



STATE OF MISSISSIPPI

Tate Reeves
Governor

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

Joe Spraggins, Executive Director

**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE MISSISSIPPI DEPARTMENT OF MARINE RESOURCES
AND
THE CITY OF DIAMONDHEAD**

This Memorandum of Understanding (the "MOU") is entered into between the Mississippi Department of Marine Resources (hereinafter "MDMR") and the City of Diamondhead (hereinafter "CODH") for the purpose of establishing the agreed upon conditions under which MDMR may allocate funds to CODH for the Restoration of Marsh Erosion Prevention (Basin "C" Watershed Hydrologic/Hydraulic Analysis) ("the Project") pursuant to the Gulf of Mexico Energy Security Act of 2006, Public Law 109-432 (hereinafter "GOMESA"). This MOU is entered into pursuant to and subject to the terms of GOMESA and relates to MDMR funds obtained through GOMESA, in the amount of Four Hundred Ninety-Five Thousand Dollars and No/100 (\$495,000.00). The CODH will use some or all of the funds, which will be provided on a reimbursement basis, to advance the Project.

RECITALS

WHEREAS, GOMESA authorizes the disbursement of funds for projects and activities for the purposes of coastal protection, including conservation, coastal restoration, hurricane protection, infrastructure directly affected by coastal wetland losses, as well as mitigation of damage to fish, wildlife, or natural resources; and,

WHEREAS, funding for GOMESA is directed to the State of Mississippi through the Bureau of Ocean Energy Management within the Department of Interior; and,

WHEREAS, the Governor of the State of Mississippi has directed that MDMR will administer GOMESA funding for the State; and,

WHEREAS, MDMR is authorized to allocate and disburse GOMESA funds in accordance with GOMESA in a manner as determined by the MDMR; and,

WHEREAS, GOMESA funds are federal funds and cannot be used to match any other federal funds unless those programs specifically state that such funds can be used for matching; and,

WHEREAS, the primary goals of the Project center around marsh erosion prevention while improving the ecosystem in the Bay of St. Louis and the restoration of the shoreline and

water quality; and,

WHEREAS, CODH proposes that the Project's restoration component will improve the stormwater drainage and water quality, reduce erosion and increase public access; and,

WHEREAS, the MDMR requests CODH maintain on file all documentation related to the receipt, investment and expenditure of the funds provided for the Project, and furnish any such documentation to the MDMR upon request; and,

WHEREAS, CODH agrees to expend the funds in accordance with the purposes as outlined in GOMESA; and,

WHEREAS, CODH agrees to provide quarterly and final reports to MDMR that summarize the expenditure of the funds reimbursed by MDMR and the status of the Project until such time as the final expenditure of these funds has been made; and,

WHEREAS, MDMR finds, consistent with GOMESA, that it is in the best interest of the State of Mississippi that funds made available from GOMESA should be allocated to CODH, on a reimbursement basis, for the Project.

NOW THEREFORE, IT IS MUTUALLY AGREED BY THE MISSISSIPPI DEPARTMENT OF MARINE RESOURCES AND THE CITY OF DIAMONDHEAD, AS FOLLOWS:

SECTION 1. Each and all of the facts and findings set forth in the preamble clauses of this memorandum are hereby found and determined to be true and accurate and are incorporated herein by this reference thereto as though set forth again in words and figures.

SECTION 2. This MOU shall be effective upon execution by both parties and shall remain in effect for a term of three years (36 months) with one optional one-year (12 months) renewal, for a total of four (4) years, unless terminated earlier. The term may be extended prior to expiration upon the written agreement of both parties.

SECTION 3. MDMR, pursuant to GOMESA, shall provide funds received from Mississippi's allocation of GOMESA funding in an amount up to Four Hundred Ninety-Five Thousand Dollars and No/100 (\$495,000.00) to CODH, on a reimbursement basis, for the purpose of providing funds to accomplish the Project as described herein.

SECTION 4. CODH shall request payment of funds hereunder for Project costs on a reimbursement basis (such requests, "Reimbursement Requests"), unless otherwise directed by MDMR. CODH shall submit written Reimbursement Requests no more frequently than monthly and no less frequently than quarterly. Each Reimbursement Request must be accompanied by detailed supporting documentation of costs incurred as required by MDMR. All Reimbursement Requests for time periods ending June 30 of any year during the term of this MOU shall be submitted no later than July 31 of that same year. MDMR will pay all properly documented Reimbursement Requests within forty-five (45) days after MDMR's receipt of same, except for any amounts disputed by MDMR in good faith. Reimbursement Requests shall be sent to Russell Weatherly, Project Manager – Office of Tidelands/GOMESA, Mississippi Department of Marine Resources, 1141 Bayview Avenue, Biloxi, MS 39530, russell.weatherly@dmr.ms.gov.

SECTION 5. CODH agrees to use all funds received from MDMR as allocated from GOMESA funding **solely** for the purposes set forth herein and authorized by GOMESA and upon the terms and provisions of this MOU; and further, by execution of this MOU, CODH does hereby certify that all GOMESA funds it receives from the MDMR shall be used exclusively for the Project. CODH understands that failure on its part to adhere to any provision within this MOU may result in termination of this MOU by the MDMR and in immediate action by the State to recover any improperly expended funds.

SECTION 6. CODH agrees to comply with the provisions of CFR 2 §200.501, which states that a non-Federal entity that expends Seven Hundred Fifty Thousand Dollars and No/100 (\$750,000.00) or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year.

SECTION 7. CODH agrees to maintain on file all documentation in accordance with the recitals of this MOU and to submit such documentation to MDMR upon request.

SECTION 8. CODH agrees to provide MDMR quarterly reports summarizing expenditure of GOMESA funds received from MDMR for the Project and the status of the Project until such time as the final expenditure or final investment of the funds has been made. The first quarterly report shall be provided within ninety (90) days of the effective date of this MOU, and thereafter within thirty (30) days of each calendar quarter end. CODH shall also provide MDMR with a final report summarizing the expenditures and use of the funds upon completion of the Project and final expenditure. Failure to timely submit reports may result in delay of payment of Reimbursement Requests. Reports shall be sent to Russell Weatherly, Project Manager – Office of Tidelands/GOMESA, Mississippi Department of Marine Resources, 1141 Bayview Avenue, Biloxi, MS 39530, russell.weatherly@dmr.ms.gov.

SECTION 9. CODH agrees to maintain copies of all invoices and documentation related to the funds allocated by MDMR for the Project sufficient to satisfy and confirm, to MDMR's satisfaction, that such funds have been expended **solely** for the purposes provided in GOMESA.

SECTION 10. CODH shall comply with and all activities under this MOU shall be subject to all applicable Federal, State, and local laws and regulations, as now existing and as may be amended or modified.

SECTION 11. CODH shall comply with the requirements of Senate Bill 2824 of the 2021 Mississippi Legislature Regular Session. CODH shall provide to the MDMR, on or before December 31st of each year, a written description and an itemized report detailing the expenditure of GOMESA funds, or the intended expenditure of the funds that have not been spent. Additionally, CODH shall provide to the MDMR a final written itemized report when all the GOMESA funds are spent. MDMR will provide these reports to the Lieutenant Governor, Speaker of the House of Representatives, Chairman of the Senate Appropriations Committee, Chairman of the House Appropriations Committee, and the Governor.

SECTION 12. CODH understands and acknowledges that if the Mississippi State Legislature fails to pass an appropriation bill for the MDMR and the prior year's appropriation bill expires, or if the Legislature fails to give MDMR the authority to expend funds, or if funds are

otherwise unavailable, then the MDMR may, in its sole discretion, terminate this agreement or issue a Stop Work Order to CODH in lieu of termination. If a Stop Work Order is issued, CODH agrees to adhere to its terms.

SECTION 13. This MOU shall be governed by and construed in accordance with the laws of the State of Mississippi, excluding its conflict of laws provisions, and any litigation with respect thereto shall be brought in the state courts of Harrison County, Mississippi.

SECTION 14. Attached hereto as [Attachment A](#) and incorporated herein by reference is the document supporting the request for GOMESA funding submitted by CODH. This document outlines the scope of work to be completed for the Project. Any change in the scope of work is subject to approval by the MDMR in writing and may require an amendment to this MOU and written approval of the GOMESA Committee and others.

SECTION 15. Attached hereto as [Attachment B](#) and incorporated herein by reference is the budget for the Project submitted by CODH.

SECTION 16. Attached hereto as [Attachment C](#) and incorporated herein by reference is the Project Selection Form approved and executed by the GOMESA Committee. In the event of a discrepancy between Attachment A and Attachment C, Attachment C will govern.

SECTION 17. All notices or information required or permitted to be given pursuant to this MOU shall be in writing and personally delivered or sent by Certified United States mail, postage prepaid, return receipt requested, to the party to whom the notice should be given at the address set forth below. Notice shall be deemed given when actually received or when refused. The parties agree to promptly notify each other in writing of any change of address.

For CODH:

City of Diamondhead
Attention: Michael Reso, City Manager
5000 Diamondhead Circle
Diamondhead, Mississippi 39525
mreso@diamondhead.ms.gov

For MDMR:

Mississippi Department of Marine Resources
Attention: Joe Spraggins, Executive Director
1141 Bayview Ave.
Biloxi, Mississippi 39530
Email: crystal.matta@dmr.ms.gov

IN WITNESS WHEREOF, the parties have affixed their signatures on the dates indicated below.

MISSISSIPPI DEPARTMENT OF MARINE RESOURCES

By: _____
Joe Spraggins, Executive Director

Date: _____

CITY OF DIAMONDHEAD

By: _____
Michael Reso, City Manager

Date: _____

Attachment A



5000 Diamondhead Circle • Diamondhead, MS 39525-3260
Phone: 228.222.4626 Fax: 228.222.4390
www.diamondhead.ms.gov

April 27, 2020

Mississippi Department of Marine Resources
Attn: Gen. Joseph Spraggins, Executive Director
1141 Bayview Ave.
Biloxi, MS 39530

Dear Gen. Spraggins,

Per your request, I am writing to submit a project for your consideration that may be funded by GOMESA. The City of Diamondhead has identified a project that will help stop marsh erosion while improving the ecosystem in the Bay of St. Louis. This area is located on the southern marsh of our city and northern part of the Bay. A large part of the city drains directly into the Bay of St. Louis, Rotten Bayou and the Jourdan River impacting the water quality in this area of Coastal Mississippi.

The city engaged Seymour Engineering to create a plan for improving water quality as part of a larger watershed-based approach to stormwater management. Part of their review included (1) the hardening of the bottom of Bay of Saint Louis with an oyster ridge or bar and rangia clams beds; (2) reintroducing sea grasses among the clams compatible with tidal hydrology and salinity; and (3) monitoring both conservation and restoration of coastal marshlands in Diamondhead. The project restores the shoreline, restores water quality and enables monitoring for both conservation and restoration progress.

In order to further improve the water quality in this area, another part of this project is the restoration of an existing stormwater retention pond located just north of I-10. This is a major drainage discharge area, which leads directly into the northern portion of the Bay of St. Louis. Pickering Engineering studied this drainage area and made recommendations for improvements. For this project, the City would focus on restoring the existing retention pond to its original state. After dredging the pond and adding sediment traps to the area, this area could be improved to allow for periodic maintenance, public access for fishing and other recreation activities for residents to enjoy. This project improves the stormwater drainage and water quality, reduces erosion and increases public access.

If you have any questions, please contact me at 228-222-4626 or Mayor Schafer at 228-493-3363. We look forward to discussing this project with you and your team.

Sincerely,

Michael J. Reso



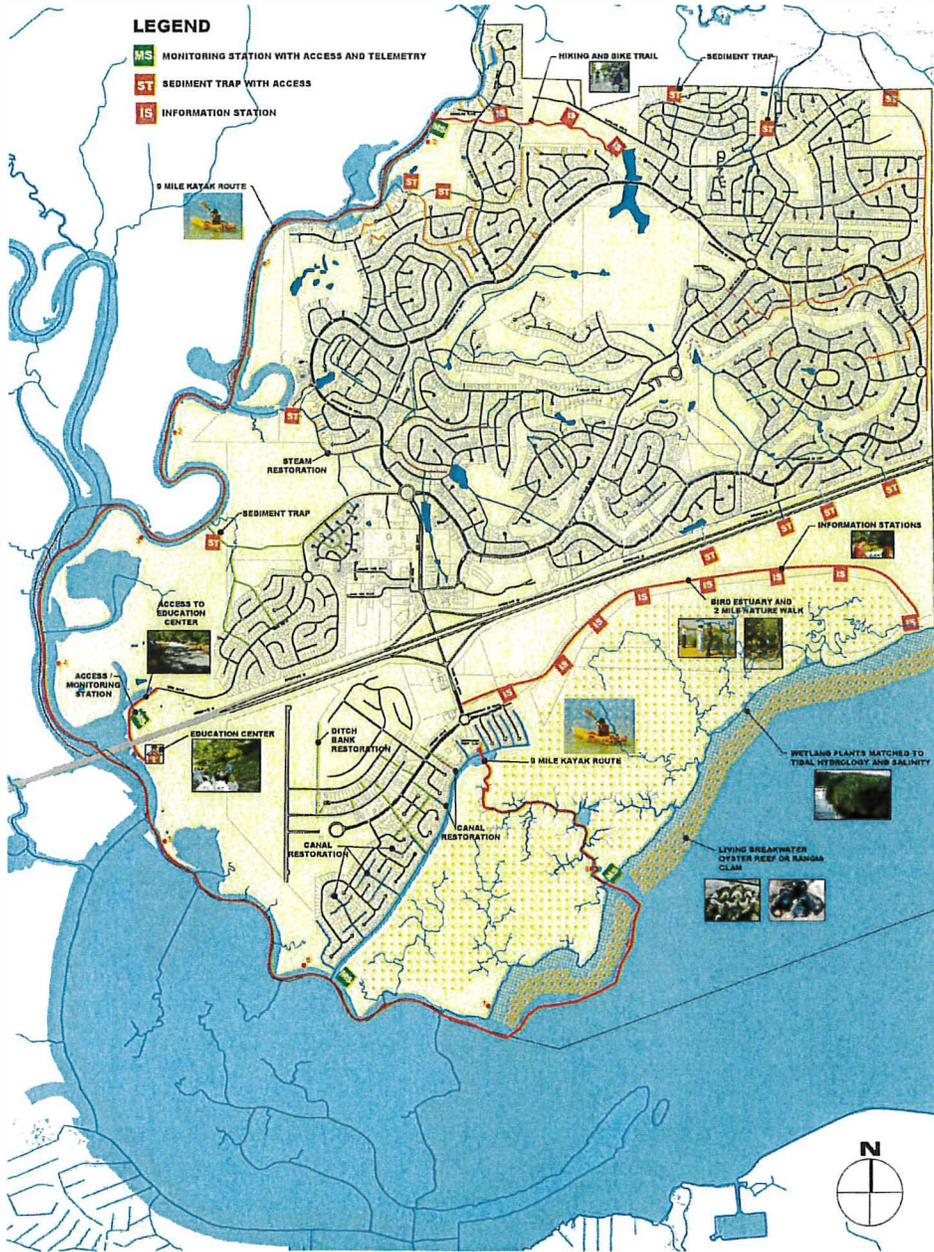
City Manager

DIAMONDHEAD

WATER QUALITY MONITORING AND RESTORATION PLAN
 DATE: 12/15/2010
 PREPARED BY: SEYMOUR ENGINEERING

LEGEND

- MS** MONITORING STATION WITH ACCESS AND TELEMETRY
- ST** SEDIMENT TRAP WITH ACCESS
- IS** INFORMATION STATION

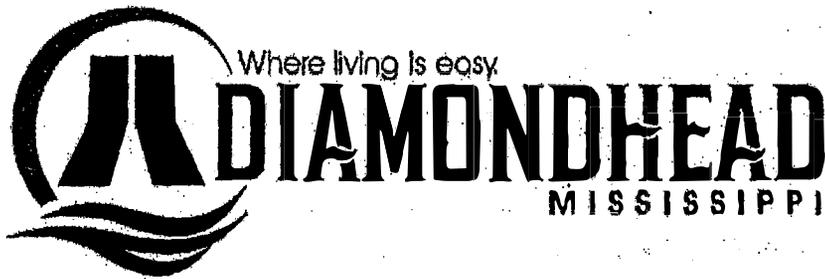


THOMAS E. SCHAFER, IV, MAYOR
 JOSEPH G. LOPEZ, WARD 1
 BLAINE G. LAFONTAINE, WARD 2
 THOMAS A. SISLOW, WARD 3
 RON L. RECH, WARD 4

ERNEST J. KNOBLOCH, COUNCILMEMBER AT LARGE
 RICHARD ROSE, CITY MANAGER

SEYMOUR ENGINEERING





Basin 'C' Watershed Hydrologic/Hydraulic Analysis

City of Diamondhead
Hancock County, Mississippi

Prepared for:
The City of Diamondhead
5000 Diamondhead Circle
Diamondhead, MS 39525

Prepared By:
Pickering Firm, Inc.
126 Rue Magnolia
Biloxi, MS 39530



July 2017

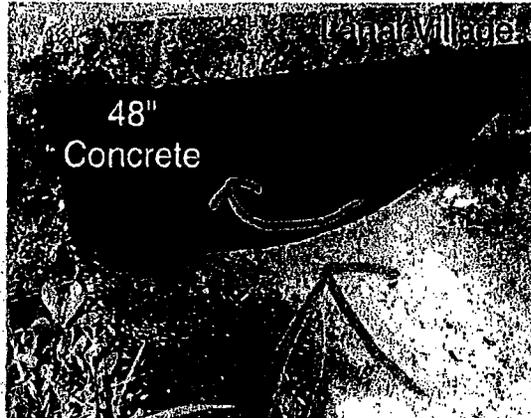


Figure 3.2.3-1 – Lanai Village Junction Box; upstream channel entrance

Also discussed in Section 3.2.1.5 - Sub-Basin 'E', the inundation of the overbanks in the first 750 feet of channel upstream of Miller Pond was observed in computer simulations in the 10 year and greater storm events. This inundation could extend onto private property, however, does not appear to threaten any physical structures. The anticipated WSE for this area could be lowered on average 6" or more for each storm event by widening this portion of channel 4 additional feet. However, exacerbated by the difficulty in access, the cost to perform this modification may not be worth the benefit described. The City of Diamondhead should continue to monitor performance of this portion of the system, engage resident input, and improve any deficiencies observed.

3.2.4 Summary of Results – Proposed Improvements – Miller Pond

As discussed, Miller Pond appears to provide notable detention in storm events. Without original design plans and documents, it is difficult to determine if the pond is performing to its original intent. It was noted that the expected flow rate passing through the discharge culvert appears to be less than what would have been expected in a pre-developed scenario (i.e. assuming wooded conditions throughout the entire Miller Pond Drainage Basin.) Further, while near the adjacent Miller Family home in the heaviest rain events, the pond does not currently appear to be an immediate flooding threat to any structures through typical riverine flooding up to the 100 year storm recurrence event. Accordingly, no improvements to this pond would be recommended on a purely hydraulic-performance basis.

However, this pond is in tremendous need of maintenance. A general rule of thumb suggests a minimum depth of 6' (below normal pool) for water retention will assist in minimizing aquatic vegetation's ability to grow and overtake a pond as well as to sustain a healthy and diverse ecosystem. Assuming this pond was originally designed with a depth of 6' (i.e. bottom elevation close to 1' MSL), the pond has seen an approximate 95% loss in its below normal pool storage. While not contributing to the pond's performance as a detention facility, this "wet" storage is paramount to a pond's performance as a water quality pond. Loss in wet storage will allow more sediment, more debris, more harmful pollutants, etc. to bypass the pond and discharge these pollutants directly to the Bay St. Louis. Loss of storage will continue

to snowball at an increasing rate with wet storage loss already nearly complete. More plants will continue to take root and capture additional water-borne sediment completing the loss of available wet storage and ultimately loss of available dry storage (i.e. areas that do serve a detention function). As wet storage is depleted the potential for clogging of the interstate box culvert is increased. As dry storage is depleted or as the box culvert is clogged the potential for flooding of adjacent private properties will be increased.

To combat the negative effects in the paragraph above, maintenance dredging and vegetation removal should be performed as soon as possible. Dredging operations should occur within the footprint shown in the 1997 aerial. A minimum depth of 6' below normal pool should be established; however, additional depth should be considered to allow for additional storage of water-borne sediment and pollutants that enter this pond. A regular maintenance schedule should be instituted for this pond to avoid the severe degradation that exists at the time of this report.

The channel entering the west end of Miller Pond from Sub-Basin 'A' needs a straighter path into Miller Pond. The west bank of this channel should have a smooth radial connection with the south bank of Miller Pond. This will add approximately 4,000 sf of pond surface area and remove about 550 cy of existing material. The bottom of the pooling area should be regraded to remove the erosion caused by the existing turn and to re-establish necessary cover over the existing sewer utility. More investigation would be needed to determine if repairs or design modifications (i.e. casing the sewer pipe, rerouting the sewer pipe, etc.) would be necessary. This recommended regrading is shown graphically in Figure 3.2.4-1 below:

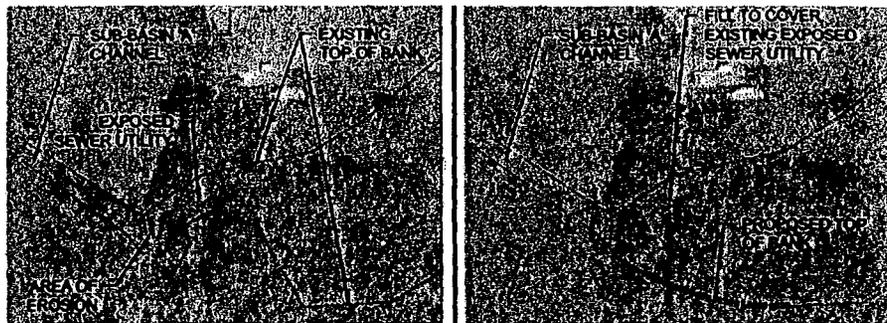


Figure 3.2.4-1 – Pond Top of Bank Regrading

Note, The City of Diamondhead should follow all applicable design and permitting authorities for any work performed in wetlands or other Waters of the United States as defined by the United States Army Corps of Engineers.

As an aside to the engineering function of this wet detention facility, please note the City of Diamondhead could work with the current landowners to possibly assume full control of this pond. Considerations for improvements to the area could be made to convert this into a park area and provide an additional amenity for City residents. Benches, trash cans, pavillions, parking, a dock, a playground, etc. could be considered.

Attachment B

GOMESA APPLICATION

City of Diamondhead

BUDGET

Retention Pond Improvements

| | |
|---|------------------|
| Long Reach Excavator and Hauling | \$ 50,000 |
| Marsh Buggy Excavator with Hauling | \$ 50,000 |
| Materials & Labor for Site Improvements (parking, fishing, bird walk) | <u>\$ 25,000</u> |
| Total Retention Pond Improvements | \$125,000 |

Living Shoreline Protection and Marsh Restoration

| | |
|---|------------------|
| Materials | \$100,000 |
| Grasses and Clams | \$100,000 |
| Contractor/Professional Services | <u>\$100,000</u> |
| Total Living Shoreline Protection and Marsh Restoration | \$300,000 |

Other Expenses

| | |
|---|-----------------|
| Engineer/Consultant/Professional Services | \$ 30,000 |
| Permitting | \$ 25,000 |
| Mobilization | \$ 10,000 |
| Signage & Other | <u>\$ 5,000</u> |
| Total Other Expenses | \$ 70,000 |

TOTAL BUDGET **\$495,000**



ENHANCE • PROTECT • CONSERVE

Attachment C

GOMESA Phase II Funding Project Selection Form

Applicant: Michael Reso
First Name Last Name

Business/Agency: City of Diamondhead

Address: 5000 Diamondhead Circle - Diamondhead, MS 39525-3260

Phone: 2282224626 Email: mreso@diamondhead.ms.gov

Project Name: Marsh Erosion Prevention (Basin "C" Watershed Hydrologic/Hydraulic Analysis)

Anticipated Budget: 495000.00 Anticipated Timeline: 7/1/2021 to 06/30/2024

Projects must meet at least one of the GOMESA criteria listed below. Please check all that apply. Additional justification may be requested.

Column A

- Coastal protection of natural resources
- Mitigation of natural or marine resources
- Conservation management
- Onshore infrastructure projects resulting from coastal damage

Column B

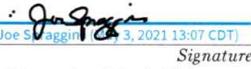
- Coastal restoration and resiliency efforts
- Ecological restoration
- Economic improvements
- Quality of life improvements

PROPOSED PROJECT NARRATIVE

This project will help stop marsh erosion while improving the ecosystem in the Bay of St. Louis. This area is located on the southern marsh of our city and northern part of the Bay. A large part of the city drains directly into the Bay of St. Louis, Rotten Bayou and the Jourdan River impacting the water quality in this area of Coastal Mississippi. The city engaged Seymour Engineering to create a plan for improving water quality as part of a larger watershed-based approach to stormwater management. Part of their review included (1) the hardening of the bottom of Bay of Saint Louis with an oyster ridge or bar and rangia clam beds; (2) reintroducing sea grasses among the clams compatible with tidal hydrology and salinity; and (3) monitoring both conservation and restoration of coastal marshlands in Diamondhead. The project restores the shoreline, restores water quality and enables monitoring for both conservation and restoration progress. In order to further improve the water quality in this area, another part of this project is the restoration of an existing stormwater retention pond located just north of 1-10. This is a major drainage discharge area, which leads directly into the northern portion of the Bay of St. Louis. The City would focus on restoring the existing retention pond to its original state. After dredging the pond and adding sediment traps to the area, this area could be improved to allow for periodic maintenance, public access for fishing and other recreation activities for residents to enjoy. This project improves the stormwater drainage and water quality, reduces erosion and increases public access.

REQUIRED SIGNATURES

GOMESA Committee:

| | | | |
|-------------------------------|---|--------------------------|---------------------------------|
| MDMR Committee Representative | <u></u> <small>Joe Saggini (May 3, 2021 13:07 CDT)</small> <i>Signature</i> | Executive Director | <u>5/3/2021</u> <i>Date</i> |
| MDA Committee Representative | <u></u> <small>Jamie M. Miller (May 19, 2021 08:57 CDT)</small> <i>Signature</i> | Chief Operations Officer | <u>5/19/2021</u> <i>Date</i> |
| MDEQ Committee Representative | <u></u> <small>Chris Wells (May 19, 2021 09:03 CDT)</small> <i>Signature</i> | Executive Director | <u>05/19/21</u> <i>Date</i> |