# MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY MISSISSIPPI STATE EXPENDITURE PLAN 2024 AMENDMENT

Submitted Pursuant to the
Oil Spill Impact Component of the RESTORE Act
33 U.S.C. § 1321(t)(3)

Approved April 2025

## **Table of Contents**

| Introduction  | 3  |
|---|----|
| Designated State Entity   | 5  |
| Point of Contact  | 5  |
| Section I: State Certification of RESTORE Act Compliance                                | 6  |
| Certifications of RESTORE Act Compliance  | 6  |
| Process Used to Verify Compliance   | 6  |
| Section II: Public Participation Statement  | 7  |
| Section III: Financial Integrity  | 7  |
| Conflict of Interest  | 11 |
| Section IV: Overall Consistency with the Goals and Objectives of the Comprehensive Plan | 11 |
| Section V: Projects, Programs, and Activities   | 12 |

#### Introduction

Projects, and corresponding project details/provisions, approved in the Mississippi State Expenditure Plan (MSEP), as amended, remain in full force and effect to the extent not modified in this MSEP 2024 Amendment.

#### Overview of the Oil Spill

On or about April 20, 2010, the mobile offshore drilling unit Deepwater Horizon, which was being used to drill a well for BP Exploration and Production, Inc. (BP) in the Macondo prospect (Mississippi Canyon 252 – MC252), experienced an explosion, caught fire, and subsequently sank in the Gulf of America<sup>1</sup> (the Gulf). This incident resulted in the discharge of oil and other substances into the Gulf from the rig and the submerged wellhead. The Deepwater Horizon oil spill (Spill) is the largest maritime oil spill in U.S. history. The Spill discharged millions of barrels of oil over a period of 87 days. In addition, well over one million gallons of dispersants were applied to the waters of the Spill area in an attempt to disperse the spilled oil. An undetermined amount of natural gas was also released to the environment as a result of the Spill. After several failed attempts to stop the release of oil, the well was declared "sealed" on September 19, 2010.

As a result of civil and criminal settlements with the parties responsible for the Spill, the State of Mississippi (Mississippi) has and will continue to receive funding from several sources to restore or benefit the natural resources or the economy of Mississippi including, but not limited to, funding received through the following: (1) the Oil Pollution Act of 1990 (OPA) and the corresponding Natural Resource Damage Assessment (NRDA); (2) the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act); and (3) the National Fish and Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund (GEBF).

The Executive Director of the Mississippi Department of Environmental Quality (MDEQ) is the designated natural resource trustee under OPA and the Governor's designee for the RESTORE Act and NFWF GEBF for the State of Mississippi.

#### RESTORE Act

On July 6, 2012, the President signed into law the RESTORE Act, Subtitle F of Public Law 112-141. The RESTORE Act makes available 80% of the Clean Water Act (CWA) civil and administrative penalties paid by the responsible parties for the Spill (i.e., BP and Transocean) to the Gulf Coast Restoration Trust Fund established by the U.S. Department of Treasury. Under the Act, monetary penalties in the Trust Fund will be available for programs, projects, and activities that restore and protect the environment and economy of the Gulf Coast region. Within the RESTORE Act, there are five funding components (commonly referred to as "buckets"), which make funds available to each of the Gulf States in accordance with certain legal parameters. These components are:

- Direct Component (Bucket 1)
- Comprehensive Plan Component (Bucket 2)
- Oil Spill Impact Component (Bucket 3)
- National Oceanic and Atmospheric Administration (NOAA) Science Program (Bucket 4)
- Centers of Excellence Research Grants Program (Bucket 5)

The Oil Spill Impact Component, also referred to as Bucket 3, accounts for 30% of the funds available in the Gulf Coast Restoration Trust Fund. In accordance with the requirements of the RESTORE Act and as set out in the allocation regulation at 40 C.F.R. § 1800.500, the State of Mississippi will receive 19.07% of the 30% allocation of the Oil Spill Impact Component. The RESTORE Act requires Mississippi, through MDEQ, to prepare a Mississippi State Expenditure Plan (MSEP) describing each activity, project, or program for which Mississippi seeks funding under the Oil Spill Impact Component.

As defined in 31 C.F.R. § 34.503, the MSEP includes a narrative description for each activity, project, or program for which Oil Spill Impact Component funding is being sought. The narrative description for each

<sup>&</sup>lt;sup>1</sup> Pursuant to Executive Order 14172, the U.S. Continental Shelf area bounded on the northeast, north, and northwest by the State of Texas, Louisiana, Mississippi, Alabama and Florida and extending to the seaward boundary with Mexico and Cuba in the area formerly named as the Gulf of Mexico was renamed as the Gulf of America. References to the Gulf of Mexico have been changed throughout.

activity in the MSEP contains the following information:

- The need, purpose, and objectives of the activity;
- How the activity is eligible for funding and meets all requirements of § 34.203 and § 34.503;
- Location of the activity;
- Budget for the activity;
- Milestones for the activity;
- Projected completion dates for the activity;
- Criteria MDEQ will use to evaluate the success of each activity in helping restore and protect the Gulf Coast Region;
- If funding has been requested from other sources, including other components of the Act, the plan identifies the source, states how much funding was requested, and provides the current status of the request;
- How the activities in the plan contribute to the overall economic and ecological recovery of the Gulf Coast; and
- How each activity that would restore and protect natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands or the economy of the Gulf Coast, is based on the best available science.

New and/or amended MSEP(s) may be written as additional funds become available and as additional projects are identified for funding.

#### Eligible Activities for the Oil Spill Impact Component

The RESTORE Act dedicates 80% of any civil and administrative penalties paid under the Clean Water Act by responsible parties in connection with the Deepwater Horizon oil spill to the Gulf Coast Restoration Trust Fund for ecosystem restoration (environmental), economic recovery, and tourism promotion in the Gulf Coast region. The RESTORE Act differs from other restoration funding sources (i.e., NFWF, NRDA) in that it specifically allows and anticipates that restoration projects will be developed for the restoration of natural resources and the restoration of the economy, both of which were affected as a result of the Spill.

The eligible activities for the Oil Spill Impact Component cover both ecological and economic projects. The RESTORE Act defines eligible activities for which the Oil Spill Impact Component funds may be used. The eligible activities, projects, and programs as defined in 31 C.F.R. § 34.203 are:

- 1. Restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region;
- 2. Mitigation of damage to fish, wildlife, and natural resources;
- 3. Implementation of a federally approved marine, coastal, or comprehensive conservation management plan, including fisheries monitoring;
- 4. Workforce development and job creation;
- 5. Improvements to or on state parks located in coastal areas affected by the Deepwater Horizon Oil Spill:
- 6. Infrastructure projects benefitting the economy or ecological resources, including port infrastructure;
- 7. Coastal flood protection and related infrastructure;
- 8. Planning assistance;
- 9. Administrative costs;
- 10. Promotion of tourism in the Gulf Coast Region, including recreational fishing; and
- 11. Promotion of the consumption of seafood harvested from the Gulf Coast Region.

#### **Designated State Entity**

The State of Mississippi, Office of the Governor, is the entity designated under the Oil Spill Impact Component of the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012 (RESTORE Act) to develop the required State Expenditure Plan. The Office of the Governor appointed Chris Wells, the Executive Director of the Mississippi Department of Environmental Quality, as his appointee.

#### **Point of Contact**

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#### Section I: State Certification of RESTORE Act Compliance

#### **Certifications of RESTORE Act Compliance**

The Mississippi Department of Environmental Quality hereby certifies to the following:

- Pursuant to the RESTORE Act, 33 U.S.C. § 1321(t)(3)(B)(i)(I), the MSEP includes projects, programs, and activities which will be implemented within the Gulf Coast Region and are eligible for funding under the RESTORE Act.
- Pursuant to the RESTORE Act, 33 U.S.C. § 1321(t)(3)(B)(i)(II), the projects, programs, and activities in the MSEP contribute to the overall economic and ecological recovery of the Gulf Coast.
- Pursuant to the RESTORE Act, 33 U.S.C. § 1321(t)(3)(B)(i)(III), the MSEP takes into consideration and is consistent with the goals and objectives of the Comprehensive Plan adopted by the RESTORE Council.
- Pursuant to the RESTORE Act, 33 U.S.C. § 1321(t)(2)(B)(i), the projects and programs that would restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, coastal wetlands, and economy of the Gulf Coast included on the MSEP will be based on the best available science as defined by the RESTORE Act.
- Pursuant to the RESTORE Act, 33 U.S.C. § 1321(t)(3)(B)(ii), not more than 25% of the funds will be used for infrastructure projects for the eligible activities described in 33 U.S.C. § 1321(t)(1)(B)(i)(VI-VII).
- Issues crossing Gulf State boundaries have been evaluated to ensure that a comprehensive, collaborative ecological and economic recovery is furthered by the MSEP.

#### **Process Used to Verify Compliance**

The projects were prioritized using the following:

Mississippi utilized three stakeholder-driven components to identify and prioritize all projects for inclusion in the SEP Amendment: Stakeholder Meetings; The Governor's Gulf Coast Advisory Committee (GCAC); and the Restoration Project Idea Portal. Items (a) through (f) below provide further explanation for the GCAC process:

- (a) Governor Tate Reeves created the GCAC to serve as an advisory body to the Governor for recommendation of projects to be funded for Mississippi under the RESTORE Act.
- (b) The GCAC is comprised of over 70 engaged stakeholders, including private citizens, non-governmental organizations, business owners, elected officials, and other community leaders from the Mississippi Coast.
- (c) The GCAC formed six sub-committees that focused on six key areas related to the activities specified in the RESTORE Act (Eco-restoration, Economic Development, Infrastructure, Seafood, Tourism, and Workforce Development/Research & Education).
- (d) On March 8, 2024, MDEQ released a public "call for projects" soliciting project ideas from the public for funding consideration on this amended SEP.
- (e) On May 20, 2024, Governor Reeves convened the GCAC to begin selection of recommended projects for this amended SEP. Each sub-committee member was sent a list of projects previously selected for funding within their respective category and provided a list of remaining portal projects related to their respective committee category.
- (f) The GCAC sub-committees met, and each produced a list of recommended projects for submittal to the Governor's office. After deliberation, the Governor selected projects to fund.

Each of the projects identified in the SEP Amendment was developed and informed directly from a project (or projects) submitted in the Restoration Project Idea Portal.

Additionally, MDEQ completed due diligence activities on each project to evaluate constructability, feasibility,

logistics, eligibility determinations, and environmental compliance reviews to confirm recommended projects could be funded by the Spill Impact Component of the RESTORE Act.

#### Section II: Public Participation Statement

There were multiple phases of public engagement for the 2024 MSEP Amendment in order to gather the appropriate public participation necessary to conform with the public participation requirements outlined in 31 C.F.R. § 34.503(g). In accordance with 31 C.F.R. § 34.503(g), the MSEP was available for public review and comment for a minimum of forty-five (45) days. MDEQ made the MSEP available for public comment and review in a manner that is consistent with other MDEQ-administered public comment periods related to the Deepwater Horizon oil spill. Each activity on the MSEP has been adopted after consideration of all meaningful input.

#### **Section III: Financial Integrity**

On behalf of the State of Mississippi, MDEQ understands its fiduciary responsibilities under the RESTORE Act and is committed to maintaining the highest level of fiscal accountability and transparency to assure the public and Congress that funds have been managed appropriately to further the purposes of the RESTORE Act. These responsibilities include RESTORE Act project administration functions, such as maintaining financial records and ensuring complete and accurate reporting through project oversight. MDEQ's financial system was developed around the basic principles of sound financial management. These principles are internationally accepted accounting and financial management practices recognized worldwide by leading public and private sector organizations. The basic principles of sound financial management include, among others, principles of transparency, internal checks and balances, and independent external auditing.

*Transparency* – MDEQ is committed to maintaining transparency with the public and to reporting on RESTORE Act projects, programs, and activities.

*Internal checks and balances* – To maintain effective controls, MDEQ properly segregates duties among state personnel performing financial functions for RESTORE Act projects, programs, and activities.

*Independent external auditing* – All state agencies are subject to annual audits to be conducted by the Office of the State Auditor, or its contracted designee as prescribed by state law. Agency audits are performed at the fund level in conjunction with the State Auditor's annual audit of the State's Comprehensive Annual Financial Report (CAFR).

These principles of sound financial management are designed to:

- Prevent corruption and reduce or eliminate financial risk and loss;
- Ensure that funds are spent in accordance with the respective grant awards, state law and federal law, as applicable;
- Ensure that personnel responsible for implementing the activities in the project work plans have the resources needed to support the job; and
- Assist state personnel in spending funds efficiently and effectively and reporting expenditures accurately.

#### MDEQ is responsible for:

- Fiscally managing and safeguarding RESTORE Act project funds;
- Disbursing funds to sub-recipients in a timely manner for reimbursement of eligible project expenditures;
- Keeping accurate and up-to-date records of all financial transactions related to project activities;
- Providing accurate financial reports as requested or required;
- Assisting state personnel with financial planning, budgeting, monitoring, and evaluation;
- Assisting state personnel in understanding and complying with financial policies and procedures needed to ensure efficient and effective stewardship of RESTORE Act funds;
- Effective financial operations depend on clear policies and procedures for different areas of

activity such as:

- Cash management policies (e.g., project budgets, requests for funds, and disbursement of funds);
- Personnel policies;
- Policies regarding delegation of signature authority for expenditures or reimbursements in excess of established thresholds;
- Purchasing and procurement laws, regulations, and policies;
- Policies regarding reimbursement of administrative expenses;
- Policies regarding supporting documentation required for disbursement of funds; and
- Policies establishing financial reporting requirements and schedules, including documented review processes by appropriate supervisory personnel.

#### **Financial Controls**

Financial controls are designed to enable state agencies to accomplish fiduciary responsibilities. These controls also reduce the risk of asset loss, ensure that RESTORE Act project documentation is complete and accurate, that financial reports are reliable, and ensure compliance with laws and regulations. A financial control system includes both preventative controls (designed to discourage errors or fraud) and detective controls (designed to identify an error or fraud after it has occurred).

Mississippi law requires "...each state agency, through its governing board or executive head, to maintain continuous internal audit covering the activities of such agency affecting its revenue and expenditures, and maintain an adequate internal system of pre-auditing claims, demands and accounts against such agency as to ensure that only valid claims, demands and accounts will be paid...". Miss. Code Ann. § 7-7-3(6)(d), (2016). Consistent with the RESTORE Act and the MSEP, sub-recipients must operate and use resources with minimal potential for waste, fraud, and mismanagement. The State's financial control system provides assurance that significant weaknesses that could affect the State's ability to meet its objectives would be prevented or detected in a timely manner.

Project management, other personnel, and those charged with governance will apply internal control processes that are designed to provide reasonable assurance in the reliability of project financial reporting. The system includes characteristics such as:

- Policies and procedures that provide for appropriate segregation of duties to reduce the likelihood of deliberate fraud;
- Personnel training materials that ensure employees are qualified to perform their assigned responsibilities;
- Sound practices to be followed by personnel in performing their duties and functions; and
- Proper authorization and recording procedures for financial transactions.

MDEQ's internal control system has been modeled after the Committee of Sponsoring Organizations (COSO) internal control framework and the following five interrelated components. Annually, each state agency is required to certify that it has performed an internal control risk assessment, identify weaknesses, and describe a corrective action plan, if applicable.

Control Environment – In Mississippi, responsibility for implementing internal controls at each state agency begins with the chief executive officer and extends to everyone in the agency. Each agency director personally holds those in leadership positions responsible for helping to design, implement, maintain, and champion an internal control program that encompasses all agency fiscal programs and related activities. Each agency's chief financial officer shares this leadership role, yet ultimate accountability remains with the agency head.

Personnel are adequately trained to carry out their responsibilities and are required to understand their responsibilities. The State provides its employees with the authority to perform the tasks assigned to them.

**Risk Assessment** – As part of establishing proper controls and procedures, an assessment is performed to identify, analyze, and manage risks relevant to achieving the state's goals and objectives for RESTORE Act projects. This assessment identifies internal and external events or circumstances that could adversely affect the state's ability to carry out its fiduciary responsibilities. Identified risks according to potential impact on the

RESTORE Act projects and the likelihood of occurrence will be considered. The MSEP is considered in the risk assessment process by considering the goals and objectives of the RESTORE Act activities while assessing the control environment, the overall financial management process, the role of the accounting system, and other financial management activities.

The identification of component systems comprising the complete accounting system is also included in the risk assessment process. Transaction cycles were identified and considered along with inherent risks. These will be continuously reviewed, and strategies will be updated as needed to manage the risks.

Control Activities – MDEQ's internal control activities include written policies, procedures, techniques, and mechanisms that help ensure management's directives are carried out in compliance with the RESTORE Act criteria. Control activities help identify, prevent, or reduce the risks that can impede accomplishment of state objectives. Control activities occur throughout the financial department, at all levels and in all functions; control activities include things such as approvals, authorizations, verifications, reconciliations, documentation, separation of duties, and safeguarding of assets.

For each transaction cycle identified in the risk assessment, the flow of information through the process and the internal control activities taken will be documented and analyzed.

Documentation may include organizational charts, standard operation procedures, manuals, flowcharts, decision tables, questionnaires, and/or review checklists.

Communication and Information – The state's financial system provides adequate processes and procedures to ensure that each agency or department has relevant, valid, reliable, and timely communications related to internal and external events to effectively run and control its operations. Agency directors can obtain reliable information to make informed business decisions, determine their risks, and communicate policies and other important information to those who need it.

Communication is vital to effective project management, and MDEQ's financial information system has mechanisms in place to properly capture and communicate RESTORE Act project financial data at the level appropriate for sound financial management. Policy manuals, accounting and financial reporting manuals, internal memoranda, verbal directives, and management actions are a few of the means of communicating across state agencies.

**Monitoring** – Monitoring of the internal control system will be performed to assess whether controls are effective and operating as intended. Monitoring is built into normal, recurring operations, is performed on a real-time basis, reacts dynamically to changing conditions, and is ingrained in each state agency. On-going monitoring occurs through routine managerial activities such as supervision, reconciliations, checklists, comparisons, performance evaluations, and status reports. Monitoring may also occur through separate internal evaluations (e.g., internal audits/reviews) or from external evaluations (e.g., independent audits, comparison to industry standards, surveys). Any deficiencies found during monitoring will be reported to the appropriate authority.

MDEQ requires prompt evaluation of any findings and recommendations. Formal procedures are documented for responding to findings and recommendations. Those that generate action items are properly outlined for timely response and resolution. Responsible parties are required to complete action items to correct or otherwise resolve the deficiencies within an established timeframe. The monitoring process also includes analysis of whether exceptions are reported and resolved quickly.

#### Accountability

While each state employee has personal internal control responsibility, the state agency director holds ultimate responsibility and assumes ownership for internal control over financial reporting of RESTORE Act funds. Other directors and managers support the state's internal control philosophy, promote compliance, and maintain control within their areas of responsibility. Chief financial officers have key oversight and policy enforcement roles over fiscal matters. Other state personnel hold lead responsibility for compliance with nonfinancial aspects of laws, directives, policies, procedures, and codes of ethics.

The state agency director has designated a senior manager as the RESTORE Act project manager specialist who is responsible for coordinating the overall state-wide effort of evaluating, improving, and reporting on internal controls over RESTORE Act project management. A risk assessment of project internal control systems will be performed annually. If the risk assessment indicates a high level of risk associated with the financial control system, internal controls will be evaluated. Any serious deficiencies will be reported to the appropriate authority.

#### **Key Controls**

MDEQ applies key controls for financial operating functions that serve as strategic risk mitigation tools within each area. These key controls are developed around financial management policies of segregation of duties, systematic reviews and reconciliations, and documented approval processes. These key controls serve as the framework for financial processes used in the flow of information for capturing and reporting financial data.

#### Other Financial Integrity Mechanisms

MDEQ has developed detailed written policies and procedures as part of its financial control systems and financial control system plan. The plan, policies, and procedures provide assurance that RESTORE Act funds are being safeguarded, and that applicable statutes, rules, and regulations are being followed while also ensuring that the goals and objectives of the RESTORE Act are being met.

The financial control system plan is more than just a list of procedures or flowcharts of how activities operate. Rather, the plan is a comprehensive document that encompasses all components of internal controls. Likewise, the plan documents the financial control structure as it relates to those functions. Key financial integrity mechanisms of internal control over financial reporting are described in the following paragraphs.

Risk assessments of sub-recipients – Pursuant to the Uniform Guidance requirements in 2 C.F.R. Part 200, MDEQ will emphasize components of sub-recipients' financial system internal checks and balances that address fraud, waste, and performance. MDEQ's financial management system is designed for the prevention of fraud, waste, and abuse. As such, risk assessments of all sub-recipients' financial management systems will be conducted before awarding RESTORE funding. MDEQ's formalized risk assessment process for sub-recipients is described in the document titled "Mississippi Department of Environmental Quality, Office of Restoration, Sub-recipient Monitoring Procedures," which outlines MDEQ's process to assess the capabilities of sub-recipients to implement activities in the MSEP consistent with the requirements of 2 C.F.R. § 200, including the sub-recipient risk evaluation in 2 C.F.R. 200.332(b).

**Project budgets** – Project budgets represent the financial plans for projects throughout their lifespans. The budgets match planned expenditures with revenues that the state expects to receive, which is essential for effective cash flow planning and management. Budgets also help prevent the misuse of project funds and control spending.

Segregation of duties – MDEQ employs several levels of control to achieve proper segregation of duties in financial processes. Departmental controls allow for proper segregation among functions related to the recording and reporting of project transactions. Supervisory approval is required for all expenditures by personnel independent of the recording process. Stewardship over project funds is essential for proper fiduciary accountability, and the State has established the framework to achieve this component of internal control.

**Safeguarding of assets** – Access to financial project information is restricted to essential personnel. Passwords and other physical safeguards are employed by the State to restrict access to financial data. By restricting access, the risk of misappropriation and fraud is reduced because only the personnel who will be working on the financial data for the projects have access to those functions. Regular backups of financial information are done and stored off-site to minimize loss of data due to an unforeseen occurrence.

**Sub-recipient monitoring** – MDEQ developed a process for sub-recipient monitoring using an effective risk assessment model. As part of the initial risk assessment process, sub-recipients are required to complete an Organizational Self-Assessment (OSA) questionnaire and provide copies of standard financial policies and procedures that the state evaluates as part of designing the sub-recipient monitoring program. The OSA is required to be updated annually by each sub-recipient. On-site assistance and reviews for a sub-recipient based

on appropriate risk levels will be provided throughout the life of the projects. MDEQ will require and review financial and progress reports for accuracy, completeness, and alignment with RESTORE goals. Budget reports may also be required for comparison to actual expenditures, in detail if necessary.

MDEQ may also employ other financial integrity mechanisms if necessary or for specific RESTORE Act project types. Modifications will be based on updated risk assessments for the RESTORE Act financial control system.

#### **Conflict of Interest**

The processes that MDEQ uses to prevent conflicts of interest in the development and implementation of the MSEP, as required by 31 C.F.R. § 34.503(b)(3), are guided by applicable Mississippi law. Under Mississippi Code § 25-4-1, it essential to the proper operation of democratic government that public officials and employees be independent and impartial, that governmental decisions and public policy be made on the proper channels of the government structure; that public office is not used for private gain other than the remuneration provided by law; that there be public confidence in the integrity of government; and that public officials be assisted in determinations of conflicts of interest.

Further, MDEQ requires, where applicable, the completion of a non-collusion and conflict of interest affidavit certifying that there are no present or currently planned interests (financial, contractual, organizational, or otherwise) relating to the work to be performed under any contract resulting from the proposed work that would create any actual or potential conflict of interest (or apparent conflicts of interest)(including conflicts of interest for immediate family members: spouses, parents, children) that would impinge on its ability to render impartial, technically sound, and objective assistance or advice or result in it being given an unfair competitive advantage. MDEQ also requires sub-recipients and contractors to notify MDEQ immediately of any potential or actual conflicts that may arise. If any potential or actual conflict cannot be resolved to MDEQ's satisfaction, MDEQ reserves the right to terminate the sub-award agreement or contract in place pursuant to the Termination for Convenience clause of the sub-award agreement or contract.

# Section IV: Overall Consistency with the Goals and Objectives of the Comprehensive Plan

Mississippi's 2024 MSEP Amendment focuses on three of the goals identified in the Comprehensive Plan:

- Replenish and Protect Living Coastal and Marine Resources
- Restore and Revitalize the Gulf Economy Enhance the sustainability and resiliency of the Gulf economy
- Enhance Community Resilience Build upon and sustain communities with capacity to adapt to short- and long-term changes

Mississippi's 2024 MSEP Amendment focuses on four objectives identified in the Comprehensive Plan:

- Protect and Restore Living and Coastal Marine Resources
- Promote Natural Resource Stewardship and Environmental Education
- Promote Community Resilience
- Restore and Enhance Natural Processes and Shorelines

**Section V: Projects, Programs, and Activities** 

|   | Project Title  | Estimated<br>Cost | Infrastructure<br>(Yes/No) | Start Date | End Date   | Primary Eligible Activity (number 1- 11; see section 4.1.1 of Submittal Guidelines) | Informed<br>by Best<br>Available<br>Science<br>(Yes/No) | Status   |
|---|--|-------------------|----------------------------|------------|------------|---|---|--|
| 1 | Mississippi Gulf<br>Coast Water<br>Quality<br>Improvement<br>Program | \$56 Million      | No                         | 08/01/2018 | 07/31/2026 | 1   | Yes   | Activity Approved (2016 Initial MSEP). Activity Amended (2017 MSEP Amendment). Activity Amended (2019 MSEP Amendment). |
| 2 | Pascagoula<br>Oyster Reef<br>Complex Relay<br>and Enhancement        | \$4.1 Million     | No                         | 08/01/2018 | 07/31/2029 | 1   | Yes   | Activity Approved (2016 Initial MSEP). Activity Amended (2017 MSEP Amendment).   |

|   | Project Title  | Estimated<br>Cost | Infrastructure<br>(Yes/No) | Start Date | End Date   | Primary Eligible Activity (number 1- 11; see section 4.1.1 of Submittal Guidelines) | Informed<br>by Best<br>Available<br>Science<br>(Yes/No) | Status   |
|---|--|-------------------|----------------------------|------------|------------|---|---|--|
| 3 | Compatibility, Coordination, and Restoration Planning  | \$3.3 Million     | No                         | 08/01/2018 | 07/31/2026 | 8   | No  | Activity Approved (2016 Initial MSEP). Activity Amended (2017 MSEP Amendment). Scope clarification (2018 MSEP Amendment). Activity Amended (2022 MSEP Amendment) Activity Amended (2023 MSEP Amendment) Activity Amended (2023 MSEP Amendment) Activity Amended (2024 MSEP Amended (2024 MSEP Amendment) |
| 4 | Gulf of Mexico<br>Citizen Led<br>Initiative<br>(GMCLI) | \$1.9 Million     | No                         | 08/01/2018 | 1/31/2027  | 1   | Yes   | Activity<br>Approved<br>(2017 MSEP<br>Amendment).  |
| 5 | Remote Oyster<br>Setting Facility                      | \$9.36 Million    | No                         | 01/01/2019 | 07/31/2026 | 1   | Yes   | Activity<br>Approved<br>(2017 MSEP<br>Amendment).  |
| 6 | Coastal<br>Headwater Land<br>Conservation<br>Program   | \$8 Million       | No                         | 08/01/2018 | 12/31/2021 | 1   | Yes   | Activity Approved (2017 MSEP Amendment).   |

|    | Project Title  | Estimated<br>Cost | Infrastructure<br>(Yes/No) | Start Date | End Date   | Primary Eligible Activity (number 1- 11; see section 4.1.1 of Submittal Guidelines) | Informed<br>by Best<br>Available<br>Science<br>(Yes/No) | Status   |
|----|--|-------------------|----------------------------|------------|------------|---|---|--|
| 7  | Round Island<br>Living Shoreline<br>Demonstrationand<br>ProtectionProject<br>(Planning)            | \$2.2 Million     | No                         | 08/01/2018 | 10/31/2027 | 8   | Yes   | Activity Approved (2017 MSEP Amendment).   |
| 8  | Mississippi Sound<br>OysterShell<br>Recycling<br>Program   | \$650,000         | No                         | 12/01/2019 | 02/28/2026 | 1   | Yes   | Activity Approved (2018 MSEP Amendment).   |
| 9  | Beneficial Use of<br>Dredge Material<br>for Marsh<br>Creation and<br>Restoration in<br>Mississippi | \$19 Million      | No                         | 12/01/2019 | 11/30/2025 | 1   | Yes   | Activity Approved (2018 MSEP Amendment) Activity Amended (2019 MSEP Amendment). Activity Amended (2023 MSEP Amendment) |
| 10 | Hancock County<br>MarshLiving<br>Shoreline<br>Extension  | \$6 Million       | No                         | 10/01/2019 | 02/28/2026 | 1   | Yes   | Activity<br>Approved<br>(2018 MSEP<br>Amendment)   |
| 11 | Mississippi<br>Beachfront<br>Resilience  | \$9.95 Million    | No                         | 10/01/2020 | 10/31/2027 | 1   | Yes   | Activity Approved (2019 MSEP Amendment) Activity Amended (2021 MSEP Amendment)   |
| 12 | Public / Private Training Partnership (Accelerate MS)  | \$2.2 Million     | No                         | 1/1/2023   | 12/31/2027 | 4   | Yes   | Activity Approved (2021 MSEP Amendment)  |

|    | Project Title  | Estimated<br>Cost | Infrastructure<br>(Yes/No) | Start Date | End Date   | Primary Eligible Activity (number 1- 11; see section 4.1.1 of Submittal Guidelines) | Informed<br>by Best<br>Available<br>Science<br>(Yes/No) | Status   |
|----|--|-------------------|----------------------------|------------|------------|---|---|--|
| 13 | Coastal Habitat<br>Management<br>Program   | \$3.3 Million     | No                         | 1/1/2023   | 07/31/2029 | 1   | Yes   | Activity Approved (2021 MSEP Amendment)  |
| 14 | Gulf Coast Center<br>of Security and<br>Emerging<br>Technology<br>(CSET) Fusion            | \$5.5 Million     | No                         | 1/1/2023   | 12/31/2027 | 4   | Yes   | Activity Approved (2021 MSEP Amendment)  |
| 15 | Improvement of Wastewater Quality and Solid Waste Disposal from Shrimp Processing Industry | \$5.5 Million     | No                         | 1/1/2023   | 12/31/2027 | 1   | Yes   | Activity Approved (2021 MSEP Amendment)  |
| 16 | D'Iberville<br>Working<br>Waterfront and<br>Commercial<br>Seafood Harbor                   | \$8.8 Million     | Yes                        | 1/1/2023   | 03/14/2029 | 6   | Yes   | Activity Approved (2021 MSEP Amendment) Activity Amended (2023 MSEP Amendment) |
| 17 | Harbor Expansion<br>Parking Area<br>(Jones Park)   | \$1.65<br>Million | Yes                        | 1/1/2024   | 12/31/2026 | 6   | Yes   | Activity Approved (2022 MSEP Amendment) Activity Amended (2023 MSEP Amendment) |
| 18 | Walter Anderson<br>Museum of Art<br>Creative Complex                                       | \$1.21<br>Million | No                         | 1/1/2024   | 12/15/2026 | 10  | Yes   | Activity Approved (2022 MSEP Amendment)  |
| 19 | Workforce Training – Meeting the Needs of the Supply Chain                                 | \$5.5 Million     | No                         | 1/1/2024   | 12/31/2028 | 4   | Yes   | Activity Approved (2022 MSEP Amendment)  |

|    | Project Title   | Estimated<br>Cost | Infrastructure<br>(Yes/No) | Start Date | End Date   | Primary Eligible Activity (number 1- 11; see section 4.1.1 of Submittal Guidelines) | Informed<br>by Best<br>Available<br>Science<br>(Yes/No) | Status   |
|----|---|-------------------|----------------------------|------------|------------|---|---|--|
| 20 | Health Professions (HEALP) for Our Community: Health Professions Center of Excellence | \$6.6 Million     | No                         | 1/1/2024   | 12/31/2028 | 4   | Yes   | Activity Approved (2022 MSEP Amendment)  |
| 21 | Recreational Enhancements at Front Beach  | \$5.5 Million     | Yes                        | 1/1/2024   | 12/31/2026 | 10  | Yes   | Activity Approved (2022 MSEP Amendment) Activity Amended (2024 MSEP Amendment) |
| 22 | IMMS Outreach<br>and Ecotourism   | \$825,000         | No                         | 1/1/2024   | 07/15/2027 | 10  | Yes   | Activity Approved (2022 MSEP Amendment)  |
| 23 | Coastal Science<br>Program for<br>Mississisppi High<br>Schools                        | \$1,886,500       | No                         | 1/1/2025   | 12/31/2029 | 4   | Yes   | Activity Approved (2022 MSEP Amendment) Activity Amended (2023 MSEP Amendment) |
| 24 | Nonspecific Invasive Species Detection and Treatment                                  | \$1.1 Million     | No                         | 1/1/2025   | 06/30/2031 | 1   | Yes   | New Activity<br>(2023 MSEP<br>Amendment)                                       |
| 25 | Pascagoula River<br>Scenic Trail  | \$2.75<br>Million | No                         | 1/1/2025   | 06/30/2026 | 10  | Yes   | New Activity<br>(2023 MSEP<br>Amendment)                                       |
| 26 | Artificial Reef<br>Project  | \$1.98<br>Million | No                         | 1/1/2025   | 12/31/2026 | 1   | Yes   | New Activity<br>(2023 MSEP<br>Amendment)                                       |
| 27 | Mississippi<br>Aquarium –<br>Interactive Exhibit                                      | \$5.6 Million     | No                         | 1/1/2025   | 06/30/2026 | 10  | Yes   | New Activity (2023 MSEP Amendment) Activity Amended (2024 MSEP Amendment)      |

|    | Project Title   | Estimated<br>Cost | Infrastructure<br>(Yes/No) | Start Date | End Date    | Primary Eligible Activity (number 1- 11; see section 4.1.1 of Submittal Guidelines) | Informed<br>by Best<br>Available<br>Science<br>(Yes/No) | Status                                   |
|----|---|-------------------|----------------------------|------------|-------------|---|---|--|
| 28 | Natural Gas<br>Improvements   | \$0               | Yes                        | 1/1/2025   | 06/30/2026  | 6   | Yes   | New Activity<br>(2023 MSEP<br>Amendment) |
| 29 | KHSA Taxilane<br>Sierra Extension   | \$0               | Yes                        | 1/1/2025   | 12/31/2026  | 6   | Yes   | New Activity<br>(2023 MSEP<br>Amendment) |
| 30 | Classrooms and<br>Dormitories for<br>the Center for<br>Marine Education<br>and Research | \$2.75<br>Million | Yes                        | 1/1/2025   | 12/31/2027  | 6   | Yes   | New Activity<br>(2023 MSEP<br>Amendment) |
| 31 | Living Shorelines Assistance Program  | \$1.1 Million     | No                         | 1/1/2026   | 12/31/2031  | 1   | Yes   | New Activity<br>(2024 MSEP<br>Amendment) |
| 32 | Stock Enhancement of Spotted Seatrout in Mississippi                                    | \$1.1 Million     | No                         | 1/1/2026   | 12/31/2031  | 1   | Yes   | New Activity<br>(2024 MSEP<br>Amendment) |
| 33 | Mississippi Sound<br>Estuary Program  | \$1.1 Million     | No                         | 1/1/2026   | 12/31/2028  | 1   | Yes   | New Activity<br>(2024 MSEP<br>Amendment) |
| 34 | Career Pathway<br>for Hydrographic<br>Technicians                                       | \$1.93<br>Million | No                         | 1/1/2026   | 12/31/2031  | 4   | Yes   | New Activity<br>(2024 MSEP<br>Amendment) |
| 35 | Mississippi<br>Artificial<br>Intelligence<br>Network (MAIN)                             | \$7.14<br>Million | No                         | 1/1/2026   | 12/31/2030  | 4   | Yes   | New Activity<br>(2024 MSEP<br>Amendment) |
| 36 | Port of Gulfport<br>Expansion   | \$1.21<br>Million | Yes                        | 1/1/2026   | 12/31/2029  | 6   | No  | New Activity<br>(2024 MSEP<br>Amendment) |
| 37 | Highway<br>63/Escatawpa<br>Natural Gas<br>Pipeline<br>Installation                      | \$0               | Yes                        | 1/1/2026   | 12/31/20027 | 6   | Yes   | New Activity<br>(2024 MSEP<br>Amendment) |

The following projects and programs are proposed for the 2024 MSEP:

#### Activity #3: Compatibility, Coordination, and Restoration Planning

**Project Summary:** The Compatibility, Coordination, and Restoration Planning project was approved in the 2016 MSEP and amended in the 2017, 2018, and 2022 MSEP Amendments. This project will provide planning assistance to support MDEQ's coordinated restoration planning effort to maximize the effectiveness of coordination of restoration in the Gulf Coast Region and the development of new and/or amended State Expenditure Plan(s). Additional information about the approved scope of work for this program can be found in the 2016 MSEP and the 2017, 2018, and 2022 MSEP Amendments.

#### **Project Modifications – 2024 MSEP Amendment**

The 2024 MSEP Amendment increases the program budget by \$500,000 to support activities approved in the MSEP as amended.

The approved 2016 MSEP and the 2017, 2018, 2022, and 2023 MSEP Amendments can be found at the following links: 2016 MSEP Amendment; 2017 MSEP Amendment; 2018 MSEP Amendment; 2022 MSEP Amendment.

#### Activity #21: Recreational Enhancements at Front Beach

**Project Summary:** This project would support promotion of tourism in the Gulf Coast region. This project is part of an overall re-development and re-purposing of a former seafood business centrally located on the primary public beach in Ocean Springs. The property has a long and deep connection with the seafood industry and the overall development and economic growth of the Gulf Coast dating back to the early 1800's. Following destruction of the structure during Hurricane Katrina in 2005, the surrounding area thrives as a public center and destination and includes improvements to enhance and protect the area for public access. The redevelopment would include a small marina, associated walkways, an open-air pavilion, green space, and other recreational amenities. Additional information about the approved scope of work for this program can be found in the 2022 MSEP Amendment.

#### **Project Modifications – 2024 MSEP Amendment**

The 2024 MSEP Amendment modifies the scope of work to exclude the marina component of the project and add a pier structure. Additionally, the following sections of the 2022 MSEP Amendment are modified to exclude the marina and add a pier structure:

**Need:** For increased economic development and tourism for the City of Ocean Springs and support public access, there is an opportunity to develop a pier and other amenities for recreational use.

**Purpose:** The purpose of the project is to provide improvements to the property to enhance public access and to support tourism activities.

**Objective:** To support planning and construction activities for a pier and other amenities in the Front Beach area of Ocean Springs.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would support infrastructure benefitting the economy in the Gulf Coast Region by constructing a pier and other amenities in Ocean Springs, MS. The project would open public access to the waterfront area.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (h) - promotion of tourism in the Gulf Coast region, including recreational fishing, and 33 U.S.C. §1321(t)(1)(B)(ii)(I) of the RESTORE Act. This activity would be implemented by the City of Ocean Springs and would comply with the definition of infrastructure in 31 C.F.R. §34.2. The primary purpose of the project is to support planning and construction activities to develop a pier and other amenities in the City of Ocean Springs to provide public access to the waterfront and increase tourism opportunities.

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Number of engineering design plans and permits acquired
- Number of improvements to recreational resources

| Activity     | Anticipated Project<br>Success | Short-term<br>outcome | Long-term outcome        |
|--------------|--------------------------------|-----------------------|--------------------------|
|              | Criteria/Metrics/              |                       |                          |
|              | Outcomes:                      |                       |                          |
| Planning     | 100% engineering               | Engineering and       | Public use of a pier and |
|              | design drawings and            | Design and            | recreational amenities   |
|              | signed permits                 | Permitting complete   |                          |
| Construction | Construction of the            | Build out of the pier | Public use of a pier and |
|              | pier and other                 | and other amenities   | recreational amenities   |
|              | amenities                      | at Front Beach        |                          |

**Monitoring and Evaluation:** The success of this project would be evaluated by the number of engineering and design plans and permits acquired to implement the construction of the pier and amenities. Additionally, improvements to recreational resources, such as the pier, will be evaluated based on finalized engineering and design specifications.

Best Available Science: In order for municipalities to enhance economic development, public access, as well as attract tourism there needs to be an investment in infrastructure (i.e., buildings, attractions, business centers, etc.). Beyond infrastructure development and economic development opportunities, the tourism sector additionally contributes to economic growth and creates jobs (Du et al., 2016). Planning, engineering, and design, permitting, and construction are priority action steps for potential economic development and tourism investment. For this project, public access improvements would create a more resilient waterfront amenity for recreation and outdoor congregation.

The approved 2022 MSEP Amendment can be found at the following link: 2022 MSEP Amendment

#### Activity #27: Mississippi Aquarium – Interactive Exhibit

**Project Summary:** This project would support the promotion of tourism in the Gulf Coast region through construction of an interactive exhibit to create a habitat for resident African penguins within the Mississippi Aquarium. Project components may include, but not limited to, habitat for the penguins, informational signage around the habitat, a viewing area for visitors, and a "behind the scenes" area where guests can have interactions with the penguins that includes time with penguin trainers and opportunities for guests to touch a penguin, hear their unique vocalizations, and get a photograph taken with a penguin. The behind-the-scenes area will also feature a nursery where penguin eggs will be incubated and hatched. This is a vital component to ensure a healthy population of penguins on public display. Visitors to the aquarium will be able to see penguin chicks through a window into the nursery during behind-the-scenes encounters.

The project would fund the construction and construction oversight of a new interactive exhibit within the Mississippi Aquarium. Additional activities may also include, but are not limited to, planning, oversight and management, and coordination of subaward(s) between MDEQ and sub-recipient.

#### **Project Modifications – 2024 MSEP Amendment**

The 2024 MSEP Amendment increases the project budget by \$1.1 million to support activities approved in the 2023 MSEP as amended.

The approved 2023 MSEP Amendment can be found at the following link: 2023 MSEP Amendment.

#### **Activity #31: Living Shorelines Assistance Program**

**Project Summary:** This project aims to support the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands in the Gulf Coast region through the implementation of a strategy designed to encourage waterfront property owners in coastal Mississippi to conserve and restore intertidal habitat.

The purpose of this project is to develop and implement a strategy that promotes the use of living shorelines over hardened alternatives for shoreline stabilization. Since most of the shorelines in this region are privately owned, this initiative is essential to foster widespread and impactful shoreline conservation and restoration efforts. To accomplish this, the project will establish a comprehensive living shorelines assistance program aimed at recruiting and incentivizing property owners to participate in shoreline conservation and restoration across coastal Mississippi. Activities may include, but are not limited to, soliciting applications, conducting site visits, designing site-specific small-scale living shoreline projects, assisting property owners with permitting, and administering a program to provide necessary supplies, such as native plants, breakwater or sill materials, and fill for living shoreline projects on state-owned water bottoms below the mean high-water line.

This project will fund the development and implementation of the program. Additional activities may include, but are not limited to, planning, oversight and management, and coordination of subawards between MDEQ and sub-recipients.

**Need:** Intertidal habitats have been degraded over time due to coastal development with the associated loss of ecosystem services these habitats provide.

**Purpose:** The purpose of this project is to conserve and restore intertidal habitats by promoting living shorelines over hardened alternatives.

**Objective:** Develop and implement a strategy to encourage waterfront property owners to conserve and restore intertidal habitats by choosing living shorelines over hardened alternatives.

**Location:** This project would take place in Jackson, Harrison, and Hancock Counties in Mississippi.

**Timeline:** This project is anticipated to start 01/01/2026 and end 12/31/2031.

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would contribute to restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region by conserving and restoring intertidal habitat.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (a) - restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region, and 33 U.S.C. §1321(t)(1)(B)(i)(I) of the RESTORE Act. This activity would be implemented by the Mississippi Sound Estuary Program through Mississippi State University and in partnership with Mississippi-Alabama Sea Grant. The primary purpose of the project is to conserve and restore intertidal habitat through living shorelines.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

- Replenish and Protect Living Coastal and Marine Resources
- Enhance Community Resilience

This project aligns with the following Comprehensive Plan objectives:

- Restore and Enhance Natural Processes and Shorelines
- Promote Community Resilience

#### **Major Milestones:**

Milestone - Planning, Engineering & Design, and Permitting

*Milestone* – Implementation

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Number of engineering design plans and permits acquired.
- Number of miles of living shoreline installed.
- Number of residential facilities benefitted.

| Activity               | Anticipated Project Success Criteria/Metrics/ Outcomes:  | Short-term<br>outcome   | Long-term outcome   |
|------------------------|--|---|---|
| Planning               | Comprehensive program development outlining recruitment strategies and implementation timeline | Clear guidelines and strategies for project execution; Effective coordination among project partners and stakeholders | Broader community<br>engagement in<br>shoreline conservation<br>efforts |
| Engineering and Design | Development of site-<br>specific designs for living<br>shoreline projects                      | E&D documents<br>for living<br>shoreline<br>construction  | Establishment of a replicable design model for future projects          |
| Implementation         | Living shoreline construction  | Improved intertidal habitat quality and functionality   | Enhanced resilience of coastal ecosystems and community                 |

**Monitoring and Evaluation:** The success of this project would be evaluated by 1) tracking the completion of milestones, including engineering design plans, permits for environmental compliance, and the number and length of living shoreline features constructed.

Best Available Science: Coastal marshes are essential not only for maintaining the ecological integrity of open shoreline habitats but also for supporting the overall health of coastal ecosystems within a broader landscape context (USEPA, 2000). These marshes are keystone habitats in coastal environments, forming the foundation for a wide array of ecosystem services and benefits. They act as natural buffers to protect shorelines from erosion, offer storm surge protection, and support fisheries productivity. Coastal marshes also enhance water quality by trapping sediments and creating conditions for nutrient assimilation and transformation, provide crucial habitat for diverse faunal species across multiple trophic levels, and contribute to carbon sequestration (Barbier et al., 2011; Mendelssohn et al., 2012).

Furthermore, these habitats play a critical role in bolstering community resilience by reducing vulnerabilities to coastal hazards, protecting property, and preserving resources vital to local economies and cultural heritage. Protecting these habitats involves various strategies, including physical acquisition to shield them from development pressures, elevation increases through the shallow-water disposal of sediments, marsh creation

via the beneficial use of dredged materials, and implementing living shorelines to mitigate erosion and facilitate sediment accumulation (Swann, 2008; Bilkovic et al., 2016).

Living shorelines offer multifaceted ecosystem service benefits that extend beyond habitat and shoreline protection. They enhance secondary benthic production (Bilkovic and Mitchell, 2013), support fisheries productivity (Gittman et al., 2016) and provide cultural and recreational benefits that strengthen community connections to the coastal environment (NOAA, 2015). These integrated ecological and community benefits underscore the critical importance of coastal marshes as foundational elements of resilient and sustainable coastal ecosystems.

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: \$1,100,000.00 (20% Planning/80% Implementation)

#### Partnerships/Collaboration:

• Mississippi Sound Estuary Program/Mississippi State University and Mississippi-Alabama Sea Grant

**Leveraged Resources:** \$500,000. (USDA NRCS – Approved)

Funds Used as Non-Federal Match: None currently anticipated.

Other: None currently anticipated.

#### References:

Barbier E.B., Hacker, S.D., Kennedy, C., Koch, E.W., Stier, A.C., Silliman, B.R. 2011. The value of estuarine and coastal ecosystem services. Ecological Monographs 81(2): 169-193.

Bilkovic, D.M., and Mitchell, M.M. 2013. Ecological tradeoffs of stabilized salt marshes as a shoreline protection strategy: effects of artificial structures on microbenthic assemblages. Ecological Engineering 61(A): 469-481.

Bilkovic, D.M., Mitchell, M., Mason, P., Duhring, K. 2016. The role of living shorelines as estuarine habitat conservation strategies. Coastal Management 44(3): 161-174.

Gittman, R.K., Peterson, C.H., Currin, C.A., Fodrie, F.J., Piehler, M.F. 2016. Living shorelines can enhance the nursery role of threatened estuarine habitats. Ecological Applications 26(1): 249-263.

Mendelssohn, I.A., Andersen, G.L., Baltz, D.M., Caffey, R.H., Carman, K.R., Fleeger, J.W., Joye, S.B., Lin, Q., Maltby, E., Overton, E.B., Rozas, L.P. 2012. Oil impacts on coastal wetlands: implications for the Mississippi River delta ecosystem after the Deepwater Horizon oil spill. Bioscience 62 (6): 562-574.

NOAA 2015. Guidance for considering the use of living shorelines. National Oceanic and Atmospheric Administration pp.1-36. Accessed online November 2018:

 $https://www.habitatblueprint.noaa.gov/wpcontent/uploads/2018/01/NOAA-Guidance-for-Considering-the-Use-of-Living-Shorelines\_2015.pdf$ 

Swann, L. 2008. The use of living shorelines to mitigate the effects of Storm events on Dauphin Island, Alabama, USA. American Fisheries Society Symposium. Accessed online November 2018: http://livingshorelinesolutions.com/uploads/Dr. LaDon Swann Living Shorelines Paper.pdf

USEPA, 2000. Principles for the Ecological Restoration of Aquatic Resources. EPA841-F-00-003. Office of Water (4501F), United States Environmental Protection Agency, Washington, DC. pp. 4

#### Activity #32: Stock Enhancements of Spotted Seatrout in Mississippi

**Project Summary:** This project supports the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region. It focuses on ensuring the sustainability of the Spotted Seatrout stock as well as the recreational, commercial, and charter fishing industries in Mississippi Sound and adjacent estuaries.

Spotted Seatrout (*Cynoscion nebulosus*), the most popular sportfish in the Gulf of America<sup>1</sup>, play a vital role in the ecology of the Mississippi Sound and the economy of the Mississippi Gulf Coast. MDMR's stock enhancement program is focused on maintaining and preserving Mississippi's Spotted Seatrout stock at sustainable levels, providing benefits to both recreational and commercial users. Additional species, such as Southern Flounder, may also be considered for stock enhancement efforts. These enhancement efforts aim to supplement wild populations, mitigate the impacts of habitat loss and overfishing, and support the sustainability of Mississippi coastal fisheries. The MDMR's Lyman Fish Hatchery, the largest state-run hatchery in coastal Mississippi, operates 14 half-acre lined ponds capable of growing up to 100,000 six-inch juvenile Spotted Seatrout for release. Currently, the hatchery has the resources to release approximately 60,000 six-inch Spotted Seatrout annually, along with more than 200,000 two-inch fingerlings. Through this project, MDMR proposes to increase Spotted Seatrout production at the Lyman Fish Hatchery over the next 5 years by upgrading the current facility to handle more capacity.

**Need:** As the demand for Spotted Seatrout has continued to grow, with anglers landing more than one million pounds annually in recent years, the growing demand highlights the need to support ongoing management measures by enhancing the stock through hatchery releases.

**Purpose:** The purpose of this project is to support the Spotted Seatrout stock through alternative management strategies.

**Objective:** To support the enhancement of the Spotted Seatrout stock in the Mississippi Sound and adjacent estuaries.

Location: This project would take place in Jackson, Harrison, and Hancock Counties in Mississippi.

**Timeline:** This project is anticipated to start 01/01/2026 and end 12/31/2031.

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would contribute to restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region through the enhancement of the Spotted Seatrout stock in the Mississippi Sound.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (a) - restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region, and 33 U.S.C. §1321(t)(1)(B)(i)(I) of the RESTORE Act. This activity would be implemented by the Mississippi Department of Marine Resources. The primary purpose of the project is to support the enhancement of the Spotted Seatrout stock in the Mississippi Sound.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

• Replenish and Protect Living Coastal and Marine Resources

This project aligns with the following Comprehensive Plan objectives:

• Protect and Restore Living Coastal and Marine Resources

#### **Major Milestones:**

Milestone - Facility/Equipment Upgrades

*Milestone* – Growth in Stock Production

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Completion of aquaculture facility/equipment upgrades.
- Number of juveniles and fingerlings released.

| Activity           | Anticipated Project Success Criteria/Metrics/ | Short-term<br>outcome | Long-term outcome      |
|--------------------|---|-----------------------|------------------------|
|                    | Outcomes:                                     |                       |                        |
| Facility/Equipment | Upgrade and optimize                          | Support               | Increased ability to   |
| Upgrades           | the Lyman Fish                                | increased             | provide necessary      |
|                    | Hatchery                                      | production by         | stock enhancements in  |
|                    | infrastructure                                | Year 1                | the future.            |
| Growth in Stock    | Producing and                                 | Production and        | Sustainability of the  |
| Production         | releasing juveniles                           | release of more       | Spotted Seatrout stock |
|                    | and fingerlings                               | juveniles and         |                        |
|                    |   | fingerlings by        |                        |
|                    |   | Year 2 than in        |                        |
|                    |   | previous years.       |                        |

**Monitoring and Evaluation:** The success of this project would be evaluated by the number of upgrades to the Lyman Fish Hatchery and the increase in the total release of Spotted Seatrout over five years.

**Best Available Science:** This project focuses on enhancing the population of Spotted Seatrout (*Cynoscion nebulosus*), a vital species in the Gulf of America<sup>1</sup> ecosystem and a cornerstone of the Mississippi Sound's economy and biodiversity. Stock enhancement efforts, such as those proposed at the MDMR's Lyman Fish Hatchery, have been shown to provide ecological and economic benefits. These approaches are essential for mitigating habitat loss, combating overfishing impacts, and ensuring sustainable fishery resources for future generations. Research identifies hatchery-based enhancement as a vital tool for rebuilding overexploited populations, provided it incorporates monitoring and adaptive management to mitigate potential ecological risks, such as ecosystem imbalances (Saillant, 2010; Somerset et al., 2014). Such informed practices align with sustainability goals while contributing to regional biodiversity and the vitality of fishery economics (Cooper et al., 2013; Hendon & Rakocinski, 2016).

Studies have demonstrated the success of hatchery-based initiatives in improving recruitment rates of target species (Camp et al., 2013). The project's expansion of juvenile and fingerling production aligns with best practices from fishery management literature, which emphasize incremental scaling to minimize ecological disruptions while achieving measurable increases in stock abundance (Tringali et al., 2008).

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: \$1,100,000.00 (20% Planning/80% Implementation)

#### Partnerships/Collaboration:

• Mississippi Department of Marine Resources

Leveraged Resources: N/A

Funds Used as Non-Federal Match: None currently anticipated.

Other: None currently anticipated.

#### **References:**

Camp, E.V., Lorenzen, K., Ahrens, R.N.M., Barbieri, L. and Leber, K.M. 2013. Potentials and limitations of stock enhancement in marine recreational fisheries systems: an integrative review of Florida's red drum enhancement. Reviews in Fisheries Science 21: 388-402.

Cooper, W.T., L.R. Barbieri, M.D. Murphy, and S.K. Lowerre-Barbieri. 2013. Assessing stock reproductive potential in species with indeterminate fecundity: Effects of age truncation and size dependent reproductive timing. Fisheries Research 138:31-41.

Hendon, J., and Rakocinski, C. F. 2016. Habitat-Specific Growth, Survival and Diet of Late Juvenile Hatchery-Reared Spotted Seatrout (*Cysnoscion nebulosus*). Journal of Experimental Marine Biology and Ecology 484: 1-10.

Saillant, E. 2010. Genetic management of aquaculture-based marine stock enhancement: main issues and current developments in Mississippi. Proceedings of the Gulf and Caribbean Fisheries Institute: 492-499.

Somerset, C. R., and Saillant, E. 2014. Regional population structure and management of aquaculture for stock enhancement of the Spotted Seatrout (*Cynoscion nebulosus*). Aquaculture 433:66-73.

#### Activity #33: Mississippi Sound Estuary Program

**Project Summary:** This project aims to support the restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands along the Gulf Coast region through the facilitation of community-driven conservation, restoration, and stewardship activities.

The Mississippi Sound Estuary Program (MSEP, mssoundep.com) is administered by the Mississippi State University Coastal and Marine Extension Program. The mission of MSEP is to facilitate community-driven conservation, restoration, and stewardship of the Mississippi Sound and its connecting watersheds. The program's workplan is developed through community feedback and engagement with advisory committees. These committees are tasked with informing the development of a Comprehensive Conservation and Management Plan (CCMP), a community-driven conservation and restoration plan for coastal Mississippi. The core of the CCMP is a prioritized list of project ideas or focal areas (termed "action items") identified by the committees and the communities they represent as essential to improving the health of the Mississippi Sound and its watersheds.

The first draft of the CCMP, including its associated action items, is anticipated to be completed by early 2025. For the proposed project, funding is anticipated to address action items identified and vetted through MSEP committee meetings. While specific projects have not yet been identified, potential initiatives may include, but is not limited to, watershed management planning, stormwater and wastewater improvement projects, habitat restoration or conservation, water quality monitoring, and many other potential activities. Additionally, the requested funding could serve as matching funds for EPA funding in the likely event that MSEP obtains national certification before these funds are awarded. Certification as a National Estuary Program (NEP) through the EPA brings with it perpetual annual funding of approximately \$800,000, which requires a 1:1 match with other funding. Currently, Mississippi is the only Gulf Coast state without a National Estuary Program and one of only three coastal states in the United States lacking such a program.

**Need:** MSEP is in need of additional funds to continue the planning and implementation of priority action items.

**Purpose:** The purpose of this project is to facilitate community-driven conservation, restoration, and stewardship activities.

**Objective:** Implementation of identified action items in the CCMP.

**Location:** This project would take place within the identified watersheds for the Mississippi Sound Estuary Program.

**Timeline:** This project is anticipated to start 01/01/2026 and end 12/31/2028.

**Additional Information:** The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would contribute to restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region by implementing identified restoration actions in the CCMP.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (a) - restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region, and 33 U.S.C. §1321(t)(1)(B)(i)(I) of the RESTORE Act. This activity would be implemented by the Mississippi Sound Estuary Program, administered by Mississippi State University. The primary purpose of the project is restoration and stewardship of Mississippi Sound and its watersheds.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

• Restore and Conserve Habitat

This project aligns with the following Comprehensive Plan objectives:

• Restore, Enhance, and Protect Habitats

#### **Major Milestones:**

Milestone - Planning for CCMP Action Items

*Milestone* – Implementation of CCMP Action Items

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

• Number of action items identified in the CCMP implemented.

| Activity                                 | Anticipated Project Success Criteria/Metrics/ Outcomes: | Short-term<br>outcome                   | Long-term outcome  |
|--|---|---|--|
| Action Items<br>from CCMP<br>implemented | Number of action items implemented                      | Implementation of priority action items | Improvements to the health of the Mississippi Sound and its watersheds |

**Monitoring and Evaluation:** The success of this project would be evaluated by the number of plans developed that had input from multiple stakeholders; the number of studies conducted and monitored will contribute to a

comprehensive effort aimed at enhancing our understanding of coastal restoration and informing decisions to ensure the sustainability of natural resources.

**Best Available Science:** Collaborative discussions with Mississippi's scientific community have revealed foundational data gaps that, if addressed, could significantly enhance restoration efforts and ensure their sustainability along the Mississippi Gulf Coast. Multiple science strategies emphasize the need to deepen our understanding of coastal ecosystem interactions.

For instance, the *Gulf Coast Ecosystem Restoration Task Force Science Assessment* (Walker et al., 2012) underscores the critical need for discovery science focused on ecosystem interactions. This includes assessing existing capacities, identifying gaps, and integrating systems to provide actionable information to resource managers and restoration practitioners. Similarly, the Pew report (Peterson et al., 2011) advocates for empirical, data-driven approaches to inform restoration decision-making. The *Gulf of America*<sup>1</sup> *Sea Grant Research Plan* (Sempier et al., 2009) identifies a priority research area in understanding the connection between freshwater inflows—both in terms of quality and quantity—and living resource restoration within priority bays, estuaries, and the Gulf itself.

This objective centers on conducting a collaborative, coordinated research effort to explore how rivers and streams influence the hydrological patterns of bays, estuaries, and ultimately the Mississippi Sound. While excellent research efforts exist—such as the U.S. Army Corps of Engineers' CH3D modeling of the Mississippi Sound for the MsCIP program (2007), ERDC/NRL's 3D watershed modeling of the Biloxi Bay Watershed coupled with ADCIRC, and the Northern Gulf Institute's integrated ecosystem assessment for St. Louis Bay—there remains a lack of connectivity between these studies. Moreover, they often do not explicitly focus on restoration outcomes, leaving significant gaps in understanding the system holistically.

This activity will serve as a foundational step in identifying critical observational data gaps needed to develop and implement an interdisciplinary modeling framework tailored to sustainable coastal restoration in Mississippi. The framework will directly support restoration efforts such as marsh creation and preservation, artificial reef placement, beach re-nourishment, and oyster reef restoration in the future.

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: \$1,100,000.00 (20% Planning/80% Implementation)

#### Partnerships/Collaboration:

Mississippi Sound Estuary Program, administered by Mississippi State University

**Leveraged Resources:** \$2,270,000 (RESTORE-Approved)

Funds Used as Non-Federal Match: None currently anticipated.

Other: None currently anticipated.

#### **References:**

Peterson, C.H., Coleman, F.C., Jackson, J.B.C., Turner, E., et al. 2011. A once and future Gulf of Mexico Ecosystem: Restoration recommendations of an expert working group. Pew Environment Group. Washington D.C. 112 pp. http://accstr.ufl.edu/files/accstr-resources/publications/Petersonetal-GOM- report 2011.pdf

Sempier, S.H., Havens, K., Stickney, R., Wilson, C., and Swann, D.L. 2009. Gulf of Mexico Research Plan. MASGP-09-024.

http://seagrant.noaa.gov/Portals/0/Documents/what\_we\_do/regional\_innitiatives/plans/Gulf%20of%20Me xico.pdf Last Accessed November 14th, 2014.

Walker, S., Dausman, A., and Lavoie, D. 2012. Gulf of Mexico Ecosystem Science Assessment and Needs – A product of the Gulf Coast Ecosystem Restoration Task Force. pp.72.

#### Activity #34: Career Pathway for Hydrographic Technicians

**Project Summary:** This project would support workforce training efforts in the Gulf Coast Region by providing hydrographic work-based learning opportunities to high school students using hydrographic survey and unmanned systems technologies in coastal Mississippi.

The National Oceans Applications Research Center (NOARC), in collaboration with Pearl River Community College (PRCC), Hancock County Career Technical Center (HCCTC) and industry partners, is working to address the shortage of technical labor currently supporting the hydrographic surveying industry. HCCTC will introduce hydrographic science to high school students while NOARC, together with industry partners, will provide work-based learning opportunities giving students hands-on experience with the latest hydrographic science technologies and introductions to potential employers who participate in the project. Training will also be provided to high school instructors. Students may also choose to receive further education and training in hydrographic science at PRCC's Workforce Academy.

The project would support a pipeline of skilled technicians to meet the demands of the survey industry, providing real-world field experience and an opportunity to further the career pathway for an associate's degree for hydrographic technicians requested by our industry partners. Furthermore, by equipping a new generation of hydrographic technicians, it ensures the Gulf Coast remains a leader in maritime and environmental stewardship.

**Need:** Innovative hydrographic science technologies are being developed, produced, and marketed, creating a growing demand for a skilled workforce to support this industry. As industries advance technologically, workforce development training programs must adapt to keep pace. To remain employed or qualify for new opportunities, workers must acquire skills that align with the evolving needs of the industry.

**Purpose:** The purpose of this project is to provide workforce training to support the autonomous systems industry at large on the Mississippi Gulf Coast.

**Objective:** Develop a technically trained workforce capable of supporting the autonomous systems industry.

**Location:** This project will take place at the Hancock Career and Technical Center in Hancock County, Mississippi.

**Timeline:** This project is anticipated to start 01/01/2026 and end 12/31/2030.

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would contribute to workforce development and job creation to the Gulf Coast Region through workforce training for students in emerging hydrographic technologies.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (d) – workforce development and job creation, and 33 U.S.C. §1321(t)(1)(B)(i)(IV) of the RESTORE Act. This activity would be implemented by the National Oceans Applications Research Center. The primary purpose of the project is to ensure a seamless career development pathway for hydrographic technicians.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

• Restore and Revitalize the Gulf Economy

This project aligns with the following Comprehensive Plan objectives:

• Promote Natural Resource Stewardship and Environmental Education

#### **Major Milestones:**

Milestone - Development of program curriculum, including classroom instruction material and field methodologies.

*Milestone* – Field-based and classroom curriculum implementation.

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Number of workforce development workshops and classes instructed.
- Number of students and instructors engaged in the program.

| Activity                      | Anticipated Project Success Criteria/Metrics/ Outcomes: | Short-term<br>outcome                             | Long-term outcome  |
|-------------------------------|---|---|--|
| Development of the curriculum | Development of specific training materials              | Recruitment of program participants               | An increased workforce to support the autonomous systems industry on the Mississippi Gulf Coast. |
| Curriculum implementation     | Implement and provide workforce training                | Implementation of job specific workforce training | An increased workforce to support the autonomous systems industry on the Mississippi Gulf Coast. |

**Monitoring and Evaluation:** The success of this project would be evaluated by the number of workshops and classes instructed and number of students and instructors engaged in the program.

**Best Available Science:** The Gulf of America<sup>1</sup>'s coastal and marine ecosystems support diverse industries, including hydrographic surveying and autonomous maritime operations. Advances in hydrographic science technologies, such as unmanned maritime systems (UMS) and precision survey equipment, are critical for activities ranging from habitat restoration to maritime navigation safety (Wooldridge et al., 2022). This project addresses the growing demand for skilled labor capable of deploying these innovations, bridging the gap between educational programs and workforce needs (Mason et al., 2021).

The integration of the Hancock County Career Technical Center (HCCTC), Pearl River Community College (PRCC), and the National Oceans Applications Research Center (NOARC) exemplifies a collaborative approach to workforce training. By incorporating work-based learning with advanced survey systems and fieldwork scenarios, this initiative builds a robust talent pipeline. Studies highlight that experiential learning significantly enhances competency in technical fields, fostering employment readiness and adaptability in evolving industries (Jones & Bartlett, 2020).

With the hydrographic industry increasingly relying on autonomous systems, the program's focus on UMS technologies prepares students for roles in a rapidly transforming sector. A recent NOAA report underscores

the importance of autonomous systems in supporting sustainable fisheries and marine resource management, emphasizing their role in the Gulf Coast's blue economy (NOAA, 2021).

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: \$1,925,000.00 (20% Planning/80% Implementation)

#### Partnerships/Collaboration:

The National Oceans Applications Research Center; Hancock County Career Technical Center; Pearl River Community College.

Leveraged Resources: None currently anticipated.

Funds Used as Non-Federal Match: None currently anticipated.

Other: None currently anticipated.

#### References:

Jones, P., and Bartlett, L. 2020. Workforce Development in Technical Fields: A Case for Experiential Learning. Journal of Technical Education, 35 (4):45-67.

Mason, R. et al. 2021. Bridging the Skills Gap in Hydrographic Surveying: Educational Innovations. International Hydrographic Review, 28 (3): 12-34.

NOAA. 2021. The Role of Autonomous Maritime Systems in Sustaining Gulf Coast Resources. National Oceanic and Atmospheric Administration Report, pp. 1-56.

Wooldridge, M. et al. 2022. Hydrographic Innovations and Workforce Challenges. Journal of Coastal Engineering, 47(2): 89-102.

#### Activity #35: Mississippi Artificial Intelligence Network (MAIN)

**Project Summary:** This project would support workforce development and job creation in the Gulf Coast Region through a workforce development training program to support the growing AI and technology fields.

The Mississippi Artificial Intelligence Network (MAIN) is a groundbreaking statewide coalition of Mississippi community colleges and universities, established to position the state's educational institutions at the forefront of Artificial Intelligence (AI) awareness, training, and implementation within business and industry. MAIN is the first statewide coalition of educational institutions in the nation dedicated solely to AI. This alliance was created in response to the rapid rise of AI and its predicted transformative impact on multiple workforce sectors. MAIN adopts a holistic approach to AI education, workforce training, and awareness initiatives. It has formalized partnerships with two major companies, all 15 community colleges, several universities, and K-12 school districts.

The AI Hub, at the Mississippi Gulf Coast Community College (MGCCC), will act as a center for specialized training in areas such as machine learning, data science, and generative AI, equipping the workforce with skills for high-demand roles. Additionally, it will serve as an economic driver by providing innovative solutions—including generative AI and data analytics—for local businesses and industries, while attracting talent and new companies to the region. The Hub will offer hands-on learning experience using state-of-the-art AI equipment and software, developing a workforce ready to thrive in an AI-driven job market. It will also facilitate cutting-edge research and innovation, fostering collaboration across sectors such as education, healthcare, disaster management, and defense. Funding for this initiative is anticipated to cover a comprehensive range of needs,

including tuition, AI equipment, salaries and benefits, contracted services, software licenses, operational costs, infrastructure, and other related expenses.

**Need:** Demand for AI-related roles, including instructors for AI and cloud computing, data scientists, and business intelligence analysts—is projected to grow by 30% to 45%, highlighting the need for a skilled workforce to meet this demand.

**Purpose:** The purpose of this project is to create a training and workforce development HUB to provide handson learning and skills development.

**Objective:** Develop a workforce training program to support the growing AI and technology fields.

**Location:** This project will take place at the Mississippi Gulf Coast Community College, Harrison County campus.

**Timeline:** This project is anticipated to start 01/01/2026 and end 12/31/2030.

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would contribute to workforce development and job creation with AI in the Gulf Coast Region through the MGCCC, which would provide workforce training to students in emerging AI technologies.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (d) — workforce development and job creation, and 33 U.S.C. §1321(t)(1)(B)(i)(IV) of the RESTORE Act. This project would be implemented by the Mississippi Gulf Coast Community College. The primary purpose of the project is to create a training and workforce development HUB to provide hands-on learning and skill development.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

• Restore and Revitalize the Gulf Economy – Enhance the sustainability and resiliency of the Gulf economy

#### **Major Milestones:**

Milestone – Marketing/Recruitment Plan

Milestone – Development of workforce training materials

*Milestone* – Curriculum implementation

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Number of workforce development programs developed.
- Number of students enrolled in respective programs.
- Number of students graduated from respective programs.

| Activity                          | Anticipated Project Success Criteria/Metrics/ Outcomes: | Short-term<br>outcome                             | Long-term outcome  |
|-----------------------------------|---|---|--|
| Marketing/<br>Recruitment<br>Plan | Development of the plan                                 | Recruitment of program participants               | Graduation and job acceptance of graduates from MGCCC          |
| MGCCC<br>training<br>materials    | Development of specific training materials              | Implementation of job specific workforce training | Graduation and job acceptance of graduates from MGCCC          |
| Curriculum implementation         | Implement and provide workforce training                | Implementation of job specific workforce training | Graduation and job<br>acceptance of<br>graduates from<br>MGCCC |

**Monitoring and Evaluation:** The success of this project would be evaluated by the number of workforce development programs developed. The number would be contingent on planning and research to ascertain market needs for job creation. Once a program and curricula have been developed, the number of students enrolled in the respective programs and the number of students graduated from the respective programs would be additional success criteria measured.

Best Available Science: The Mississippi Artificial Intelligence Network (MAIN) project leverages the latest advancements in artificial intelligence (AI) to establish a statewide educational and workforce development initiative. By addressing the burgeoning demand for AI expertise, this initiative aligns with the Gulf Coast Restoration Council's Comprehensive Plan, fostering economic resilience, innovation, and sustainable development. AI is revolutionizing multiple sectors, including education, healthcare, disaster management, and defense. Studies indicate that AI and machine learning technologies are pivotal for enhancing operational efficiency, decision-making, and predictive capabilities (Brynjolfsson & McAfee, 2022). The creation of AI hubs, such as the one proposed by MAIN, represents a critical step in equipping the workforce with the skills necessary to integrate and utilize these transformative technologies effectively (Makridakis, 2021).

MAIN's focus on AI education and training directly addresses the anticipated 30–45% growth in demand for roles like data scientists, business intelligence analysts, and AI instructors in Mississippi. Evidence from similar initiatives highlights the success of specialized training hubs in bridging skills gaps and boosting regional economic development (Smith et al., 2023). The MAIN project's collaboration with community colleges, universities, and industry partners ensures a robust talent pipeline tailored to local and statewide needs.

The AI Hub at MGCCC will offer hands-on experience with cutting-edge AI tools, software, and equipment. Research underscores the effectiveness of experiential learning in fostering deep understanding and application of complex technologies (Aithal and Mishra, 2024). This comprehensive approach ensures participants are prepared for roles in AI-driven industries, enhancing job readiness and employability.

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: \$7,141,244.00 (20% Planning/80% Implementation)

#### Partnerships/Collaboration:

• Mississippi Gulf Coast Community College, companies, community colleges, universities, and K-12 schools in Mississippi.

Leveraged Resources: N/A

Funds Used as Non-Federal Match: None currently anticipated.

Other: None currently anticipated.

#### **References:**

Aithal, P.S., and Mishra, N. 2024. Integrated Framework for Experimental Learning: Approaches & Impacts. International Journal of Case Studies in Business, IT and Education, 8(1): 145-173.

Brynjolfsson, E., and McAfee, A. 2022. The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies. W.W. Norton & Company, 3: 121–135.

Makridakis, S. 2021. The impact of AI on employment: New challenges and opportunities. Technological Forecasting and Social Change, 172(5): 113512–113526.

Smith, A., Brown, L., and Chen, Y. 2023. Bridging the AI skills gap: The role of educational partnerships. Journal of Emerging Technologies in Education, 12(3): 24–39.

#### **Activity #36: Port of Gulfport Expansion**

**Project Summary:** This project will support infrastructure benefiting the economy in the Gulf Coast Region through planning activities for expansion efforts at the Port of Gulfport. In recent decades, maritime freight transportation has trended toward larger, deeper-draft vessels to increase efficiency in cargo operations. Due to this trend, the Port of Gulfport faces challenges in attracting new business because many cargo vessels are too large to navigate the channel. Additionally, some vessels that currently call at the Port of Gulfport must unload cargo at other ports to reduce their draft before entering. Even during the recent supply chain challenges, the port remained underutilized because the channel was not deep enough to accommodate diverted vessels.

To address this issue, the Mississippi State Port Authority at Gulfport (MSPA) proposes a project to build containment berms at the Port of Gulfport. These berms will be used to contain beneficially reused dredged material from the future deepening and widening of the Federal Navigation Channel to Gulfport. This project includes engineering design and studies related to future containment structures to receive beneficial use dredge material from the Port of Gulfport federal navigation channel deepening and widening. MSPA received environmental clearance for this work in 2017. This is part of a larger port expansion effort to support deepening and widening the federal navigation channel to the Port of Gulfport. The expansion would bring increased revenue and economic development to the area.

**Need:** In recent decades, maritime freight transportation has trended towards larger, deeper-draft vessels to increase efficiency in cargo operations. Due to this trend, the Port of Gulfport is hindered in attracting new business because many cargo vessels are too big to navigate the channel.

**Purpose:** The purpose of this project is to plan for expansion efforts at the Port of Gulfport.

**Objective:** Plan for port expansion to support economic growth of the Port of Gulfport.

**Location:** This project will take place at the Port of Gulfport, Harrison County, Mississippi.

**Timeline:** This project is anticipated to start 01/01/2026 and end 12/31/2029.

**Additional Information:** The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would

enhance capacity to handle larger vessels will increase port competitiveness, contributing to regional economic growth. Additionally, the reuse of dredged material aligns with sustainable infrastructure principles, minimizing waste and supporting ecosystem restoration.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (f) – infrastructure benefitting the economy, and 33 U.S.C. §1321(t)(1)(B)(i)(VI) of the RESTORE Act. This project would be implemented by the Mississippi State Port Authority.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

• Restore and Revitalize the Gulf Economy

This project aligns with the following Comprehensive Plan objectives:

• Promote Community Resilience

#### **Major Milestones:**

Milestone – Planning, Engineering & Design, and Permitting

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Number of engineering and design plans and permits acquired.
- Number of environmental compliance documents completed.

| Activity | Anticipated Project Success Criteria/Metrics/ Outcomes:   | Short-term<br>outcome                              | Long-term outcome |
|----------|---|--|-------------------|
| Planning | Number of E&D plans<br>developed, permits<br>obtained, and<br>environmental compliance<br>completed | E&D, permitting, environmental compliance complete | N/A               |

Monitoring and Evaluation: The success of this project would be assessed through the completion of engineering designs for expansion and containment structures.

**Best Available Science:** A Best Available Science (BAS) review is required for programs and activities that would restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast. The primary focus of this project is to design and permit port expansion activities.

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: \$1,210,000.00 (100% Planning)

#### **Partnerships/Collaboration:**

• Mississippi State Port Authority; Port of Gulfport

**Leveraged Resources:** \$538,182. (GCRF and Port Funds - Approved)

Funds Used as Non-Federal Match: None currently anticipated.

**Other:** None currently anticipated.

**References:** N/A

#### Activity #37: Highway 63/Escatawpa Natural Gas Pipeline Installation

**Project Summary:** This project would support infrastructure projects benefiting the economy or ecological resources, including port infrastructure through the installation of a natural gas main along Wildwood Road to State Highway 63 in northern Jackson County southward towards Interstate 10.

There is currently no gas infrastructure in place along this stretch of Highway 63, which hinders potential development opportunities. Highway 63 is a major north-south thoroughfare connecting Greene and George Counties to the industries and the Gulf of America<sup>1</sup> in Pascagoula. This area is also adjacent to the Trent Lott International Airport and Mississippi Export Railroad system. Consequently, there are large commercial and industrial businesses interested in connecting to the city's gas system along that corridor. The new gas main would connect to the Gulf South Pipeline through a utility easement along Wildwood Road. This and other phases of natural gas pipeline installation will allow existing and prospective industries and residential developments to connect to the new line.

The project would fund the engineering and design, permitting, and construction of new natural gas lines. Additional activities may also include, but are not limited to, planning, oversight and management, and coordination of subaward(s) between MDEQ and sub-recipient.

**Need:** There is currently no gas infrastructure in place along this stretch of Highway 63, which hinders potential development opportunities.

**Purpose:** The purpose of this project is to install a natural gas main along State Highway 63 from its intersection with State Highway 613 in northern Jackson County southward to Interstate 10.

**Objective:** To support economic growth by providing natural gas infrastructure in Jackson County, Mississippi.

**Location:** This project would take place in Jackson County, Mississippi.

**Timeline:** This project is anticipated to start 1/1/2026 and end 12/31/2027.

**Additional Information:** The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would contribute to infrastructure benefitting the economy in the Gulf Coast Region by allowing existing and prospective industries and residential developments to connect to the new natural gas line.

Eligibility and Statutory Requirements: This project is located in the Gulf Coast Region as defined by 31 C.F.R. § 34.2. This project qualifies as an eligible activity for Oil Spill Impact Component funding through 31 C.F.R. § 34.201 (f) - infrastructure benefitting the economy or ecological resources, including port infrastructure, and 33 U.S.C. §1321(t)(1)(B)(i)(VI) of the RESTORE Act. This activity would be implemented by the City of Moss Point and would comply with the definition of infrastructure in 31 C.F.R. §34.2. The primary purpose of the project is to install a new natural gas main.

#### **Comprehensive Plan Goals and Objectives:**

This project aligns with the following Comprehensive Plan goals:

• Restore and Revitalize the Gulf Economy

#### **Major Milestones:**

Milestone – Planning, Engineering, Design and Permitting Milestone – Construction

#### **Success Criteria/Metrics/Outcomes:**

The anticipated success criteria that would be measured are:

- Number of engineering design plans and permits acquired.
- Linear feet of pipe installed.

| Activity     | Anticipated Project     | Short-term            | Long-term outcome     |
|--------------|-------------------------|-----------------------|-----------------------|
|              | Success                 | outcome               |                       |
|              | Criteria/Metrics/       |                       |                       |
|              | <b>Outcomes:</b>        |                       |                       |
| Engineering  | 100% engineering design | Engineering and       | N/A                   |
| and Design   | drawings and signed     | Design and Permitting |                       |
|              | permits                 | complete              |                       |
| Construction | Construction of project | Installation of new   | Reduced operational   |
|              | features                | pipeline              | costs for repairs and |
|              |                         |                       | maintenance and new   |
|              |                         |                       | residents serviced.   |

**Monitoring and Evaluation:** The success of this project would be evaluated by the number of engineering and design plans and permits acquired to implement the project as well as the linear footage documented by as-built drawings of the project features.

**Best Available Science:** A Best Available Science (BAS) review is required for programs and activities that would restore and protect the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast. The primary focus of this project is to install new natural gas main in Mississippi's coastal area.

#### **Budget/Funding**

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: None currently anticipated.

#### **Partnerships/Collaboration:**

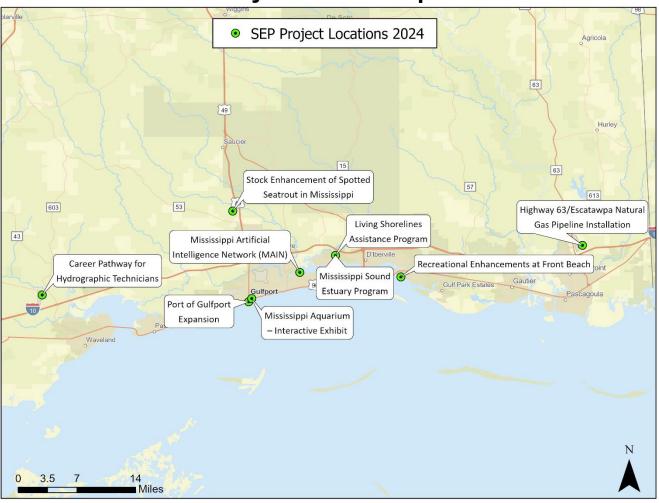
City of Moss Point

Leveraged Resources: None currently anticipated.

Funds Used as Non-Federal Match: None currently anticipated.

**Other:** \$1,650,000.00 - Funding for this project comes entirely from a federal court settlement of Deepwater Horizon oil spill-related claims against Halliburton Energy Services, Inc and Transocean Ltd. that is separate from funds allocated by the RESTORE Act. No Spill Impact Component funds are being requested for this project. However, under the court order the settlement funds may only be used on projects approved by the Council pursuant to the RESTORE Act. For this reason, this project is included for approval in this SEP amendment.

## **Project Location Map**



# THE STATE OF MISSISSIPPI'S RESPONSE TO COMMENTS REGARDING THE 2024 AMENDED MISSISSIPPI STATE EXPENDITURE PLAN (MSEP)

On December 16, 2024, the Mississippi Department of Environmental Quality (MDEQ) published for public review and comment its 2024 Amended MSEP. Mississippi Governor Tate Reeves announced the amended MSEP on November 13, 2024. A notice was published in the Sun Herald and Clarion Ledger newspapers informing the public that the 2024 Amended MSEP was available for public review and comment. An email blast was also sent to those registered to receive notices. The 2024 Amended MSEP was made available for public review and comment for a total of 61 days, from December 16, 2024, until February 14, 2025. The 2024 Amended MSEP was available to the public, directly downloadable, through <a href="www.restore.ms">www.restore.ms</a> and was also available upon request via email, fax, telephone, or mail directly from MDEQ. The 2024 Amended MSEP was available in English, Spanish, and Vietnamese upon request.

MDEQ accepted public comments and input electronically via <a href="www.restore.ms">www.restore.ms</a>, as well as via email, fax, telephone, or mail directly to MDEQ. On December 16, 2024, MDEQ delivered email messages to notify the public that the public review and comment period for the amended MSEP is open and would close on February 14, 2025. On January 13, 2025, MDEQ delivered an email blast to remind those registered to receive notices that the public review and comment period for the amended MSEP would close on February 14, 2025. A final email blast was delivered on February 10, 2025, as a reminder that the public review and comment period for the amended MSEP would close on February 14, 2025.

During the public review and comment period, MDEQ received a total of three (3) sets of written comments. No other comments were submitted. The comments have been summarized for purposes of this response. All comments submitted during the public review and comment period were reviewed and considered by MDEQ. Each activity in the Amended MSEP was adopted after consideration of meaningful input from the public.

This document includes the following sections:

Section 1: Comments on Specific Projects on 2024 Amended MSEP

Section 2: General Comments on 2024 Amended MSEP

#### SECTION 1: COMMENTS ON SPECIFIC PROJECTS ON 2024 AMENDED MSEP

MDEQ received a comment expressing support for Activity #31: Living Shorelines Assistance Program and urging the program to prioritize the education and deployment of nature-based and natural infrastructure approaches for living shoreline projects, which can provide many co-benefits.

MDEQ appreciates this comment.

MDEQ received a comment expressing support for Activity #33: Mississippi Sound Estuary Program.

MDEQ appreciates this comment.

#### **SECTION 2: GENERAL COMMENTS ON 2024 AMENDED MSEP**

MDEQ received two (2) comments opposing funding and modifications as presented in the 2024 Amended MSEP due to an established system and process that systematically excludes Black stakeholders input.

MDEQ disagrees with this accusation. Treasury's implementing regulations published at 31 CFR Part 34 outline the requirements of State Expenditure Plans for Spill Impact Component Funds saying "Each Gulf Coast State, through its Governor or the Governor's designee, must submit a State Expenditure Plan to the Council for its approval that describes each activity for which the state seeks funding." (31 CFR 34.503) Treasury's regulations go on to outline the required elements of a State Expenditure Plan and describe the public review and comment requirement. The regulations state, "The State Expenditure Plan must describe how it takes into consideration

the Comprehensive Plan and is consistent with the goals and objectives of the Comprehensive Plan. In addition, the State Expenditure Plan must describe the processes used... To obtain public review and comment in accordance with paragraph (g) of this section" and "Before being submitted to the Council for approval, a State Expenditure Plan must be available for public review and comment for a minimum of 45 days, in a manner calculated to obtain broad-based participation from individuals, businesses, Indian tribes, and non-profit organizations." (31 CFR 34.504(b)(4) and (g)) Treasury also acknowledges in section II of the preamble to 31 CFR Part 34 that "states are not expected to guarantee full public participation in the public review and comment process. Treasury's rule is clear that states must use methods "calculated to obtain broad-based participation from individuals, businesses, Indian tribes, and non-profit organizations." Treasury cannot describe in detail the methods that will satisfy this requirement in every case, as they may depend on the state and the impacted region or population." In this specific instance, the fact that the commenter, a self-identified minority member of the community, was able to comment on the MSEP proves that MDEQ's public outreach process is meeting its intended purpose of reaching a broad group of individuals in order to obtain "broad-based participation from individuals, businesses, and non-profit organizations." (31 CFR 34.503(g))

As the entity identified in the RESTORE Act to carry out the duties of a Gulf Coast State, MDEQ utilizes various methods of public input designed to obtain broad-based participation from individuals, businesses, Indian tribes, and non-profit organizations. In March 2024, MDEQ issued a public "call for projects" soliciting project ideas from the public for funding consideration on this amended MSEP. Governor Reeves utilized the Gulf Coast Advisory Committee to review projects and develop a recommendation for funding. The Advisory Committee meetings were also publicly accessible via Facebook Live and archived on Facebook for later viewing. In November 2024, Governor Reeves held a press event to announce projects for this amended MSEP. In November 2024, MDEQ virtually held the 9th annual Restoration Summit which is open to the public and is free of charge. The public was able to provide input as part of the Summit on everything that was presented, including the proposed projects. When making the 2024 Amended MSEP available for public review and comment as prescribed by Treasury's regulations, MDEQ advertises the review and comment period in the two newspapers, via email blast and on MDEQ's website. The amended MSEP is available in English, Spanish and Vietnamese, upon request, is available for immediate download via MDEQ's website, and is available via fax or hardcopy when requested. No revisions have been made to the 2024 Amended MSEP in response to this comment.

MDEQ received a comment stating "MDEQ continue to overlook the critical need for local capacity building to identify, mitigate and improve communities directly impacted; specifically historically underserved residents, communities and the public utilizing RESTORE Act funds".

MDEQ disagrees with this accusation. The State of Mississippi has invested more than \$37.5 million in Deepwater Horizon oil spill funding across 13 projects specifically designed to create local capacity across all coastal communities, including those directly impacted and historically underserved residents. To date these projects have seen more than 2,300 participants taking advantage of a variety of training and education programs, many of which are offered free of charge. In addition, the State of Mississippi has invested an additional \$185 million in economic projects designed to restore our coastal economy by bringing new jobs and creating opportunities for further economic growth. No revisions have been made to the 2024 Amended MSEP in response to this comment.

# MDEQ received a comment stating that "MDEQ process fails to comply with the intended purpose and fails to provide qualitative and quantitative benefits of proposed use of funds".

MDEQ's MSEP planning process is described in Mississippi's Planning State Expenditure Plan and initial State Expenditure Plan and subsequent SEP amendments, each of which has been deemed "complete" and confirmed to "meet all requirements set forth in the RESTORE Act, the U.S. Department of the Treasury's implementing regulations (31 C.F.R. Part 34) and the council's SEP guidelines" by the Gulf Coast Ecosystem Restoration Council. Additionally, MDEQ has received seven (7) grant awards and amendments to carry out SEP planning activities that are consistent with the Project Description, Need, Purpose, Objective, Location, Milestones, Success Criteria, and Project Budget of the Initial SEP and subsequent SEP amendments. Finally, the Objective

statement for each activity in the Amended MSEP does provide qualitative benefits for each activity, and since there is no statutory requirement to describe quantitative benefits for activities in the SEP narrative, these benefits are established when negotiating a grant award with the Gulf Coast Ecosystem Restoration Council.

In section II of the preamble to 31 CFR Part 34 Treasury states, "Several commenters asked Treasury to establish substantive criteria for evaluating project proposals, such as performance goals and preferences for certain kinds of activities. Other commenters proposed that Treasury adopt procedures, such as independent expert reviews, for evaluating synergies and potential conflicts between projects proposed under different components, or to address project proposals that may be controversial. Treasury considered similar comments during its review of comments on the proposed rule. The Act does not impose uniform criteria for the selection of projects under the Direct Component, Comprehensive Plan Component, and Spill Impact Component, or require the coordination of projects across components. Each component has different eligibility criteria, different processes for selecting activities, and different entities responsible for selecting the activities to be funded. The final rule acknowledges these differences, while still requiring compliance with the Act and Federal laws and policies applying to grants. Under these policies, Federal awards will include an indication of the timing and scope of performance, and may include specific performance goals, indicators, milestones, and expected outcomes. The appropriate vehicle for addressing these project specific requirements is the Federal award agreement." No revisions have been made to the 2024 Amended MSEP in response to this comment.