protection of cultural and historical resources.

- The coastal management program is working to streamline the permitting process for living shoreline projects to make them more attractive for homeowners and more feasible for contractors. The coastal management program helped to facilitate many of the discussions between the Mississippi Department of Marine Resources and the Mississippi Secretary of State, and partners shared that, as a result, Mississippi's permitting route for living shorelines has shifted from one of the more difficult to one of the best in the nation.

There are elements of the regulatory structure of Mississippi agencies that impede the coastal management program's ability to be responsive to issues and efficient in implementing conservation measures. For instance, it is critical for the effective management of coastal preserves that the Coastal Preserves Program is able to respond quickly to expansions of existing populations of invasive species or occurrences of new infestations; however, regulatory requirements intended to prevent the occurrence of negative environmental impacts related to development are equally applied to conservation actions and can interfere with a timely response. As an example, *Phragmites australis* appeared on Deer Island and rapidly expanded, and due to the complexity of the required steps, the permit process took eight months to complete, further delaying the ability for program staff members and partners to remove the invasive plant. Additionally, partners noted that the requirements for cultural resource surveys under the Antiquities Law of Mississippi are burdensome, hampering the ability to do even basic levels of conservation work in a timely manner. For instance, it took two years for the Coastal Preserves Program to complete the permitting process and obtain the permissions necessary to install a fire break. The cultural resource survey necessity increased the time and the cost of the project. The coastal management program is encouraged to work with the Mississippi Department of Archives and History to explore opportunities for improving the efficiency of the part of the permitting process for which the Department of Archives and History has responsibility.

Findings for Program Administration

Accomplishment: The Mississippi Coastal Management Program and the Department of Marine Resources implemented DMR-70, effective March 1, 2020, a policy requiring that monies from application fees, fines, dredging fees, public notice fees, and mitigation fees are no longer held in the state's general fund but are directed to an account to be used for coastal management activities.

Accomplishment: The Mississippi Coastal Management program staff demonstrated resilience, flexibility, support for each other, and dedication in maintaining operations and continuing to

meet the needs of their partners and stakeholders while navigating challenges posed by both the pandemic and a period of significant transition in leadership and staffing capacity.

Accomplishment: The Mississippi Coastal Management Program has increased the efficiency and efficacy of its wetlands permitting program and built trust with stakeholders through innovative solutions, improved technology, and its continued practice of holding pre-application coordination meetings and proactive outreach with peer agencies throughout the permitting process.

Recommendation: NOAA's Office for Coastal Management encourages the Mississippi Coastal Management Program and the Mississippi Department of Marine Resources to continue to prioritize and build on the current efforts that support onboarding of new staff members and succession planning. Consider strategies to proactively document institutional knowledge by developing and periodically updating knowledge transfer plans, especially for positions which have experienced frequent turnover and for those that are more likely to become vacant as a result of retirement.

Recommendation: NOAA's Office for Coastal Management encourages the Mississippi Coastal Management Program to leverage their improved partnership with the Mississippi Department of Archives and History's State Historic Preservation Office to identify opportunities to streamline the state consultation process under the Antiquities Law of Mississippi while providing protection of cultural resources.

Recommendation: NOAA's Office for Coastal Management encourages the Mississippi Coastal Management Program quantify the impact of the changes in the U.S. Army Corps of Engineers' wetland permitting process by developing measures to track permit violations.

Necessary Action: The Mississippi Coastal Management Program must work with NOAA's Office for Coastal Management to develop a program change that notes the change in the role of the Mississippi Advisory Commission on Marine Resources (formerly the Mississippi Commission on Marine Resources) pursuant to NOAA's Coastal Zone Management Program regulations at 15 C.F.R. Part 923, Subpart H, as revised in 2019, and the Office for Coastal Management's [program change website](#). After discussions between Mississippi Coastal Management Program staff and NOAA's Office for Coastal Management, the state should submit the program change by [date six months from approval date of findings].

Coastal Habitat Protection and Resilience to Coastal Hazards

The four primary programs that comprise the Mississippi Office of Coastal Resources Management coordinate together and with partners to protect and enhance coastal habitats and to increase community resilience. The program consistently demonstrates that innovation is integrated into their everyday processes. Partners and stakeholders appreciate their ability to think outside the box to find new solutions and recognize, as a hallmark of the program's work, their openness to implementing novel approaches that improve effectiveness and efficiency. Examples of the program's culture of innovation include:

- As discussed in the *Permitting and Regulatory Coordination* section above, the coastal management program encouraged the U.S. Army Corps of Engineers to put into place a Water Resources Development Act Section 214 agreement to fund a regulatory project manager to process projects sponsored or co-sponsored by the Department of Marine Resources. The coastal management program also proposed a new permit category under the WRDA 214 agreement, a Clean Water Act 404 Letter of Permission permit procedure. This new permit will streamline and incentivize the placement of clean dredged material at the coastal management program's beneficial use sites. The Corps noted that the 404 Letter of Permission approach represents a practical solution that, in hindsight, seems obvious. The Corps is open to working with the program to explore additional innovative solutions for creating efficiency in other permitting processes.
- The coastal management program's Beneficial Use Program is developing a testing protocol for sediments that goes beyond the standard testing requirements and provides consistency in the application of sediment testing for all parties involved. The thorough protocol creates a standard of suitability and ensures that only clean, nontoxic sediments are used in beneficial use projects protecting the health of local habitats. As discussed in the *Permitting* section above, the program has identified and pre-permitted beneficial use sites so that when dredging occurs, once the material has been tested and qualified as suitable, it can be directed to the sites quickly without the need for additional permits.
- The program supports and collaborates with research conducted by partners at coastal preserves and beneficial use sites and uses the research findings to improve habitat restoration strategies. For example, with slash pine research, the results will help inform how the coastal management program plans vegetation planting on future restored islands to maximize ecosystem benefit.
- The coastal management program has been creative in seeking opportunities for public access enhancements of land management activities. For instance, when firebreaks are installed, they are also managed as trails providing public access for outdoor recreation activities like bird watching.

As discussed in the previous section, funding for land acquisition does not allow for implementation of coastal preserve management activities like invasive species control, public access, controlled burns, and wetland restoration through alternative shorelines and the beneficial use of dredged sediment. To address that gap, the coastal management program continues to foster relationships with partners to amplify their collective impact in funding and implementing coastal preserve activities. For example, the Bureau of Coastal Preserves partners with Great Bay National Estuarine Research Reserve to share equipment and conduct prescribed burns on coastal preserves. Additionally, the coastal management program and the reserve are interested in working together to conduct vegetation monitoring in coastal preserves to assess effectiveness of management activity.

As Deepwater Horizon funds phase out by 2031, the coastal management program will increasingly rely on the funding available for strategies developed under Section 309 of the Coastal Zone Management Act to continue its vital work in managing and protecting coastal habitats. As a part of the 2016–2020 Section 309 Enhancement Cycle, the coastal management program developed Coastal Preserve land use management plans that include the need for alternative funding sources for management activities including restoration in anticipation of the decline in funding through Deepwater Horizon funds.

The control of **invasive species** is a critical element of reversing coastal habitat degradation and slowing further loss of native plant and animal species. Staff and partners of the coastal management program noted that “invasive species are aggressive and don’t take time off” and discussed the necessity of monitoring for early detection of infestations and ongoing implementation of control measures. This creates constant pressure on the coastal management program’s Coastal Preserves Program and the Invasive Species Program staff members. They partner with community organizations and nonprofits to continue their diligent effort to monitor and treat areas in coastal preserves experiencing infestation by harmful, invasive species of plants and animals. Through these efforts, the program and partners have been successful in restricting the occurrence of giant salvinia to the point that the plant is no longer detectable south of Interstate 10. The program also engages visitors and residents of the coastal area about invasive species issues and how they can help through activities including providing staffed educational displays at various events, presenting at public workshops, and hosting an [informational webpage](#) that includes a link to a [mobile GIS reporting tool](#).

Managing public use of and access to coastal areas while balancing protection of these habitats is a challenge for many states, including Mississippi. In Mississippi, the coastal preserves are managed as natural areas in perpetuity and also allow for “low-impact recreational activities” that are conducive to preservation. However, the only regulatory tool available to manage public use of coastal preserves was an ordinance that merely banned the use of motorized vehicles. To be able to maintain the integrity of the coastal preserve system, during the previous evaluation period, the coastal management program’s coastal preserves program initiated the development and approval of public access and use rules and regulations for

coastal preserves. In this evaluation period in 2019, the Mississippi Commission for Marine Resources passed [Title 22 Part 19](#), *Rules and Regulations for the Use of State-Owned Coastal Preserve Areas*, allowing the program the ability to more effectively steward these areas. The coastal management program has described this as “monumental” in allowing them to maintain the natural state of these lands while providing for low-impact public use.

Living shorelines are an innovative, and often cost-effective, coastal management technique that uses natural materials like oyster reefs and native vegetation to protect, stabilize, and restore shorelines while preserving and enhancing the ecological function of natural systems. The Mississippi Coastal Management Program has been involved for many years in promoting the use of living shorelines as an alternative to the previously standard response of installation of hardened structures.

Coastal program staff members recognize that the benefits to the Mississippi shorelines and habitat, and subsequently to residents and visitors to Mississippi, increase as more property owners choose the installation of living shorelines when appropriate. They have worked to understand and address barriers and sources of resistance to the installation of living shorelines. After receiving feedback that homeowners are often unfamiliar with the term “living shorelines” or have negative perceptions of living shorelines, the program instead refers to these approaches as “alternative shorelines” or “alternative bulkheads.” Further utilizing the understanding they have gained about homeowner perception of barriers and benefits of alternative shorelines, the coastal program could explore the use of [community-based social marketing](#) to foster greater awareness and adoption of alternative shorelines. To support that effort, resources are available such as the community-based social marketing-focused course available through NOAA’s Office for Coastal Management and examples from other state coastal programs, like [Virginia](#), that serve as a model.

In 2013 during the previous evaluation period, the coastal management program developed a guidance document titled [Alternative Shoreline Management in Mississippi](#) to increase understanding of the use of alternative shorelines among property owners. Since then, it became clear that an additional obstacle to the use of alternative bulkheads was that contractors and engineers lacked knowledge about design and installation. In response, the guidance document has been updated, and the coastal management program partnered with Mississippi-Alabama Sea Grant Consortium to engage engineers and contractors through trainings and technical assistance to introduce them to these approaches, the regulatory framework related to installation, and available resources.

Another factor that hinders adoption of alternative shorelines by homeowners is that public state funds cannot be used to improve private property directly benefiting private property owners. The coastal management program should explore additional avenues to encourage, fund, and support the adoption of alternative bulkhead approaches. Some examples include ensuring property owners are aware of the Natural Resources Conservation Service’s cost share program, exploring opportunities with partners to create a cost share program specific to

Mississippi, adopting a neighborhood-scale approach, or working to implement pilot demonstration projects on public property. Additionally, the coastal management program could draw inspiration from creative, successful funding examples in other states, such as [Virginia's Fight the Flood](#), and tap into resources available from NOAA's Office for Coastal Management, including the [webinar series about funding and financing approaches](#) used to support coastal resilience activities.

To reduce loss of tidal marsh and to create coastal habitat, the state of Mississippi requires that if any dredging project yields more than 2,500 cubic yards of material, the dredged material must be considered for beneficial use (MS § 49-27-61 [2010]). Through the 2021–2025 309 strategy, the Mississippi Department of Marine Resources is currently developing a beneficial use guidance document that will provide users with policies and procedures regarding sediment collection, handling, and testing. Additionally, as a part of the strategy, the program developed and launched an interactive map that provides decision-makers with site-specific sediment history and details. As a result, users will have access to the tools and practices necessary to design, permit, implement, and evaluate beneficial use projects effectively.

The coastal management program has been effective in identifying local champions for beneficial use projects and engaging affected communities to keep them informed about project progress and potential impacts. Through this outreach, the program promotes transparency and helps foster a clearer understanding of project implications. For example, as a beneficial use project neared the construction phase, time had passed since the initial awareness efforts and leading to some local resistance. In response, the program collaborated with the project contractor to develop and share visual renderings of the site's appearance after project completion. These visuals conveyed the project's benefits and helped alleviate concerns about potential impacts to views and the surrounding landscape. Given the success of this approach, the program is considering using similar visual aids and outreach for future beneficial use projects to improve community engagement and support. During the previous evaluation period, the coastal management program and the U.S. Army Corps of Engineers' Mobile District formed and co-chair the multiagency Mississippi Beneficial Use Group, one of the first beneficial use groups in the region, to guide and incentivize the use of dredged material for restoration and resilience. Since then, the multiagency Mississippi Beneficial Use Group has been an information source and role model for other states as they seek to form their own beneficial use groups.

The Coastal Management Program's Role in Resilience

The Mississippi Coastal Management Program recognizes the importance of resilience to coastal hazards in their region and seeks additional ways to complement the efforts of partner organizations including the Mississippi Department of Marine Resources' Office of Coastal Restoration and Resiliency. The coastal management program leadership team expressed interest in expanding the program's contribution to these efforts. During the evaluation site

visit, partners, stakeholders, and coastal management program staff engaged in discussions to explore how to continue to build the program’s resilience work in a strategic way that brings the most value to Mississippi. After considering the group’s input, the program leadership team acknowledged that the discussion validated their current direction in advancing resilience efforts in Mississippi. The coastal management program currently supports resilience through several key actions including:

- The program team has fostered trusted relationships with partners and in communities through their regular permitting work. They have used their understanding of community needs and expertise to bring partners together for resilience efforts. For example, the coastal management program staff connected the Mississippi-Alabama Sea Grant Consortium with the Hancock County Port and Harbor Commission to pilot the Ports Resilience Index, allowing port leadership to gain a clearer understanding of hazard vulnerabilities and identify a number of effective avenues the port could pursue to increase their resilience. Partners noted that without the program’s expertise and ability to facilitate connection, it was unlikely that the assessment would have occurred.
- The program uses funding when possible to support partner initiatives. For instance, the coastal management program had surplus funds and partnered with Grand Bay National Estuarine Research Reserve to support a project that lacked the funds for full implementation. The project installed green infrastructure to reduce chronic flooding issues at Kreole Primary Elementary School in Moss Point, Mississippi.
- The coastal management program is interested in facilitating funding for outreach about the availability of a mobile app version of the [Coastal Homeowner’s Handbook](#) that helps users prepare for and recover from disasters as well as for support of translation of the handbook into Vietnamese and Spanish.
- The program is regarded by partners as a key resource for expertise and advice on restoration techniques like beneficial use of dredged material.
- The coastal management program leadership has seen the successful adoption of the fortified roof program in Louisiana and Alabama and is taking steps to bring [Smart Home America’s FORTIFIED Roof](#) program to Mississippi. By raising awareness about the program’s benefits, including flood and wind insurance savings, the program seeks to encourage homeowners to adopt these standards to increase the resilience of the roof of their home. Additionally, the coastal management program wants to support training of more [FORTIFIED Home™](#) evaluators to increase certification capacity and insurance benefits to Mississippi’s coastal community.

The discussions also sparked several new ideas within the coastal management program team that, within their authority, could further enhance the program’s contribution to resilience efforts. These potential opportunities include:

- Recognizing that public state funds may not be used for private land, explore funding and financing approaches that are being taken by other state, regional, and local entities that would be appropriate for Mississippi.
- Coastal restoration activities like installation of alternative shorelines and the beneficial use of dredged material enhance community resilience to coastal hazards. The program could frame restoration in terms of improving resilience to coastal hazards which could potentially open up additional funding opportunities.
- Given that the Office of Coastal Restoration and Resiliency and the coastal management program are the two Mississippi Department of Marine Resources programs charged with coastal resilience, they should work together to develop a common understanding and agreement around their respective roles within the department and identify opportunities to collaborate and amplify their collective impact. The coastal management program could develop the 309 strategy to outline how they wish to further develop that niche and to identify opportunities to support resilience-related projects in partnership with the Office of Coastal Restoration and Resiliency.

Findings for Coastal Habitat Protection and Resilience to Coastal Hazards

Accomplishment: The Mississippi Coastal Management Program's Coastal Preserves Program established *Rules and Regulations for the Use of State-Owned Coastal Preserve Areas* that were approved in 2019 by the Mississippi Commission for Marine Resources. These rules and regulations, found in [Title 22 Part 19](#), provide the Mississippi Coastal Management Program the ability to more effectively manage and steward these areas balancing protection of these lands with public access and use.

Accomplishment: The Mississippi Coastal Management Program continues to work with and through partners like the Mississippi-Alabama Sea Grant Consortium to understand and address factors that hamper awareness and to support broader adoption of alternative shoreline approaches among property owners.

Accomplishment: The Mississippi Coastal Management Program is regarded as a leader for the beneficial use of dredged materials and continues to enhance the success of these projects through engagement with affected communities and information exchange and knowledge transfer through support of regional networks like the Mississippi Beneficial Use Group.

Accomplishment: The Mississippi Coastal Management Program and the Grand Bay National Estuarine Research Reserve leverage resources and expertise between programs, easing the burden on both programs. For example, the two programs currently share equipment and collaborate to conduct prescribed burns on coastal preserves. Additionally, the coastal management program and the reserve are interested in exploring opportunities for collaboration on habitat management research and monitoring efforts, for example, vegetation monitoring in coastal preserves to assess effectiveness of management activity.

Recommendation: NOAA's Office for Coastal Management encourages the Mississippi Coastal Management Program to address barriers to adoption of alternative shoreline approaches by private property owners by seeking additional avenues to support and fund the appropriate use of alternative shorelines. Some examples include increasing awareness of the Natural Resources Conservation Service's cost share program, adopting a neighborhood scale approach, and working to implement pilot demonstration projects on public property. Additionally, the coastal management program could draw inspiration from innovative, successful funding examples in other states and tap into training resources available from NOAA's Office for Coastal Management.

Evaluation Metrics, 2018–2023

Approved August 6, 2018. The goals were adapted from the Mississippi Department of Marine Resources (MDMR) Strategic Plan: 2019 – 2023.

Metric 1

Goal: Restore, protect, and conserve the marine and estuarine habitats of Mississippi.

Objective: Acquire additional lands for the Mississippi Coastal Preserves Program.

Strategy: 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. Since 1992, the program has acquired more than 24,000 acres including tidal wetlands, beach and dune, and other coastal habitats. Over the next several years, there will likely be a substantial increase in funding available for land acquisition in Coastal Preserves through Deepwater Horizon/BP Oil Spill Settlement programs such as NRDA, NFWF Gulf Environmental Benefit Fund, and the RESTORE Act. The State of Mississippi has already received a \$17.4 million grant from NFWF for a project entitled “The Acquisition of Priority Tracts for Coastal Habitat Connectivity – Phase I.” This project seeks to enhance coastal habitat connectivity and increase core conservation areas within the Mississippi Coastal Preserves System, the Gulf Islands National Seashore, and the Grand Bay National Wildlife Refuge.

Performance Measure: From 2018 to 2023, number of acres of tidal wetlands protected by acquisition or easement with assistance from Coastal Zone Management funding or staff.

Target: From 2018 to 2023, 500 acres of tidal wetlands will be protected by acquisition or easement with assistance from Coastal Zone Management funding or staff.

Results:

Year 1 (2018) = 0

Year 2 (2019) = 0

Year 3 (2020) = 0

Year 4 (2022) = 0

Year 5 (2023) = 1857

Total = 1857

Discussion: Augmenting the progress reporting reflected in the results above, the information submittal provided by the program in preparation for the evaluation details that the coastal management program has acquired an additional 4,657 for the Coastal Preserves Program from 2018 through 2023. An Internet search reveals an additional acquisition of 611 acres at the Graveline Bay Coastal Preserve. While it is not clear what amount of the acquired acreage discussed in the information submittal is tidal wetlands, based solely on the progress reporting, the program exceeded its target of protection or acquisition of 500 acres.

Metric 2

Goal: Manage the marine and estuarine habitats of Mississippi using sound science and responsible regulation.

Objective: Provide coastal decision-makers and regulators with the skills, knowledge, and tools needed to address coastal resource management issues.

Strategy: In evaluating proposed regulated activities and making coastal zone consistency determinations, MDMR's Wetlands Permitting Program works closely with applicants, consultants, contractors, local government officials, several state and federal agencies, as well as our own Commission on Marine Resources. In addition, staff from MDMR's Office of Coastal Resources Management work closely with other agencies and groups on the development of large-scale restoration projects, beneficial uses of dredged material, management activities in Coastal Preserves, and proposed land acquisitions. Some of the groups mentioned above have high staff/member turnover rates, which may negatively affect the functioning of these groups. Having a core group of individuals with the necessary knowledge, skills, abilities, and experience to review and assess the best available information is critical to making sound resource management decisions. MDMR will develop a regular schedule for training events and assign staff to recruit attendees and coordinate training.

Performance Measure: From 2018 to 2023, number of training events related to government coordination offered by MDMR's Office of Coastal Resources Management.

Target: From 2018 to 2023, 10 training events related to government coordination will be offered by MDMR's Office of Coastal Resources Management.

Results:

Year 1 (2018) = 0

Year 2 (2019) = 0

Year 3 (2020) = 0

Year 4 (2021) = 0

Year 5 (2022) = 3 training events

Total = 3

Discussion: The program reported a total of three training events. However, from the information submittal provided by the program as a part of the information collection for the evaluation, in 2022 the coastal management program's Bureau of Wetlands Permitting partnered with the Mississippi State University's Coastal Research and Extension Center, the Mississippi Secretary of State's office, and Anchor QEA to host two workshops that provided participants with information and resources regarding the benefits, planning, and design, and permitting of alternative shorelines. Additionally, the FY2023 Mississippi Department of Marine Resources Annual Report details that the program hosted three state and federal wetlands permitting process workshops for municipal employees, marine contractors, and environmental consultants.

Metric 3

Goal: Enhance resiliency and minimize vulnerability of the Mississippi Gulf Coast.

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

Strategy: Reducing risk from coastal hazards is a primary concern of the MDMR. Given the intensity of recent coastal storms, and the potential impacts for climate change and sea level rise, there is a growing concern that more people and property will be vulnerable to the impacts of coastal hazards. To address coastal hazards in a meaningful way, the MDMR has established a new Office of Coastal Restoration and Resiliency. This new office will focus attention on the resiliency of the natural and the built environment and helping communities prepare for short- and long-term impacts of coastal hazards and to consider hazard risks in land-use planning, architecture development and management of natural habitats. Staff from the Office of Coastal Resources Management currently participate in the development of Coastal Restoration projects aimed at ameliorating the effects of coastal hazards along with staff from the Office of Coastal Restoration and Resiliency. The two offices anticipate working together on future local-level planning efforts. Between 2018-2023, we anticipate completing or updating one local plan and completing three state-level projects with assistance from CZM funding or staff.

Performance Measure: From 2018 to 2023, number of a) state-level policies and plans; b) local-level policies and plans; c) projects completed at the state-level; and d) projects completed at the local-level to reduce future damage from coastal hazards with assistance from Coastal Zone Management funding or staff.

Target: From 2018 to 2023, a total of four a) state-level policies and plans; b) local-level policies and plans; c) projects completed at the state-level; and d) projects completed at the local-level to reduce future damage from coastal hazards will be completed with assistance from Coastal Zone Management funding or staff.

Results:

Year 1 (2018) = 0

Year 2 (2019) = 0

Year 3 (2020) = 7

Year 4 (2021) = 2

Year 5 (2022) = 0

Total = 9

Discussion: In year three, two state level projects were completed and five local level projects were completed. During the meetings conducted as a part of the evaluation, the program staff members discussed additional ways they can work with the Office of Coastal Restoration and Resiliency to maximize the effect of their collective efforts.

Conclusion

This evaluation concludes that the State of Mississippi is successfully implementing and enforcing its federally approved coastal management program, adhering to the terms of its federal financial assistance awards, and addressing coastal management needs identified in section 303(2)(A) through (K) of the Coastal Zone Management Act.

These evaluation findings contain one necessary action and four recommendations. The necessary action must be responded to within the deadline given. The recommendations must be considered before the next regularly scheduled program evaluation but are not mandatory at this time. Program recommendations that must be repeated in subsequent evaluations may be elevated to necessary actions.

This is a programmatic evaluation of the Mississippi Coastal Management Program, which may have implications regarding the state's financial assistance awards. However, it does not make any judgment about or replace any financial audits.

Jeffrey L. Payne, Ph.D.
Director
NOAA Office for Coastal Management

Date

Appendix: Response to Written Comments

No written comments were received.