MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

MISSISSIPPI STATE EXPENDITURE PLAN

2023 AMENDMENT

Submitted Pursuant to the

Oil Spill Impact Component of the RESTORE Act

33 U.S.C. § 1321(t)(3)

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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 2023 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 Mexico (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 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 (e) 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 seven sub-committees that focused on seven key areas related to the activities specified in the RESTORE Act (Eco-restoration, Economic Development, Infrastructure, Seafood, Small Business, Tourism, and Workforce Development/Research & Education).

(d) On April 3, 2023, MDEQ released a public "call for projects" soliciting project ideas from the public for funding consideration on this amended SEP.

(e) On April 25, 2023, 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 were 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 2023 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 will only be 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; and
- 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 2023 MSEP Amendment focuses on four of the goals identified in the Comprehensive Plan:

- Restore and Conserve Habitat
- 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 2023 MSEP Amendment focuses on four objectives identified in the Comprehensive Plan:

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

Section V: Projects, Programs, and Activities

	Project Title	*Estimated Cost*	*Infrastructure (Yes/No)*	*Start Date*	*End Date*	*Primary Eligible Activity (number 1-11; see section 4.1.1 of Submittal Guidelines)*	*Informed by Best Available Science (Yes/No)*	*Status*
1	Mississippi Gulf Coast Water Quality Improvement Program	$56 Million	No	08/01/2018	07/31/2023	1	Yes	Activity Approved (2016 Initial MSEP). Activity Amended (2017 MSEP Amendment). Activity Amended (2019 MSEP Amendment).
2	Pascagoula Oyster Reef Complex Relay and Enhancement	$4.1 Million	No	08/01/2018	07/31/2023	1	Yes	Activity Approved (2016 Initial MSEP). Activity Amended (2017 MSEP Amendment).
3	Compatibility, Coordination, and Restoration Planning	$2.8 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)

	Project Title	*Estimated Cost*	*Infrastructure (Yes/No)*	*Start Date*	*End Date*	*Primary Eligible Activity (number 1-11; see section 4.1.1 of Submittal Guidelines)*	*Informed by Best Available Science (Yes/No)*	*Status*
4	Gulf of Mexico Citizen Led Initiative (GMCLI)	$1.9 Million	No	08/01/2018	7/31/2023	1	Yes	Activity Approved (2017 MSEP Amendment).
5	Remote Oyster Setting Facility	$9.36 Million	No	01/01/2019	12/31/2023	1	Yes	Activity Approved (2017 MSEP Amendment).
6	Coastal Headwater Land Conservation Program	$8 Million	No	08/01/2018	12/31/2021	1	Yes	Activity Approved (2017 MSEP Amendment).
7	Round Island Living Shoreline Demonstrationand ProtectionProject (Planning)	$2.2 Million	No	08/01/2018	12/31/2020	8	Yes	Activity Approved (2017 MSEP Amendment).
8	Mississippi Sound OysterShell Recycling Program	$650,000	No	12/01/2019	11/30/2021	1	Yes	Activity Approved (2018 MSEP Amendment).
9	Beneficial Use of Dredge Material for Marsh Creation and Restoration in Mississippi	$19 Million	No	12/01/2019	11/30/2024	1	Yes	Activity Approved (2018 MSEP Amendment) Activity Amended (2019 MSEP Amendment). Activity Amended (2023 MSEP Amendment)

	Project Title	*Estimated Cost*	*Infrastructure (Yes/No)*	*Start Date*	*End Date*	*Primary Eligible Activity (number 1-11; see section 4.1.1 of Submittal Guidelines)*	*Informed by Best Available Science (Yes/No)*	*Status*
10	Hancock County MarshLiving Shoreline Extension	$6 Million	No	10/01/2019	09/30/2021	1	Yes	Activity Approved (2018 MSEP Amendment)
11	Mississippi Beachfront Resilience	$9.95 Million	No	10/01/2020	12/31/2024	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)
13	Coastal Habitat Management Program	$3.3 Million	No	1/1/2023	12/31/2027	1	Yes	Activity Approved (2021 MSEP Amendment)
14	Gulf Coast Center of Security and Emerging Technology (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 Working Waterfront and Commercial Seafood Harbor	$8.8 Million	Yes	1/1/2023	12/31/2028	6	Yes	Activity Approved (2021 MSEP Amendment) Activity Amended (2023 MSEP Amendment)

	Project Title	*Estimated Cost*	*Infrastructure (Yes/No)*	*Start Date*	*End Date*	*Primary Eligible Activity (number 1-11; see section 4.1.1 of Submittal Guidelines)*	*Informed by Best Available Science (Yes/No)*	*Status*
17	Harbor Expansion Parking Area (Jones Park)	$1.65 Million	Yes	1/1/2024	12/31/2026	6	Yes	Activity Approved (2022 MSEP Amendment) Activity Amended (2023 MSEP Amendment)
18	Walter Anderson Museum of Art Creative Complex	$1.21 Million	No	1/1/2024	12/31/2025	10	Yes	Activity Approved (2022 MSEP Amendment)
19	Workforce Training – Meeting the Needs of the Supply Chain	$5.5 Million	No	1/1/2024	12/31/2027	4	Yes	Activity Approved (2022 MSEP Amendment)
20	Health Professions (HEALP) for Our Community: Health Professions Center of Excellence	$6.6 Million	No	1/1/2024	12/31/2027	4	Yes	Activity Approved (2022 MSEP Amendment)
21	Marina at Front Beach	$5.5 Million	Yes	1/1/2024	12/31/2026	6	Yes	Activity Approved (2022 MSEP Amendment)
22	IMMS Outreach and Ecotourism	$825,000	No	1/1/2024	12/31/2025	10	Yes	Activity Approved (2022 MSEP Amendment)
23	Coastal Science Program for Mississippi High 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 (2023 MSEP Amendment)

	Project Title	*Estimated Cost*	*Infrastructure (Yes/No)*	*Start Date*	*End Date*	*Primary Eligible Activity (number 1-11; see section 4.1.1 of Submittal Guidelines)*	*Informed by Best Available Science (Yes/No)*	*Status*
25	Pascagoula River Scenic Trail	$2.75 Million	No	1/1/2025	06/30/2026	10	Yes	New Activity (2023 MSEP Amendment)
26	Artificial Reef Project	$1.98 Million	No	1/1/2025	12/31/2026	1	Yes	New Activity (2023 MSEP Amendment)
27	Mississippi Aquarium – Interactive Exhibit	$4.5 Million	No	1/1/2025	06/30/2026	10	Yes	New Activity (2023 MSEP Amendment)
28	Natural Gas Improvements	$0	Yes	1/1/2025	06/30/2026	6	Yes	New Activity (2023 MSEP Amendment)
29	KHSA Taxilane Sierra Extension	$0	Yes	1/1/2025	12/31/2026	6	Yes	New Activity (2023 MSEP Amendment)
30	Classrooms and Dormitories for the Center for Marine Education and Research	$2.75 Million	Yes	1/1/2025	12/31/2027	6	Yes	New Activity (2023 MSEP Amendment)

The following projects and programs are proposed for the 2023 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 – 2023 MSEP Amendment
The 2023 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, and 2022 MSEP Amendments can be found at the following links: 2016 MSEP Amendment; 2017 MSEP Amendment; 2018 MSEP Amendment; 2022 MSEP Amendment

Activity #9: The Beneficial Use of Dredge Material for Marsh Creation and Restoration in Mississippi

Project Summary: The Beneficial Use of Dredge Material for Marsh Creation and Restoration in Mississippi

program was approved on the 2018 MSEP Amendment and amended on the 2019 MSEP Amendment. This program supports the restoration and protection of natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast Region by creating new marsh and restoring and enhancing existing marsh through the beneficial use (BU) of dredge materials. This program will support the dredging needs in the three coastal counties and may utilize accumulated spoil materials to facilitate the material necessary for marsh restoration.

Project Modifications – 2023 MSEP Amendment
The 2023 MSEP Amendment modifies the scope of work to include habitat protection. Additionally, the following sections of the 2018 MSEP Amendment are modified to include habitat protection:

Need: Mississippi has lost numerous acres due to coastal erosion (over 10,000 acres over the last 50 years, and more specifically over 1000 ft of marsh loss in the Heron Bay / St Joe Point over the last 50 years) and there is a significant need for funding to help pay for local dredging needs to facilitate material for marsh restoration and implement measures to protect marsh.

Purpose: Maximize and accelerate marsh creation and restoration by pairing the use of BU materials with local dredging needs in each of the three coastal counties and provide protection to marsh habitats that are impacted by erosion.

Objective: The program will create, restore, and protect marsh in coastal Mississippi through the beneficial use of dredged sediments and shoreline protection.

Major Milestones:

Milestone – Material plans completed. The three coastal counties complete material removal and receipt plans.

Milestone – Marsh creation and restoration completed. Marsh will be created and restored through the BU of dredge sediments.

Milestone – Marsh protection measures completed. Marsh will be protected through various methods including, but not limited to, living shorelines.

Milestone – Monitoring of restoration efforts. Monitoring success could include marsh dimension, vegetation cover, and marsh shoreline position.

Success Criteria/Metrics/Outcomes:

The anticipated success criteria that will be measured are:

- A material removal and receipt plan per county to maximize marsh creation and restoration; and
- Creation of marsh and restoration of marsh with use of BU sediments.
- Protection of marsh habitats.

The approved 2018 MSEP Amendment and the 2019 MSEP Amendment can be found at the following links: 2018 MSEP Amendment; 2019 MSEP Amendment

Activity #16: D'Iberville Working Waterfront and Commercial Seafood Harbor

Project Summary: This project would support the planning and construction activities for infrastructure benefiting the economy in the Gulf Coast Region. Activities include, but are not limited to, planning and construction activities necessary to develop a working waterfront and commercial seafood harbor.

Project Modifications – 2023 MSEP Amendment
The 2023 MSEP Amendment increases the project budget by $2,200,000 to support activities approved in the 2021 MSEP.

The approved 2021 MSEP Amendment can be found at the following link: 2021 MSEP Amendment

Activity #17: Harbor Expansion Parking Area (Jones Park)

Project Summary: This project would support the planning and construction activities for infrastructure benefiting the economy in the Gulf Coast Region. Activities include, but are not limited to, planning and construction activities necessary to develop enhanced public access to Jones Park.

Project Modifications – 2023 MSEP Amendment
The 2023 MSEP Amendment modifies the scope of work to include sidewalks in addition to parking areas.
The approved 2022 MSEP Amendment can be found at the following link: 2022 MSEP Amendment

Activity #23: Coastal Science Program for Mississippi High Schools

Project Summary: This project would support workforce development and job creation in the Gulf Coast Region. The Coastal Science Program, which would be implemented by the Mississippi Department of Marine Resources, is designed to engage high school students in environmental education with hands-on experiences to monitor water quality, raise native wetlands plants in a nursery for use at coastal restoration sites, and grow marine species, including native fish at an aquaculture facility, to be released in local estuarine waters. Additional information about the approved scope of work for this program can be found in the 2022 MSEP Amendment

Project Modifications – 2023 MSEP Amendment
The 2023 MSEP Amendment increases the project budget by $1,320,000 to support activities approved in the 2022 MSEP. Additionally, the scope of work is modified to include high schools across the Mississippi coast.

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

Activity #24: Nonspecific Invasive Species Detection and Treatment

Project Summary: This project would support the restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches, and coastal wetlands of the Gulf Coast region through the control of invasive species to address the environmental and economic challenges posed by non-native invasive species in coastal Mississippi.

Mississippi's coastal habitats contain an abundance of invasive species, including the Giant Applesnail, Giant Salvinia, Phragmites, Alligatorweed, and feral hogs. Areas infested with these species deteriorate and lead to a reduction in food supply, nursery grounds, and foraging habitat for native species. Additionally, many invasives lack natural predators, allowing them to outcompete native species and further alter the biological integrity of coastal habitats. The consequences of this imbalance are far-reaching, impacting the region's economy and environment. The reduced food supply and habitat degradation have adverse impacts on fisheries, water quality, and the overall ecosystem's health, jeopardizing the well-being of native species and our Mississippi Gulf Coast ecosystem. By controlling invasive species, the project aims to improve water quality, enhance species diversity, and promote ecosystem resilience.

The project would fund the monitoring and treatment of non-native invasive species to restore and maintain the health of coastal habitats. 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: Non-native invasive species have established themselves and outcompete native species, further altering the biological integrity of coastal habitats.

Purpose: The purpose of this project is to identify, suppress, and control invasive species in coastal habitats and waterways along the Mississippi Gulf Coast.

Objective: Reduce the abundance of invasive species to improve water quality, enhance species diversity, and promote ecosystem resilience.

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

Timeline: This project is anticipated to start 1/1/2025 and end 06/30/2031

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 mitigation of damage to fish, wildlife, and natural resources in the Gulf Coast Region by identifying, suppressing, managing, and eradicating invasive species in nearshore habitats and coastal waterways.

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 manage and control invasive species in coastal habitats.

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 – Assessment to identify invasive species

Milestone – Implementation of invasive species treatments

Milestone – Post-treatment assessment and evaluation

Success Criteria/Metrics/Outcomes:
The anticipated success criteria that would be measured are:

- Acres of invasive species treated.

Activity	Anticipated Project Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Planning	Identification of invasive species types and locations	Identified species and locations to inform treatment	Data collected to inform long-term management
Implementation of Treatments	Acres of invasives treated; Acres of enhanced habitat	Invasives controlled; Native	Healthy ecological communities and increased ecological

		species communities enhanced	functioning comprised primarily of native species
Assessment and Evaluation	Evaluation of treatment effectiveness	Plan for adaptive management, if needed	Data collected and evaluated to inform long-term management

Monitoring and Evaluation: The success of this project would be evaluated by the acreage of invasive species treated and habitats enhanced.

Best Available Science: Coastal waters, marshes, and adjacent upland habitats are key components of the greater Gulf of Mexico ecosystem (Brown et al., 2011). The ecological integrity of these systems is crucial for the structure and function of coastal habitats. Often structure and function are compromised by invasives being introduced to the system and exploding in size and abundance (Havel et al., 2015). Invasions can have community level effects with myriad ecological consequences, including altering physical properties of ecosystems such as light attenuation (Coetzee and Hill, 2020), soil characteristics (Torres et al., 2021), and impacting animal behavior (Stewart et al., 2021). Dealing with the effects of invasion can be problematic, because the pace at which invaders establish often outpaces the management available for their control or eradication (Green Grosholz, 2021).

Several strategies and frameworks have identified the control of invasives as a critical component of ensuring success towards comprehensive ecosystem restoration. The *MS Comprehensive Wildlife Conservation Strategy*, coordinated by the Mississippi Department of Wildlife, Fisheries and Parks identified invasive species as a threat to healthy ecosystems and made their eradication and control a priority target (MS Museum of Natural Science, 2015). The *East Gulf Coastal Plain Joint Venture*, by the US Fish and Wildlife Service, identifies invasive species as a target because of their threat to natural habitat (Applegate et al., 2008). The Nature Conservancy, in the *Strategy for Restoring the Gulf of Mexico: Recommendations to the Gulf of Coast Ecosystem Restoration Task Force* (Brown et al., 2011), identifies targeting invasive species and more specifically focusing on them within coastal wetland ecosystems as a means towards restoring the Gulf of Mexico. MDMR, through the Mississippi Coastal Preserves Program, would focus efforts on priority areas to comprehensively control invasives such that the abundance of the invasive species would be reduced to the point that the MDMR can maintain control through its normal management activities.

Budget/Funding

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

Partnerships/Collaboration:

- The Mississippi Department of Marine Resources

Leveraged Resources: None currently anticipated.

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

Other: None currently anticipated.

References:

Applegate, R., Brunjes, J., Chebib, L., Demarest, D., Ford, B., Kleiner, K., Pashley, D., Perkns, J., Soehren, E., Somershoe, S., Tipton, H., Vorisek, S. 2008. East Gulf Coastal Plain Joint Venture, Implementation Plan, Vers. 1, pp.106.

Brown, C., Andrews, K., Brenner, J., Tunnell, J.W., Canfield, C., Dorsett, C., Driscoll, M., Johnson, E., and Kaderka, S. 2011. Strategy for Restoring the Gulf of Mexico: Recommendations to the Gulf Coast Ecosystem Restoration Task Force (A Cooperative NGO Report). *The Nature Conservancy,* pp.23.

Coetzee, J. A., & Hill, M. P. (2020). Salvinia molesta D. Mitch. (Salviniaceae): impact and control. CABI Reviews, (2020).

Green, S. J., & Grosholz, E. D. (2021). Functional eradication as a framework for invasive species control. Frontiers in Ecology and the Environment, 19(2), 98-107.

Havel, J. E., Kovalenko, K. E., Thomaz, S. M., Amalfitano, S., & Kats, L. B. (2015). Aquatic invasive species: challenges for the future. Hydrobiologia, 750, 147-170.

Mississippi Museum of Natural Science. 2015. Mississippi State Wildlife Action Plan. Mississippi Department of Wildlife, Fisheries, and Parks, Mississippi Museum of Natural Science, Jackson, Mississippi.

Stewart, P. S., Hill, R. A., Stephens, P. A., Whittingham, M. J., & Dawson, W. (2021). Impacts of invasive plants on animal behaviour. Ecology letters, 24(4), 891-907.

Torres, N., Herrera, I., Fajardo, L., & Bustamante, R. O. (2021). Meta-analysis of the impact of plant invasions on soil microbial communities. BMC Ecology and Evolution, 21, 1-8.

Activity #25: Pascagoula River Scenic Trail

Project Summary: This project would support promotion of tourism in the Gulf Coast region through the construction of amenities at a scenic trail along the Pascagoula River. The Pascagoula River Scenic Trail, also known as the Pascagoula River Blueway Connection, will establish 65-miles of mapped and signed waters on the largest free flowing river in the Continental United States. The project will provide a nature-based experience along the Pascagoula River through bottomland hardwood forests, cypress swamps, and coastal marshes. The watershed contains a network of diverse lakes, bayous, and sandbars. It is also home to a diverse range of animals, and over 320 species of birds including the Mississippi sandhill crane and swallow-tailed kites.

The trail is anticipated to connect the Pascagoula River-George County Blueway and extend through Jackson County along the river. It could also connect to the existing Pascagoula River-Jackson County Blueway along the east branch of the river. With connections to the already existing blueways, this project could provide over 100 miles of contiguous scenic water trails for paddlers of varying levels of experience and support nature-based tourism opportunities in Jackson County Additionally, it is anticipated that an influx of tourists in the area would support businesses along the Pascagoula River corridor and surrounding coastal communities.

The project would fund the engineering, permitting, and construction of a scenic trail, including but not limited to wayfinding signage, kayak landing/launches, parking areas, primitive campgrounds, picnic areas, restrooms, comfort stations, kayak rack/wash stations, and other amenities. Additional activities may also include, but are not limited to, planning, oversight and management, and coordination of sub-award(s) between MDEQ and sub-recipient.

Need: There is a need to expand nature-based tourism and economic development for Jackson County.

Purpose: The purpose of the project is to enhance and create a scenic trail to increase tourism opportunities to the Mississippi Gulf Coast.

Objective: To install wayfinding signage and maps along the blueway, as well as a mixture of kayak landing/launches, parking areas, primitive campgrounds, picnic areas, permanent restrooms, comfort stations, and kayak rack/wash stations at key locations along the Pascagoula River.

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

Timeline: This project is anticipated to start 1/1/2025 and end 06/30/2026

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would support promotion of tourism in the Gulf Coast region through the development and enhancement of a nature-based scenic trail along the Pascagoula River. This would position Jackson County to compete for nature-based tourism travelers in the Gulf region. It would also provide business opportunities along the river and throughout Coastal Mississippi to support visitors.

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 Jackson County Board of Supervisors. The primary purpose of the project is to support planning and construction activities to develop the Pascagoula River Scenic Trail.

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 – 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.
  Number of improvements to recreational resources.

Activity	Anticipated Project Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Planning	100% engineering design drawings and signed permits	Engineering and Design and Permitting complete	N/A
Construction	Construction of the wayfinding signage, landing/launches, and other amenities	Build out of the Blueway	Public use of a river scenic trail and commercial/recreational amenities

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 amenities along the Pascagoula River Scenic Trail. Additionally, number of improvements to recreational resources would be measured based on final engineering and design specifications.

Best Available Science: Scenic and blueway trails contribute to the overall well-being of communities by

offering recreational opportunities, fostering economic development, promoting environmental awareness, and enhancing the quality of life for residents and visitors (Shopinski et al., 2023). Promotion of waterway recreation can also influence communities to place a higher value of conservation efforts and benefit from diversifying their economic structure through promotion of nature-based tourism and recreation (Edmonds, 2011). According to the Nature Based Tourism Plan for Coastal Mississippi (Gulf Coast National Heritage Area, 2016), wildlife tourism generates nearly $2 billion in tourist spending annually and supports 26,000 jobs in Mississippi. The typical nature-based trip lasts for several days as opposed to the average Mississippi tourist who only comes to the state for a day trip. These tourists also spend approximately $1,500 per trip versus $172 for an average day trip. This project would endeavor to construct the appropriate infrastructure for nature-based tourists to use for multi-day activities.

Budget/Funding

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: $2,750,000.00 (20% Planning/ 80% Implementation)

Partnerships/Collaboration:

- Jackson County Board of Supervisors

Leveraged Resources: $500,000 - Jackson County Board of Supervisors through the State Legislature appropriation for 2023.

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

Other: None currently anticipated.

References:

Edmonds, K. (2011). Challenging the Traditional Values of Our Rivers: a Case for Water Trails. In Georgia Institute of Technology. Proceedings of the 2011 Georgia Water Resources Conference, April (Vol. 11, p. 12).

Mississippi Gulf Coast National Heritage Area/Mississippi Department of Marine Resources. (2016). Nature Based Tourism Plan for Coastal Mississippi.
https://msgulfcoastheritage.ms.gov/wp-content/uploads/2020/09/TourismBook.pdf

Shopinski, S., Tejada, T., Jenkins, H., Raad, S., Quinn, M., & Lachance, L. (2023). Paddling Together: Water Trails as Innovative Public Health Strategies. Health Promotion Practice, 24(1_suppl), 41S-45S.

Activity #26: Artificial Reef Project

Project Summary: This project would support the restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region through the construction and installation of artificial reefs within the waters of Mississippi.

The project anticipates the construction of reef structures to create a thriving and dynamic ecosystem. Site selection would be based on a thorough analysis of factors such as water depth, current patterns, proximity to existing reefs, and the potential for increased biodiversity. Artificial reefs play a pivotal role in supporting marine ecosystems and enhancing fisheries. By providing suitable habitats for marine organisms, the reefs would attract a variety of fish species, which in turn promotes the growth of healthy fish populations. This increased fish population also offers significant economic benefits by providing more opportunities for recreational, charter, and commercial fishing.

This project would fund the engineering and design, permitting, construction, and installation of reef structures. Additional activities may also include, but are not limited to, planning, oversight and management, and

coordination of sub-award(s) between MDEQ and the sub-recipient.

Need: There is a need for enhanced support of marine biodiversity along the gulf coast.

Purpose: The purpose of this project is to support marine species by providing suitable substrate and shelter for fish, invertebrates, and other marine organisms, thereby bolstering the overall health and resilience of this marine environment.

Objective: To install artificial reef structures to support marine species within the territorial waters of Mississippi.

Location: This project would take place in the waters of Mississippi.

Timeline: This project is anticipated to start 1/1/2025 and end 12/31/2026

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would support restoration and protection of the natural resources, ecosystems, fisheries, marine and wildlife habitats, beaches and coastal wetlands of the Gulf Coast region through the development of artificial reefs within the territorial waters of Mississippi.

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 One Goal One Gulf Foundation. The primary purpose of the project is to support planning and construction activities for artificial reef installation in Mississippi waters.

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 – 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.
- Number of artificial reef structures deployed.

Activity	Anticipated Project Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Engineering and Design	100% engineering design drawings and signed permits	Engineering and Design and Permitting complete	N/A

Construction	Installation of artificial reef structures	Habitat creation for marine species	Support of marine biodiversity

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 installation of artificial reef as well as the number of reef structures deployed.

Best Available Science: Artificial reefs are widely acknowledged to both attract and produce reef fish species (Arney et al., 2017; Scott et al., 2015; Smith et al., 2015; Dance et al., 2011; Cowan et al., 2011; Powers et al., 2003). How much a particular reef produces or attracts, however, depends on its location, configuration (e.g., down current from natural relief features; adjacent to already existing artificial reefs, etc.) and design (Smith et al., 2016). For this reason, the project would include a site selection process based on a thorough analysis of factors such as water depth, current patterns, proximity to existing reefs, and the potential for increased biodiversity. In addition to artificial reefs being used to attract fish, many are now installed to protect, regenerate, concentrate and enhance populations of myriad marine organisms (Vivier et al, 2021). In addition to biological benefits that accrue from artificial reefs, reefs also provide benefits to human users, including commercial fishers, recreational anglers, sport divers, or others (Ropicki, 2021).

Budget/Funding

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: $1,980,000.00 (20% Planning/ 80% Implementation)

Partnerships/Collaboration:

- Marty Wilson Foundation One Gulf One Goal

Leveraged Resources: None currently anticipated.

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

Other: None currently anticipated.

References:

Arney, R. N., Froehlich, C. Y., & Kline, R. J. (2017). Recruitment patterns of juvenile fish at an artificial reef area in the Gulf of Mexico. Marine and Coastal Fisheries, 9(1), 79-92.

Cowan, J. H., Grimes, C. B., Patterson, W. F., Walters, C. J., Jones, A. C., Lindberg, W. J., ... & Lindeman, K. C. (2011). Red snapper management in the Gulf of Mexico: science-or faith-based? Reviews in Fish Biology and Fisheries, 21(2), 187-204.

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Ropicki, A., Adams, C., Lindberg, B., & Stevely, J. (2021). The economic benefits associated with Florida's artificial reefs.

Scott, M. E., Smith, J. A., Lowry, M. B., Taylor, M. D., & Suthers, I. M. (2015). The influence of an offshore artificial reef on the abundance of fish in the surrounding pelagic environment. Marine and Freshwater Research, 66(5), 429-437.

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Smith, J. A., Lowry, M. B., Champion, C., & Suthers, I. M. (2016). A designed artificial reef is among the most productive marine fish habitats: new metrics to address 'production versus attraction'. Marine Biology, 163(9), 188-196.

Vivier, B., Dauvin, J. C., Navon, M., Rusig, A. M., Mussio, I., Orvain, F., ... & Claquin, P. (2021). Marine artificial reefs, a meta-analysis of their design, objectives and effectiveness. Global Ecology and Conservation, 27, e01538.

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.

Need: There is a need to develop additional eco-tourism opportunities that would increase visitor demand, tourism satisfaction, and visitor stay time on the Mississippi Gulf Coast.

Purpose: The purpose of the project is to provide increased tourism opportunities to the Mississippi Gulf Coast.

Objective: To create a new interactive exhibit at the Mississippi Aquarium for the benefit of tourists and residents.

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

Timeline: This project is anticipated to start 1/1/2025 and end 06/30/2026

Additional Information: The project would be administered by MDEQ.

Overall Economic or Ecological Contribution to the Recovery of the Gulf Coast: This project would support promotion of tourism in the Gulf Coast region through the development of encounters and interaction between tourists and animals at the aquarium.

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. The primary purpose of the project is to implement improvements to the property to support tourism activities.

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 –Construction

Success Criteria/Metrics/Outcomes:

The anticipated success criteria that would be measured are:

- Square footage of constructed areas.

Activity	Anticipated Project Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Construction	Construction of the African Penguin Exhibit	Enhanced visitor engagement	Increase tourism opportunities and improved connection between communities and marine resources

Monitoring and Evaluation: The success of this project would be evaluated by the square footage documented by as-built drawings of the project features.

Best Available Science: Encounters, public display, and other forms of interaction provide a human-animal connection and is one the of building blocks to create a culture of conservation. Interacting with non-human animals in aquarium or zoo settings has been associated with numerous well-being benefits among humans and has been linked with improved physical and psychological outcomes (Clements et al., 2019). Effective environmental outreach also enhances attitudes, values, and knowledge toward the environment, as well as builds skills that prepare individuals and communities to collaboratively undertake environmental action (Ardoin et al., 2020). Interactive coastal and marine exhibits can improve public science literacy through participant learning and enable communities to engage with the marine environment (Kelly et al., 2020). Through this project, the Mississippi Aquarium would endeavor to improve the public's understanding of coastal and marine living resources and conservation by engaging the public through effective exhibits and education.

Budget/Funding

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: $4,500,000.00 (100% Implementation)

Partnerships/Collaboration: The Mississippi Aquarium

Leveraged Resources: $1,000,000.00 Mississippi Development Authority; $1,000,000.00 City of Gulfport Bond

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

Other: None currently anticipated.

References:

Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. Biological Conservation, 241, 108224.

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Activity #28: Natural Gas Improvements

Project Summary: This project would support infrastructure projects benefiting the economy or ecological resources, including port infrastructure through the replacement of degraded existing natural gas lines and the installation of new lines to expand the natural gas system. The project consists of the replacement of approximately 11.5 miles of 3" steel pipe of an existing natural gas line and the expansion of the natural gas system of approximately 1,500 feet along Kiln Delisle Road. The current gas system is installed within the right of way of Highway 603 and is located from Highway 43 to Highway 90 and was installed during the 1960's. The project would reduce operational costs for repairs and maintenance and would serve additional customers along Kiln Delisle Road and the Jourdan River Shores subdivision.

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: The current natural gas pipeline system is dated and needs replacement to avoid potential leaks and reduce operational and maintenance costs for the City of Waveland.

Purpose: The purpose of this project is to provide enhanced, uninterrupted natural gas services to existing and new customers in the City of Waveland.

Objective: To install a new gas main and extend the gas system for existing residents and currently unserved areas.

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

Timeline: This project is anticipated to start 1/1/2025 and end 06/30/2026.

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 reducing operational costs for repairs and maintenance and extending the gas system to serve additional customers.

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 Waveland and would comply with the definition of infrastructure in 31 C.F.R. §34.2. The primary purpose of the project is to replace degraded natural gas lines and add new connections.

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 Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Engineering and Design	100% engineering design drawings and signed permits	Engineering and Design and Permitting complete	N/A
Construction	Construction of project features	Installation of new pipeline	Reduced operational 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, coastal wetlands, and economy of the Gulf Coast. The primary focus of this project is to repair natural gas lines in Mississippi's coastal area; therefore, BAS does not apply.

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 Waveland

Leveraged Resources: None currently anticipated.

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

Other: $1,100,000.00 - 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.

Activity #29: KHSA Taxilane Sierra Extension

Project Summary: This project will support infrastructure benefiting the economy in the Gulf Coast Region through the extension of a taxilane at Stennis International Airport. The project will bring aeronautical access to an existing 13,000SF hangar and two adjacent parcels of land. The extension will make the airport more attractive to potential tenants, which could lead to increased ground lease revenues and the creation of new jobs. The project is expected to have a positive impact on the local economy, generating annual ground lease revenues and supporting a significant number of jobs.

The project would fund the engineering and design, permitting, and construction of the Taxilane Sierra extension. 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 a need to attract business and commerce to Stennis International Airport to support economic growth in Hancock County.

Purpose: The purpose of this project is to increase economic activity at Stennis International Airport and Hancock County.

Objective: To extend the current taxilane to allow for increased capacity and economic development opportunity at Stennis International Airport.

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

Timeline: This project is anticipated to start 1/1/2025 and end 12/31/2026

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 benefiting the economy in the Gulf Coast Region by providing enhanced access for businesses to operate and attract future tenants which could lead to increased revenues, jobs, and investment in the local economy.

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 Hancock County Port and Harbor Commission and would comply with the definition of infrastructure in 31 C.F.R. §34.2. The primary purpose of the project is to support infrastructure improvements at Stennis International Airport.

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.

- Square feet of construction.

Activity	Anticipated Project Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Engineering and Design	100% engineering design drawings and signed permits	Engineering and Design and Permitting complete	N/A
Construction	Construction of taxilane extension	Utilization of the taxilane extension by existing businesses	Increased economic activity at Stennis International Airport through added business and jobs.

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 improvements as well as the square footage documented by as-built drawings of the project features.

Best Available Science: Improvements to airports are often included in strategies for economic growth and local economic development (Tveter, 2017). Airport improvements result in subsequent economic benefits for business expansion and attraction. Airports can influence the geographic distribution of business and industry and can be a strong factor in the decision for a business to locate in a certain area (Cooper, 1990). As regional amenities, airports can lead to business growth and can reduce costs for businesses located on site in specialized industries (Giroud, 2013). Many airports have recognized the importance of strategy formulation to operate in a competitive market (Jimenez et al., 2014). The taxilane extension would make the airport more attractive to potential tenants, which could lead to increased ground lease revenues and the creation of new jobs, which in turn, translates to a positive impact on the local economy.

Budget/Funding

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

Partnerships/Collaboration:

- Hancock County Port and Harbor Commission

Leveraged Resources: None currently anticipated.

Funds Used as Non-Federal Match: $250,000.00 **-** Hancock County Port and Harbor Commission

Other: $1,925,000.00 - 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.

References:

Cooper, R. (1990). Airports and economic development: An overview. Transportation Research Record, (1274).

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Activity #30: Classrooms and dormitories for the Center for Marine Education and Research

Project Summary: This project would support the planning and construction activities for infrastructure benefitting the economy in the Gulf Coast Region through the construction of dormitories and classrooms at the Institute for Marine Mammal Studies' Center for Marine Education and Research (IMMS-CMER) to enhance research and educational programs and activities.

This project would allow IMMS to better collaborate with graduate students and scientists from the U.S. and abroad by providing inexpensive accommodations. IMMS works with nearby universities and would like to expand its collaborative efforts to include other universities in Mississippi which are located up to six hours away. The proposed dormitories would allow students and researchers from these universities to contribute to the research efforts that are being conducted by IMMS and partners. Furthermore, it would provide opportunities to house visitors from throughout the region for educational camps, fieldtrips, and overnight activities throughout the year. This would greatly extend the educational outreach that IMMS is currently able to provide to the Gulf Coast and the entire State of Mississippi.

The project would fund the engineering and design, permitting, and construction of dormitories and additional classrooms at the Center for Marine Education and Research in Gulfport, MS. 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 a need to develop additional research and education opportunities for researchers, students, and visitors in the Gulf Coast region.

Purpose: The purpose of the project is to construct classrooms and dormitories for research and educational programs and activities.

Objective: The project will support the planning and construction activities for dormitories and additional classrooms at the Institute for Marine Mammal Studies' Center for Marine Education and Research (IMMS-CMER).

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

Timeline: This project is anticipated to start 1/1/2025 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 support infrastructure benefitting the economy in the Gulf Coast Region by constructing dormitories and additional classrooms in Gulfport, MS. This project would provide enhanced opportunities for marine education, research, conservation, and natural resource stewardship for researchers, students, and visitors in the Gulf Coast Region.

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 activity would be implemented by IMMS. The primary purpose of the project is to construct dormitories and classrooms to enhance research and educational programs and activities of the Gulf Coast region.

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 goals:

- Promote Natural Resource Stewardship and Environmental Education

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.
- Square feet of construction.

Activity	Anticipated Project Success Criteria/Metrics/ Outcomes:	Short-term outcome	Long-term outcome
Engineering and Design	100% engineering design drawings and signed permits	Engineering and Design and Permitting complete	N/A
Construction	Construction of dormitories and classrooms at CMER	Utilization of dormitories and classrooms at CMER	Enhanced marine education, research, conservation, and stewardship throughout the region

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 improvements as well as the square footage documented by as-built drawings of the project features.

Best Available Science: Effective environmental education and outreach enhances attitudes, values, and knowledge toward the environment, as well as builds skills that prepare individuals and communities to collaboratively undertake environmental action (Ardoin et al., 2020). Interactive coastal and marine outreach programs improve public science literacy through participant learning and enables communities to engage with the marine environment about issues including seafood harvesting, marine plastic pollution, cetacean conservation, and marine environmental planning, among others (Kelly et al., 2020). Through this project, IMMS would endeavor to improve the public's understanding of coastal and marine living resources and conservation by engaging students through effective education and outreach programs and providing the necessary facilities for researchers to contribute to research efforts that relate to the Northern Gulf of Mexico environments and its inhabitants.

Budget/Funding

Estimated Cost of the Project and Amount to be Requested from Oil Spill Impact Component Funds: $2,750,000.00 (20% Planning/ 80% Implementation)

Partnerships/Collaboration:

- Institute for Marine Mammal Studies, Inc.

Leveraged Resources: None currently anticipated.

Funds Used as Non-Federal Match: $3,000,000.00 – Gulf Coast Restoration Fund

Other: None currently anticipated

References:

Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. Biological Conservation, 241, 108224.

Kelly, R., Fleming, A., Pecl, G. T., von Gönner, J., & Bonn, A. (2020). Citizen science and marine conservation: a global review. Philosophical Transactions of the Royal Society B, 375(1814), 20190461.

Project Location Map