



March 2, 2015

Ms. Maryellen Farmer
c/o District Engineer
U.S. Army Engineer District Mobile
P.O. Box 2288
Mobile, AL 36628

Ms. Willa Brantley
Mississippi Department of Marine Resources
1141 Bayview Ave.
Biloxi, Ms 39530

RE: SAM-2013-00088-MJF

Dear Ms. Farmer:

Please consider the following comment letter on behalf of the Gulf Restoration Network, a collection of individuals and organizations united to protect and restore the natural resources of the Gulf of Mexico region. On behalf of our members in Louisiana and Mississippi, I submit this comment letter.

Our comments on the early NRDA projects in Mississippi were generally supportive of the Hancock County Heron Bay project, but until the release of the COE public notice, plans, and application by MDEQ for the living shorelines, marsh creation, and oyster cultch placement, GRN didn't know the construction methods that would be used in support of the plans.

Now that we have some idea of the layout of the breakwater along the shoreline from the Pearl River mouth to Point Clear, the placement of the hard bottom in Heron Bay and the scale of dredging that will accompany these activities, we have concerns that we would like to voice in the comment period.

- 1. There is a large amount of dredging planned to create barge flotation channels for the placement of the materials into the alignments of the living shoreline structures and to install the materials to make the oyster cultch or other hard bottom. We question whether this much dredging is necessary and whether there are other methods that can be used to place materials that don't require the amount of dredging set forth in the application and notice.**

Over 100 acres of access canal dredging is planned both parallel to the shore where the living shoreline breakwater is to be built, and in approaches to Heron Bay for the placement of 46 acres of hard bottom oyster cultch rock or shell. These are termed temporary flotation channels and it is stated that in the best opinion of the engineers, the spoil material that is cast to the Gulf side of the barge access channels will naturally backfill the dredge-cut bottoms within 5 years due to wave action.

GRN questions whether it is necessary to use such deep draft vessels in the construction of the project. If smaller vessels are used that don't require conforming the bottom depth to the draft of the work vessel, much dredging can be avoided. Large barges, heavily loaded with rock or shell or marine mattresses and pushed by tugs are contemplated by the planners, so that the placement of the materials proceeds as quickly as possible. For a project that seeks to stabilize a marsh shoreline, we question why it is necessary to cut channels into silty, soft bottoms, parallel to the shore, close to the edge of the existing marsh.

The Hancock County marsh shoreline along the pass between St. Bernard Parish and Hancock County, at the west end of the Mississippi Sound gets wave action from the southeast (southeast wind driven waves move over the longest fetch of the Mississippi Sound) throughout each year, plus it feels the effect of daily tides that move back and forth east and west through a wide tidal pass. Spoil piled up on the Gulf side of the parallel flotation canals along the shore won't all simply slough back down into the cut from wave action. Currents that move along the shore, whether from wind forcing or from tidal movement have the energy to suspend and move soft spoil. The public notice admits that longshore transport studies still need to be done to investigate the fate of the dredge spoil. If the sponsor/applicant doesn't have a better idea of whether this spoil material can actually move back into the cut to fill the flotation channels, permitting these spoil piles and this dredging method seems premature.

Cutting a channel parallel to the shoreline, and then installing a breakwater close to the channel edge made of either large rock or a series of marine rock mattresses seems to invite collapse of the toe of the rock pile or marine mattress if the channel doesn't fill in as predicted. Wave energy propagated from the south and southeast hitting the Hancock marsh shore could erode the landward edge of the channel bottom and move it toward the breakwater. Wave energy has eroded the shoreline here, marching the marsh edge northward for decades. What will that wave energy do to the shoreward edge of a flotation canal dug parallel and close to the shore?

Because these questions exist and have not been answered, it seems better to place the breakwater without dredging or with much less dredging than contemplated by the permit. Using smaller vessels, and more vessels than just a few large work barges, is an option that has not been raised in the body of the application or the public notice.

The discussion did not contemplate alternative methods such as using a fleet of shallower draft vessels to install the breakwater, but this could be a way to avoid much of the dredging, especially the dredging of floatation channels parallel to the marsh shoreline.

Another reason to avoid dredging and to explore the use of smaller vessels to install this project is that this would promote the hiring of more people under the contracts let to complete the oil spill restoration and natural resources damage recovery work, such as this Hancock County living shorelines, oyster bottom and marsh creation project. Hiring more local Mississippi residents would be in line with the rationale of the Mississippi Jobs First Act, (Senate Bill 2622 of the 2012 Regular Session of the Mississippi Legislature) and it would spread the benefit of the oil spill recovery money more widely in the local economy. The bill requires that contractors receiving oil spill disaster money, such as NRDA funding, must examine a list of local workers during a 10 day delay period before finalizing hiring for a project. The intent of the bill's authors was to put local people to work in the various restoration and recovery projects that follow any oil spill or disaster.

For similar reasons, dredging to create the long access channel from the Mississippi Sound into Heron Bay, for reef building there, could be avoided if smaller, shallower draft vessels were utilized in the transport of the shell or rock to be deposited. The use of smaller vessels with shallower drafts would also allow more individual sub-contractors to be hired in order to spread the economic effect of this restoration project farther in the community, and to ensure (see above Ms. Jobs First Bill discussion) that local residents are hired for the project.

The marsh creation projects using beneficial use/placement of spoil that will follow the construction of the breakwaters and the sediment or spoil retention dikes should likewise be designed for installation with the minimal amount of access/flotation channel dredging. Minimizing the disturbance of shallow nearshore water bottoms should be a goal for this phase of the construction project as well. Dredging channels into the bottom so close the areas selected for spoil deposition should be avoided if possible or minimized to the greatest extent.

MDEQ should re-evaluate the expenditure and effort to place hard bottom, either shell or rock, on 46 acres of Heron Bay in waters that the Mississippi Department of Marine Resources has designated as a restricted (or prohibited) oyster harvest zone.

The application for this project, published by the Mississippi Department of Marine Resources, contains an environmental assessment that reveals that the 46 acres of hard bottom restoration and oyster reef replanting would occur in a restricted harvest zone. (Environmental Assessment: *Physical Environment* Sec. 2.3.2.1, and *Biological Environment*, 2.3.2.2) Due to the presence of elevated levels of fecal coliform bacteria, probably from failing septic systems in Ansley, Lakeshore and in the other developed areas that contribute water and runoff to the Tennessee Gas Pipeline Canal, the relevant section of Heron Bay is a restricted oyster harvest zone. Considering the steep drop in oyster production in only a few short years, **all** oyster bottoms created in Mississippi should be harvestable reefs, even if only to provide places on which to grow seed oysters so they can be moved later to other

managed public oyster reefs. The large expense of creating these oyster growing areas needs to provide **full** usefulness. Forty-six acres of hard bottom for the propagation of oysters, paid for with public money, would serve a greater public purpose if the oysters could be considered part of the Mississippi's usable, managed, fishable public reefs.

Alternatively, if several tens of millions of dollars are to be spent creating hard bottom and oyster reefs in waters that are impaired and cannot be fished for oysters, the probable source of the fecal coliform pollution and runoff causing the water impairment needs to be aggressively addressed as well, with an equal or greater amount of funding in this or some other portion of this same NRDA funding stream, or with other sources of oil spill recovery money. MDEQ's failure to address this water quality impairment problem (Tennessee Gas Pipeline Canal Fecal Coliform Pollution of Heron Bay) would be negligent since it has been fully identified in this proposal.

When Governor Bryant announced that this Early NRDA project had cleared its last hurdle and would be funded, he emphasized that the living shorelines and reefs would benefit fisherman who were interested in speckled trout, redfish and flounder. That announcement seemed to be a gross oversimplification or maybe a misunderstanding of the project's purpose on the part of the Governor. (Maybe he thought that the audience was mostly composed of recreational fishing enthusiasts.) However, if these hard bottoms are placed in impaired waters, and are being created strictly for the promotion of secondary productivity as reported by the environmental assessment, then the Governor was more correct than I originally thought. These hard bottoms will offer very little utility to oyster growers and are going to be primarily used by sport fishermen in boats who are seeking game fish attracted to the secondary production that happens on oyster reefs and hard bottoms. More productivity in the estuary is not a bad thing, but this isn't probably what most people on the coast (who are familiar with oysters) would consider to be oyster reef restoration.

The planned restoration of 46 acres of Heron Bay oyster bottom in this project reveals the complexity of trying to restore oyster habitat in a coastal zone that has lots of people, homes, camps and sewer systems. There are clearly too many pipes spewing/leaking too much fecal coliform bacteria pollution here, and the existing systems are failing to contain and treat this contamination source in the coast's waters - including the tidal waters that affect Heron Bay. This Early NRDA project, on its face, is a worthy effort. That was the way GRN and other responded to it when it was announced. The project is nevertheless burdened with pre-existing water quality problems that will hamper it and diminish its usefulness and success.

I served as a facilitator on Saturday, February 28th at the "Water Quality" Resource Summit, sponsored by MDEQ and hosted by Covington Environmental, the same consulting engineering contractor that has written this 404 dredge and fill permit/proposal for the applicant, MDEQ. The Resource Summit was funded by some of the oil spill lawsuit settlement money (NFWF) and was conceived as a way to plan for the spending of more of the BP settlement/fine money coming later. We met at the Handsboro Community Center, and about 60 people attended to listen to presentations and to participate in identifying

water quality problems, prioritizing areas of emphasis, and even to offer projects and fixes for trouble spots. At my table, oysters came up early in the discussion of why we were concerned with water quality. Rebuilding, bolstering and supporting the Mississippi Coast's oyster growing, shipping and processing industry was mentioned specifically at my table, which had seven attendees - both local citizens and outside resource experts sitting around it. When I drew this project on the table's map and added the explanatory note that the water quality of the Tennessee Gas Pipeline Canal made the oysters in the new 46 acre reef un-harvestable, nobody at the table could believe that the state would do this project this way. They were not all marine scientists, but they were reasonable people.

Covington Environmental and MDEQ are in a position to clearly see the full scope of the problems and contradictions of trying to restore oysters in impaired waters. Very few people or organizations enjoy the same access to data or understanding about water quality impairments, oyster growing areas, and the various construction methods that could be used in this project. Even so, the people attending the Resource Summit, and I, had a hard time understanding the spending of so much money to create the oyster bottoms, when water quality problems will make them un-harvestable for consumption and thereby diminish the usefulness of the project.

The MDEQ and Covington need to re-evaluate this project's plans for extensive dredging activity and questionable oyster reef placement, and revise the permit application in a way that does justice to the restoration purpose and overall utility of the project, in consideration of the large amount of money being spent here.

Thank you for the opportunity to comment.

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