US Army Corps
of Engineers
Mobile District

June 2009

Mississippi Coastal Improvements Program (MsCIP) Hancock, Harrison, and Jackson Counties, Mississippi

Comprehensive Plan and Integrated Programmatic Environmental Impact Statement

Appendix L: Comments And Responses

Choctaw Nation

From: Ian Andrew Thompson [iatc97@unm.edu]
Sent: Friday, March 27, 2009 9:59 AM
To: Rees, Susan I SAM
Cc: vrobison@choctawnation.com; iatc97@unm.edu
Subject: Draft EIS Comments

Dr. Rees,

I am writing you in response to a request that was made of the Choctaw Nation of Oklahoma to comment upon the US Army Corps of Engineers Mobile District's Integrated Programmatic EIS for the Mississippi Coastal Improvement Program.

In terms of cultural resources / TCPs, the plan as outlined in the Comprehensive Report is acceptible to the Choctaw Nation of Oklahoma. As described in the Report, we will be willing to consult on a project-by-project basis rather than through a PA. As a general protocol, we do ask that an archaeological site file search and survey be conducted for ground-disturbing projects that will occur in previously unsurveyed areas that have a high archaeological potential. We ask that we are notified of the survey results before ground breaking begins. We also ask that we be included in any MOUs involving cultural resources that may be created for specific projects. If a project, whether directed by an MOU or not, uncovers archaeological materials, we also ask that we be contacted immediately to begin consultation.

Thank you for your time and correspondance. Please let us know if there is anything further we can do to assist you at this point. We are looking forward to working with you.

Sincerely,

Ian Thompson PhD, RPA
Tribal Archaeologist
Choctaw Nation of Oklahoma

Response to Choctaw Nation of Oklahoma, Email dated March 27, 2009

Comment Response: Thank you for your input and your comment was noted.

Rees, Susan I SAM

From: Bryant J. Celestine [celestine.bryant@actribe.org]
Sent: Thursday, March 05, 2009 10:38 AM
To: Rees, Susan I SAM
Cc: 'Carlos Bullock'
Subject: Mississippi Coastal Improvements Plan

Dear Ms. Rees:

On behalf of Chief Oscola Clayton Sylestine and the Alabama-Coushatta Tribe of Texas, our appreciation is expressed on the U.S. Army Corps of Engineers (USACE), Mobile District's efforts to consult us regarding the Mississippi Coastal Improvements Plan. As a federally recognized Tribe, we maintain ancestral associations throughout southeastern United States despite the absence of written documentation to completely identify Tribal activities, villages, trails, or burial sites.

In reference to the February 24, 2009 message by Joseph A. Giliberti, the three coastal counties of Mississippi contain migratory routes and temporary habitation sites utilized by ancestral members of the Alabama and Coushatta Tribes. Therefore, we would appreciate the opportunity to assist your agency in this endeavor as we seek to protect religious, cultural, and historical assets of our Tribe.

For consultation purposes, our current leadership comprises of Chief Oscola Clayton Sylestine and Tribal Council Chairman Carlos Bullock. Official correspondence may be direct to either leader at the address below with consultation coordinated through my office.

Feel free to contact us should you require additional assistance regarding this matter. Again, we welcome the opportunity to collaborate with the USACE, Mobile District and look forward to a successful partnership.

Respectfully submitted,

Bryant J. Celestine

Historic Preservation Officer

Alabama-Coushatta Tribe of Texas

571 State Park Rd 56

Livingston, Texas 77351

936 - 563 - 1181

Celestine.bryant@actribe.org

Cc Carlos Bullock, Tribal Council Chairman

Response to the Alabama-Coushatta Tribe of Texas, Email Dated March 5, 2009

Comment Response: Thank you for your comment and the comment was noted.

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Richard B. Russell Federal Building
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Atlanta, Georgia 30303

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9043.1

April 28, 2009

Dr. Susan I. Rees
Army Engineer District, Mobile
P.O. Box 2288
Mobile, AL 36628-0001

Subject: Draft Environmental Impact Statement for the Mississippi Coastal Improvements Program, Hancock, Harrison, and Jackson Counties, MS

Dear Dr. Rees:

As requested, the U.S. Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the Mississippi Coastal Improvements Program (MsCIP). The following comments include the review and comments made by the U.S. Geological Survey, the National Park Service, and the U.S. Fish and Wildlife Service.

U.S. Geological Survey

Structural and Non-Structural Measures and Alternatives

The following should be considered in the development and implementation of structural and non-structural measures and alternatives.

- Direct and indirect environmental impacts due to hurricane protection measures should be clearly documented to avoid possible conflicts and unintended consequences (e.g., Summary, p 2, lines 45; Section 1, p 8, line 9; p15 line 38).
- Flood risks and levels of protection should be evaluated at regular intervals (adaptive management) and protection measures modified as needed to maintain adequate flood protection (Section 5.20, p 32).
- Structural measures should be designed to have the smallest physical footprint possible to minimize impacts to hydrologic pathways and allow for natural cyclic exchange of water, sediment, nutrients and biota (e.g., Section 2.2.4, p 8).

1

- Borrow material for levee construction should be from sources external to the coastal wetland system to the extent practical (Section 4, p 52, line 40; Section 6, p 1, line 22).
- Opportunities for natural processes to distribute sediments through flood protection structures should be provided (Section 4, p 40, line 28).
- Non-structural alternatives should be adopted to the extent practical

Adaptive Management

The DEIS recognizes the value of an adaptive management approach and acknowledges that monitoring is an essential part of this approach. The DEIS outlines a 5-year monitoring plan; however, long term monitoring over the lifespan of a project will be necessary to evaluate the effectiveness and impacts associated with management actions addressed by the DEIS. Consideration could be given to developing a system-scale long-term monitoring program in collaboration between the States of Mississippi and Louisiana.

Consideration also should be given to improving the availability and accuracy of baseline data from which change can be measured when applying adaptive management. Without the acquisition of baseline data, change cannot be quantified and subsequent monitoring may provide an incomplete or inaccurate picture of success or failure of restoration activities on the ecosystem. Examples of suggested baseline data acquisition include:

- Barrier Islands – Post-Katrina and Rita (perhaps post-Gustav and Ike) baseline data, including bathymetry and shoreline change, are needed prior to final project planning. Available bathymetric data are inadequate. For example, sediment transport modeling and comparisons of historic to present day bathymetry prior to sand placement are needed to support estimates of sand movement. Present day bathymetry being conducted by James Flocks, USGS St. Petersburg, will confirm whether these sediment transport estimates are accurate.
- Elevation data – Available elevation data should be updated to improve the accuracy of predictive models. For example, modeling conducted for the New Orleans area was based on the 1929 datum and should be updated to the North American Vertical Datum of 1988 (NVD88). In Mississippi, bathymetry, baseline seafloor characterization, and sub-bottom assessment (post-Katrina) data for the barrier islands, Mississippi Sound, and the mainland coast are needed to support sediment transport and storm surge modeling, storm surge warning systems, storm-impact assessment of island and mainland coastlines and submerged features, quantification of sediment resources, identification of areas of potential instability (e.g. breach hotspots), and identification of areas favorable for efficient littoral renourishment. Renourishment options will affect sturgeon and turtle habitat.
- Salinity data – Baseline salinity data may be available; however, the availability of salinity data should be discussed in the DEIS. For example, salinity data can be used to evaluate the potential consequences of fresh water inputs delivered either through Lake Pontchartrain or Lake Borgne to Mississippi Sound before proposed diversions are implemented. Salinity data also can be used to evaluate the potential for saltwater intrusion into ground-water resources.

Climate Variability: Potential Effects of Sea-Level Rise

Sea-level rise is one of several primary factors contributing to the widespread coastal erosion and land loss occurring around the U.S. and the world. Theory and predictions suggest that with increased climate variability, sea level will continue to rise and is likely to greatly accelerate due to ocean warming and expansion and melting of ice sheets and glaciers (J. L. Gonzalez and T. E. Tornqvist, Eos, Vol. 87, No. 45, November 7, 2006, pp 493-508). Such increases in sea level will increase storm-surge flooding, coastal erosion, wetland loss, salt-water intrusion into fresh-water aquifers, and property damage; however, details on the effects and risks to natural landforms and human development in coastal regions has been lacking.

3

Relative sea level rise, a combination of sea-level rise and subsidence, is a concern in the MsCIP program and plans. Consequences of relative sea level rise, especially shoreline change, will affect surge predictions. Therefore, future erosion effects of sea-level rise and altered hydrodynamics will have to be considered for surge predictions to be useful. Otherwise storm surge models will be inaccurate and misleading. The latest scientific knowledge should be incorporated into the DEIS.

National Park Service

SEIS Required before Project Implementation

As established within the DEIS, additional environmental analyses and evaluations must be addressed within a supplemental EIS (SEIS) and associated Record of Decision pertinent specifically to the barrier islands restoration component of the MsCIP. The National Park Service (NPS) requests status as an official cooperating agency with the USACE in developing the SEIS, which will provide a more detailed evaluation of viable barrier island restoration alternatives, tiered from the DEIS. The additional environmental analysis and evaluation pertaining to the barrier islands of Gulf Islands National Seashore (GUIS) will need to conform to NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis and Decision Making.

4

Restoration of the Sediment Transport and Budget System

NPS endorsement of the MsCIP, and specifically the barrier islands restoration component, is predicated upon the opportunity to restore the sediment transport and budget system, as articulated in Section 1.7.3.3 of the DEIS. The Mississippi barrier islands have experienced substantial changes in shoreline position and island area since the mid-1800s. Lateral island migration (erosion along the eastern end of the islands and deposition to the west) has occurred, driven by dominant east-to-west long shore sediment transport. The long-term and accelerating erosion and land loss experienced by the barrier islands is of major concern to the NPS.

5

Although some erosion is due to storms and relative sea level rise, anthropogenic activities, including dredging of navigation channels throughout the coastal system have also been a major contributing factor. The result has been a progressive reduction in sand supply to the barrier island sediment budget and increased island land loss, ranging from 24% to 64% of upland island volume since the 1840s. The regional shortage of littoral sand for barrier island maintenance is

most profound at Ship Island, at the terminus of the sediment transport system along the islands (Rosati et al., 2007). Consequently, Ship Island's vulnerability to breaching has progressively increased with time. Because of the island's diminished state, it may now have lost the ability to restore and maintain itself as in the historical past (Morton, 2007), placing the island's cultural resources (structural and archeological sites) at greater risk. Thus, given the altered state of natural resource processes due in part to human-caused intervention, as well as the resulting threats to cultural resources, the NPS in collaboration with other agencies has concluded that restoring the sediment transport processes of the Mississippi barrier islands to conditions similar to pre-human intervention offers the best opportunity to restore the inherent resiliency of these islands.

More specifically, as tiered to in NPS Management Policies, 2006, Section 4.8.1.1 pertaining to shorelines and barrier islands, the overarching NPS management objective applicable to the barrier islands restoration component of the MsCIP is to restore the sediment transport and budget system, including littoral processes to as natural state as possible given channel dredging, frequent intense storms, climate change (sea level rise) and other anthropogenic influences.

Monitoring and Adaptive Management - Barrier Island Ecosystem Restoration

Successful restoration of the littoral sediment flow system for the Mississippi barrier islands will require adaptive management through the life of the project. Timely, targeted monitoring of a range of biologic and geologic conditions will be needed to provide sufficient data for informed adaptive management decisions. If possible within project time constraints, baseline data should be collected about pre-project conditions including barrier island footprint and topography, bathymetry around barrier islands, sediment flux and currents through Camille Cut and within the littoral system, salinity of Mississippi Sound, and biodiversity of benthic habitat around barrier islands and within Mississippi Sound. As the project progresses, this data should be monitored at appropriate intervals and locations, and analyzed to assess project effectiveness. 6

Monitoring by USACE scientists and engineers and by NPS resource managers will be an important component of data collection for project assessment. However, involvement by scientists from the U.S. Geological Survey and universities will be necessary to ensure that a full complement of monitoring and assessment capacity is available to the project to ensure that the science used for project management decisions is objective and will be perceived as such by the public, the State of Mississippi, and the Congress.

The need for pre-project data, monitoring during the project to support adaptive management (to be assessed by an interagency adaptive management team), and post-project assessment is addressed in section 5-20 on p. 5-32 of the main report and Appendix H, sections 6.5.1 & 7.5, and Tables 8.1 & 8.3, in which total funding of $4.95 million is proposed. However, these sections should be enhanced to emphasize that targeted, objective, scientific information will be crucial to project effectiveness. 7

NPS requests continued involvement as a cooperating agency if the barrier islands restoration component of the MsCIP is approved and funded by Congress. To ensure and document the success of barrier island restoration, and to provide critical information for adaptive management 8

during the project, the NPS requests that the project budget include sufficient funding for : 1) quality assurance and quality control of sand replenishment adjacent to the MS barrier islands; 2) monitoring of a range of mutually agreed biologic and geologic conditions, as well as regular and recurring synopses of data necessary to make informed adaptive management decisions; 3) development and evaluation of criteria to determine the short- and long-term success of the restoration project(s); and, 4) formation of an interagency scientific team to make timely assessments of monitoring data and recommend adaptive management actions to senior management. To ensure that the project has access to objective scientific data of the highest quality, the NPS recommends that in addition to scientists from the NPS and the USACE, scientists from the U.S. Geological Survey and, if appropriate, from universities be involved in the monitoring process and included on the interagency scientific team.

Cat Island

While not officially included under the auspices of the MsCIP, Cat Island has also experienced land loss due to a depleted sand supply. Because a portion of Cat Island is included within the boundaries of GUIS, NPS endorses continued study of the Cat Island littoral system as alluded to within the report to assess potential actions to address the sand supply issue 9

Presentation of Barrier Island Restoration Information throughout Document

It is often difficult to distinguish which alternative for barrier island restoration is referred to by text within the document. For example, is the use of river sand still being considered? If not, does an analysis still need to be included in the EIS? Is submerged aquatic vegetation restoration still being considered (option F), or has it been eliminated with the tentative selection of Barrier Island Plan H? Is revegetation beyond planting of sea oats to stabilize direct placement within Camille Cut still an option? To make the document clearer for readers, particularly those not familiar with National Environmental Policy Act (NEPA) documents, the text should clarify where possible which components refer to Plan H and which to other alternatives. 10

Environmental Impacts Resulting from Sand Removed at St. Bernard Shoals

The NPS recommends inclusion of more detailed analysis in this document, or in a Supplemental EIS, concerning the anticipated environmental effects of removing perhaps as much as 22 million cubic yards (mcy) of sand from St. Bernard Shoals or other open-water areas in the Gulf of Mexico for use in restoration of the barrier island sediment budget and transport system, including restoration of Ship Island. 11

NPS Wetland and Floodplain Compliance Requirements

NPS Management Policies (2006) and NPS Procedural Manual #77-1: Wetland Protection (2008) establishes a “no-net-loss of wetlands” policy for the NPS, which requires avoiding, minimizing, and compensating for adverse impacts on wetlands. If a proposed action such as sand replenishment on barrier islands will have such impacts, then compliance with these policies and procedures must be recorded in a Wetland Statement of Findings (WSOF) and approved by NPS. Likewise, such actions would trigger compliance with NPS *Procedural* 12

Manual #77-2: Floodplain Management, including preparation and approval of a Floodplain Statement of Findings.

Upon completion of a Supplemental EIS for barrier islands sand replenishment, a Wetland/Floodplain Statement of Findings, as addressed above, will need to be incorporated. Please reference "Editorial & Procedural Comments" section below, for additional details in completing this document.

Potential Impacts to NPS Classified Wetlands

Following selection of the preferred alternative for barrier island restoration, the Supplemental EIS should address habitat changes and/or alterations to NPS classified wetlands and deepwater habitats using the Cowardin Classification system that occur within GUIS boundaries. These habitats include the marine system, both subtidal and intertidal, which extends from the outer edge of the continental shelf shoreward to the landward limit of tidal inundation and to the seaward limit of wetland vegetation; and the estuarine system which consists of deepwater tidal habitats and adjacent tidal wetlands (emergent and scrub/shrub habitat). 13

Sea Level Rise

According to reports out of the International Scientific Congress on Climate Change (IPCC) conference recently held in Copenhagen, new research indicates that the upper range in sea level rise could be approximately 1 meter, and possibly more, by the year 2100. The previous IPCC report, published in 2007, projected a sea level rise of 18 – 59 centimeters by 2100. The NPS suggests evaluating and including this new information in the document, and addressing the implications of such information in future MsCIP project planning, particularly with respect to the barrier islands. 14

Freshwater Diversion, Salinity and Seagrass

The document's discussion on salinity and seagrass within Mississippi Sound (MS) is somewhat deficient. The data available on salinity conditions within the Sound, including seasonal variations etc., should be fully summarized. Although the proposed freshwater diversion is not the focus of this DEIS and will need to be further scoped and planned in conjunction with the state of Louisiana and the New Orleans District of the USACE, there are several issues raised in Appendix A, Environmental, that point to potentially conflicting desired outcomes of such a diversion. For example, "decreased availability of light" and "extended periods of depressed salinity" is listed as potential causes of seagrass decline in MS Sound. Introduction of Mississippi River water into the system could contribute to both of those factors. Given that there are proposed projects to restore seagrass beds, this apparent conflict would need to be resolved. A more detailed and comprehensive assessment of water quality parameters in MS would need to be conducted in order to better model the impacts and gradients in salinity and other parameters expected with the proposed river diversion. 15

Page S-7, Table S-2, Environmental Effects of Recommended Alternatives

With respect to environmental effects of the recommended barrier island restoration alternative on "Geology," the table states "No Impacts." While this determination may be correct with respect to impacts on geologic formations, the recommended alternative for barrier island restoration is based on the assumption that identified actions would likely result in positive impacts to barrier island coastal geologic features and processes by attempting to restore and maintain the barrier island sediment budget and transport system. Reconstructing the severely eroded Ship Island to a circa 1917 geomorphic condition, the reintroduction of sand in the littoral zone near East Ship Island and Petit Bois Island and modifying future navigation channel maintenance dredging practices would likely reestablish natural coastal geologic processes as much as possible given continued dredging of navigation channels near the barrier islands. In addition, the reintroduction of 22 mcy of compatible sand into the barrier island system, (i.e., 13 mcy to reconnect East and West Ship Islands, 5 mcy and 4 mcy placed in the littoral zone near East Ship Island and Petit Bois Island, respectively), sand that was historically removed from the littoral drift zone at the Horn Island Pass Outer Bar Channel, will at the very least place that volume of sand back into the disturbed system to mitigate past adverse impacts which should result in a net benefit to barrier island coastal geologic features and processes. 16

Page 1-3, Section 1.2, Study Purpose and Scope, Line 1-3

The definition of resilience presented in the document is the "engineering" definition – resistance to disturbance and speed of return of a system to equilibrium state. There is an "ecosystem" definition that, in light of ecosystem theory and climate change, is probably a better choice – the capacity of a system to undergo disturbance and maintain its existing functions and controls and its capacity to adapt to future change (Gunderson, L.H. 2000. Ecological resilience- in theory and application. Annual Review of Ecology and Systematics 31: 425-439. Carpenter, S., B. Walker, J.M. Anderies, and N. Abel. 2001. From metaphor to measurement: resilience of what to what? Ecosystems 4: 765-781.). 17

Page 1-10, Section 1.6.2, Regional Salinity / Water Quality Monitoring, Line 30-31

The text states "….the barrier island changes proposed for construction in the MsCIP study do not involve significant changes to the barrier island footprints." The recommendation to place 13 mcy of compatible sand in "Camille Cut," which is 3-4 miles in length, to reconnect East and West Ship Islands as they were historically in the past will likely be viewed by some reviewers as a significant change to the barrier island footprint. Recognizing that the shallow sand shoal (footprint) upon which the subaerial and largely intact Ship Island existed prior to Hurricane Camille, we suggest qualifying the referenced statement as follows: "…the barrier island changes proposed for construction in the MsCIP study do not involve significant changes to the barrier island footprints as compared to that which existed in 1969 prior to Hurricane Camille." 18

Page 1-13, Section 1.7.2, Additional Required Coordination, Line 30-32

In view of the fact that the NPS is the Federal land management agency with jurisdiction on the barrier islands and adjacent waters within GUIS, we request the addition of the NPS in this section of the document as additional coordination between the USACE and NPS is imperative as we move forward in this planning process. 19

Page 2-6, Section 2.2.2, Relative Sea Level Rise; and Page 3-8, Section 3.3.3.3, Accommodating Uncertainty in Future Sea Level Rise Through Scenario Testing

20

These two sections address relative sea level rise, using the same endpoint values (2 feet and 3.4 feet) for periods of 100 years (p. 2-6) and 50 years (p. 3-8). Time periods of analysis should be checked, and the timing made consistent.

Page 2-12, Section 2.2.6.3, Federal T&E Species and Their Critical Habitats, Table 2.1

21

The seven T&E marine species noted on lines 27-31 should be included in this table as project activity in the Gulf of Mexico and near the barrier islands could impact habitat use. The NPS notes that Table 2.1 does not include state listed species, and suggests that such species should be included if any are known to occur in the project area. The NPS also suggests inserting "West Indian" before manatee to differentiate it from the other two species of manatee. The footnotes below Table 2.1 include "PE = proposed endangered," however no such species are presented in the table. The footnote could be deleted and a short sentence could be included in the text to tell the reader that no proposed threatened or endangered species are known to occur in the project area.

Although the Bald eagle was delisted in 2007, it should be included in Table 2-1 as the species will be monitored every five years for a total of 20 years. (i.e., the table then could be titled as "T&E and Species of Management Concern" or something to that effect.) Should there be a drop in its numbers, it is conceivable that it could be relisted. The code would be "DM" for delisted/monitored. It will also be protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act – and as such, is a Species of Concern (this is also noted in the FWS Table 2). The source for the table should really be the United States Fish Wildlife Service (USFWS) and their ECOS website (www.ecos.fws.gov) for most current information (not a 2000 document, which by the way there are two Mann entries in the reference section, neither which seem like good citations for the T&E species in the area.). The National Marine Fishery Service also has a website and lists T&E species along with federal species of concern (i.e., something that USFWS no longer lists except at some field offices and states). So, both should be cited as references.

Page 3-13, Section 3.4.2.3, Damage to Fish and Wildlife, Line 42-45

22

The DEIS states, "Hurricane Katrina and other recent storms have over washed all barrier islands in the Northern Gulf causing severe erosion, severely damaging or destroying facilities and resources, depositing massive amounts of debris, degrading habitats, and setting the stage for rampant infestations of noxious, invasive plant and animal species." This level of impact apparently did not occur on all islands and the statement should be qualified.

Page 3-17, Section 3.5, Planning Goals and Objectives, Line 20-22

23

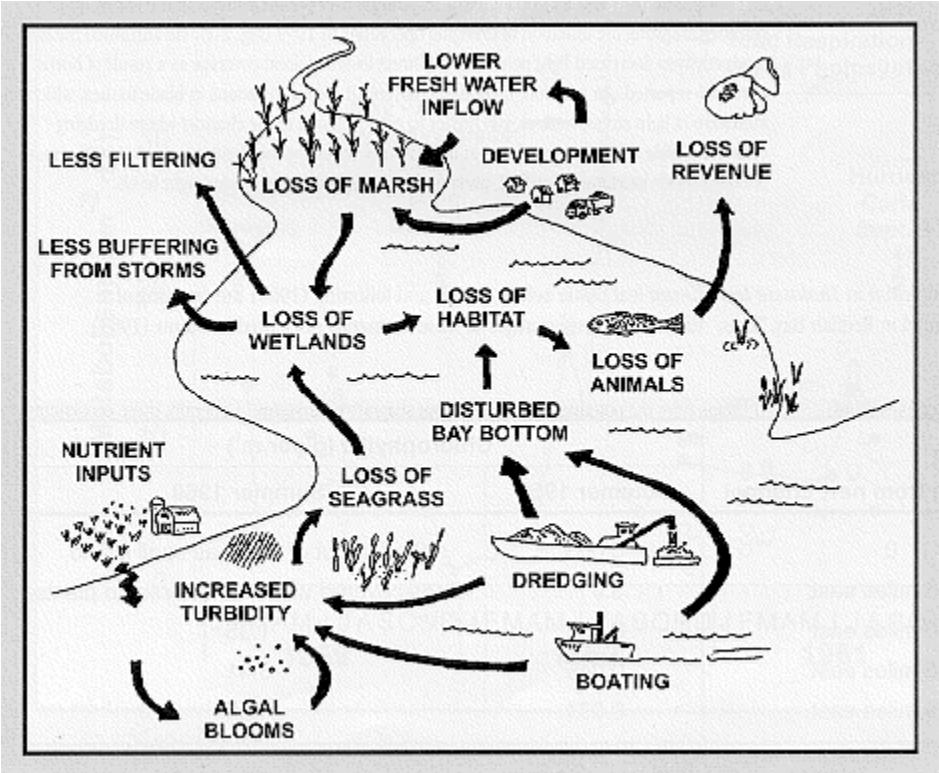
The text states, "(m)anage seasonal salinities within the western Mississippi Sound such that optimal conditions for oyster growth (surrogate for other aquatic resources, 15 ppt during summer months) are achieved on an annual basis by 2015." It would be helpful to the reader to include current salinity values.

Page 3-47, Section 3.15.2.4, Preliminary Submerged Aquatic Vegetation, Line 22-24

24

The document states "…Primary reasons for the disappearance of SAVs are most likely an overall decline in water quality, extended periods of depressed salinities, and physical disturbances, such as tropical storms and hurricanes (Moncrieff 1998)…" According to Texas Parks and Wildlife, the primary reasons for the loss of SAV are primarily from human induced activities (see Figure 1 below). The Gulf of Mexico Regional Collaborative (http://www.gomrc.org/sav/analysis-findings.html) found a negative correlation between land use (impervious surface) and the distribution of seagrasses and other SAV:

Figure 1. The major factors that contribute to loss of seagrass habitat are primarily human induced impacts and include dredging, excessive nutrient inputs, and boating activities. - *Texas Parks and Wildlife.*



"Increases in impervious surface are negatively correlated with SAVs, though the strength of relationship differs in different estuaries as does the relationship itself. Increases in impervious surfaces are also related to other potentially damaging side effects of coastal development, which may not be terrestrial. For example, recreational boating (propeller scarring), an increase in the construction of docks and armoring, as well as the need for structures like bridges and causeways will increase as populations increase and impervious surfaces increase."

Page 3-71, Section 3.20, Systems of Accounts Table for Barrier Island Alternatives, Table 3-11

25

With respect to Impact Assessment, National Economic Development, Beneficial Impacts items 1-4, the table presents the same costs for Plan H (combination of Plans C and G) as under Plan A. The same issue appears in the table relative to costs and impact descriptions pertaining to

Environmental Quality (impact items 2, 3, 5, 6, 7, 8 and 13), Other Social Effects, and several other factors. Are these costs and descriptions accurate?

Page 4-3, Section 4.1.1, Comprehensive Plan – No Action Alternative, Line 15-16

26

The document states, "(t)hese islands are also essential habitats for some T&E species, such as piping plover and sea turtles." The Gulf sturgeon should be included in this sentence.

Page 4-6, Section 4.1.5, Comprehensive Plan Geology Impact, Line 2

27

The document states, "(n)o geological changes are anticipated to occur by implementation of these type projects." As suggested above (refer to comments pertaining to Page S-7, Table S-2, Environmental Effects of Recommended Alternatives), the NPS recommends noting that that identified actions would likely result in positive impacts to barrier island coastal geologic features and processes by attempting to restore and maintain the barrier island sediment budget and transport system.

Page 4-6, Section 4.1.9, Comprehensive Plan Vegetation Impact, Line 26-30

28

The document states, "Restoration at the barrier islands would consist of shaping existing sand into dunes on the beaches. Dune features would be planted with native vegetation on the barrier islands and along the mainland shoreline. Planting of marshes, maritime forests, and seagrasses in the nearshore areas of the islands and mainland would serve to restore or enhance lost habitat. Implementation of this measure would provide significant benefits to the existing damaged vegetation." Does this description reflect expected barrier island work under the recommended alternative?

Page 4-7, Section 4.1.10, Comprehensive Plan Fish and Wildlife Impact, Line 42-44

29

The text states, "(g)enerally, restoration of barrier islands would entail filling of existing water bottoms to pre-Hurricane Camille conditions, restoring dunes along beaches, and re-planting of native vegetation within the island interiors." This brief description appears to address a combination of several alternatives presented for restoration of the barrier islands and the sediment budget and transport system, but does not reflect specifics presented in the "Comprehensive Barrier Island Plan" (Appendix H - Barrier Islands, Chapter7). If the intent of this section is to describe the range of barrier island restoration alternatives considered in the document, the NPS recommends including text that briefly describes the full breadth of the analyzed alternatives, including the "Comprehensive Barrier Island Plan." If the intent of this section is to describe only the "Comprehensive Barrier Island Plan," the NPS recommends revising the text accordingly to present a more accurate summary.

Page 4-9, Section 4.1.11, Comprehensive Plan Threatened and Endangered Species Impact, Line 45-48

30

The document states "Manatees, Gulf sturgeon and sea turtles could be in the project area and there is potential for adverse impacts to occur. It is anticipated these species would primarily

avoid the construction areas due to noise and activity resulting in less risk for harm or harassment." Where is it documented that these disparate species will avoid "noise and activity?" Is this speculation? Many bottom feeding fishes, like the Gulf sturgeon, are drawn to disturbances of the bottom because their benthic and epibenthic prey become more available (i.e., the prey are displaced from their shelter or lose their cryptic advantage when they move). For example, fish will congregate around and follow feeding rays and whales when they are digging for prey in the substrate.

Page 4-15, Section 4.1.15, Comprehensive Plan Land Use Impact, Line 9-17

31

With respect to barrier island restoration, the text states, "Alteration of land use is expected due to the change from filling in of water bottoms being converted to sandy barrier islands resulting in expanded acreage. It is anticipated this change in land use would be insignificant as the islands would be expanded to historical sizes and the relative size of the project to the surrounding land use. Environmental restoration and construction of a dune feature would provide a benefit to current land use as restoration would provide enhancement to the existing environment. Restoration of sea grasses would result in an enhancement of the water bottoms and existing seagrass beds as a result of implementation of this measure. The project would result in a positive benefit to land use." Is this information accurate in terms of specific elements included in the Comprehensive Barrier Island Restoration Plan?

Page 4-38, Section 4.3.2, Restoration of Barrier Islands, Line 45-46

32

The document states "Additionally, river sands could be used and would be obtained from upland disposal areas adjacent to inland rivers." Is this alternative source of sand still being contemplated?

Page 4-40, Section 4.3.2.3, Barrier Island Restoration Fish and Wildlife Impact, Line 7-17

33

The text discusses use of river sand for the littoral zone placement near the barrier islands. Is this still a valid option? Similar discussions are repeated elsewhere in the document.

Page 4-43, Section 4.3.2.5, Barrier Island Restoration Threatened and Endangered Species Impact, Line 21-25

34

The document states, "Prey Abundance: Activities associated with placement cover epibenthic crustaceans and infaunal polychaetes within the littoral zones and breach areas that serve as potential prey items for the Gulf sturgeon. The impacts are considered short-term in nature and consist of a temporary loss of benthic invertebrate populations where the shoreline extends seaward. It is believed that this will not alter critical habitat…" On a MsCIP conference call on 9/16/08, Richard Heard (University of Mississippi) said that based on his work on the barrier islands, the benthic infauna on the shallow sand platforms (to about 2 m depth) with low DO is unique. Dr. Heard said the ghost shrimp- polychaete community can recover "but they have to have a place to recover to. Unsorted sediments that get dumped can be a problem to benthos." Dr. Heard thought it best that the sediments get sorted by natural processes.

Page 5-32, Section 5.2, Monitoring and Adaptive Management, Lines 6-9

35

The text states "Post-implementation monitoring of ecosystem restoration components of the Comprehensive Plan is projected to be conducted for no more than five years at a cost of less than 1% of the total first cost of the project's ecosystem restoration features." This seems in direct conflict with the monitoring strategy described in the Appendix H – Barrier Islands; Page 76; Lines 33-35**:** "Monitoring activities should be continued for a specified time period after project activities are completed to measure long-term or cumulative impacts, and whether the goals of the project have been met." One of the project benchmarks states that Ship Island should remain continuous for 20 years and the minor breaches should heal within 10 years. Although the collection of orthoimagery is proposed for 10 or 11 years, project monitoring should continue during this 20 year period to evaluate this benchmark, and would ideally also include periodic evaluation of bathymetry, and island geomorphology and vegetation derived from CHARTS, out to the 20 benchmark.

If this DEIS is approved as-is will the monitoring on the barrier islands be limited to the 5 years as stated in the main part of the report, or the slightly expanded timeline in the Appendix? Ideally, the monitoring would continue the full 20 years included in the project benchmark.

Appendix A Section 1.3 Impact Analysis of Alternatives Not Being Considered in Main Report; Page 8, Section 2.10.1.7 Option G: Restoration of Ship Island Breach, Line 35; and Page 11, Section 2.13.1.7, Line 21

36

Figures given for the amount of sand needed to fill Camille Cut for this option are 8 million Cubic yards (page 8) and 21 million cubic yards (page 11). Figures given for the amount of sand needed for this option also vary from 7 to 8 to 13 in Appendix E Engineering and Appendix H Barrier Islands (see comments below for those Appendices). This inconsistency may be misleading and confusing to the public and other reviewers of the document. One best estimate figure needs to be used consistently throughout the Comprehensive Plan/DEIS.

Appendix A Section 2.1 Fish and Wildlife Coordination Act Report and Biological Assessment and Biological Opinions, Page 7, Fish and Wildlife Coordination Act Report, Mississippi Coastal Improvements Program, Table 2, Threatened and Endangered Species with Associated Habitat Descriptions

37

The Eastern indigo snake, a listed threatened species known to occur in the project area, is not listed in the table. This table has more information than Table 2-1 and 1.4.1-1.

Appendix A Section 3.4 Compliance with Environmental Laws and Regulations, Table Entitled "Environmental Laws and Regulations"

38

For Executive Orders 11988 and 11990, we disagree with the entries under the "Principal Federal Responsible Agencies" column. All federal agencies are required to comply with these Executive Orders, and must have their own procedures in place to do so. For the barrier island restorations proposed within GUIS, NPS procedures for implementing both Executive Orders will need to be followed (see *NPS Procedural Manual #77-1* for wetlands and *NPS Procedural*

Manual #77-2 for floodplains). Since NPS will need to certify the required Statement of Findings for wetlands and floodplains for proposed barrier island restoration actions, the NPS should be included among the responsible agencies. See comments pertaining to NPS wetland and floodplain compliance requirements.

Appendix E Page 230, Section 3.1.1, General, Line 5

39

The amount of sand to fill the breach between East and West Ship Islands (Camille Cut) is estimated here as 8 million cubic yards. This estimate is not consistent with the revised estimate of 13 million cubic yards (see Section 5.1.1, page 48 in Appendix H. Barrier Islands), and the inconsistency may be misleading and confusing to the public and other reviewers of the document.

Appendix E Page 264, Section 3.1.2.11, Option G – Restore Ship Island Breach, Line 24; and Page 265, Line 37

40

The amount of sand to fill the breach between East and West Ship Islands (Camille Cut) is estimated as 8 million cubic yards. This estimate is not consistent with the revised estimate of 13 million cubic yards (see Section 5.1.1, page 48 in Appendix H. Barrier Islands), and the inconsistency may be misleading and confusing to the public and other reviewers of the document.

Appendix H Page 1, Background and General Information, Line 18-20

41

The document states "(t)he new land mass would be shaped into dunes and marshes and planted with native marsh, maritime forest and dune vegetation or simply planted with these types of vegetation and allowing the effects of nature to create the land forms." The NPS has not supported the planting of marsh and maritime forest vegetation to date, but has supported the planting of dune vegetation species in association with Ship Island restoration.

Appendix H Page 1, Background and General Information, Lines 45-46

42

The text states that "…the project will be subject to an 11 year monitoring program described in Chapter 7." It appears in Section 7.5 Long Term Monitoring (Page 75) that obtaining orthophotography of the barrier islands (to determine shoreline position change) is the only monitoring task that will continue for 11 years, and that this will occur on an annual basis for only 5 years post-project, and thereafter every 2 years for 3 events. Mapping of the bathymetry around the barrier islands will occur during pre- and post-project, 1 year after project completion, 5 years after project completion, and following passage of a tropical storm or hurricane. Two of the tasks, including water quality monitoring, have no description of the length of time that these will continue.

Appendix H Page 48, line 17; Page 58, line 28; Page 65, line 6; and Page 73, line 3

Figures cited for the volume of sand needed to fill Camille Cut vary from 7 to 8 to 13 million cubic yards at these text locations. To avoid confusion, a single figure should be determined and used consistently throughout the DEIS. 43

Appendix H Page 58, Section 5.1.6.8, LOD-1, Option G, Line 28

The amount of sand to fill the breach between East and West Ship Islands (Camille Cut) is estimated here as 8 million cubic yards. This estimate is not consistent with the revised estimate of 13 million cubic yards (see Section 5.1.1, pg. 48), and the inconsistency may be misleading and confusing to the public and other reviewers of the document. 44

Appendix H Page 65, Section 6.4.2, Emergency Actions, Line 6

The amount of sand estimated to fill Camille Cut and restore the 1916-1917 geomorphic condition of Ship Island is here estimated to be only 7 million cubic yards. This estimate is not consistent with the revised estimate of 13 million cubic yards (see Section 5.1.1, pg. 48), and the inconsistency may be misleading and confusing to the public and other reviewers of the document. 45

Appendix H Page 73, Section 7.3, Camille Cut and Barrier Island Restoration, Line 31-32

The document states "(t)he presence of these historic sites led to the inclusion of the barrier islands off the coast of Mississippi as a National Seashore." While this statement is partially correct, it should be revised to state ""(t)he presence of these historic sites, in addition to the nationally significant natural resources, led to the inclusion of the barrier islands off the coast of Mississippi within Gulf Islands National Seashore." 46

Appendix H Page 74, Section 7.3, Camille Cut and Barrier Island Restoration, Line 38-41

The text states "This decision was based on an agreement with the NPS that allows them to mitigate any damage from man's activities or to perform necessary means to preserve historic sites. This agreement has a positive aspect to MsCIP with the replacement of sand that has been lost from the littoral system." The NPS recommends replacing these statements with the following more accurate text: "NPS Management Policies (2006) allows restoration of lands disturbed by human activities, and protection of significant cultural resources in NPS units. Addition of sediment to the littoral system will help restore its function, which modeling indicates is necessary for the long-term preservation of the barrier islands." 47

Appendix H Page 75, Section 7.5, Long Term Monitoring Program

This section on monitoring does not include recommendations to monitor other key elements of the ecosystem such as benthic biota and other species that might be affected by the project, Mississippi Sound salinity, etc. See comments presented above under Monitoring and Adaptive Management - Barrier Island Ecosystem Restoration. 48

Editorial & Procedural Comments

NPS Wetland and Floodplain Compliance Requirements

NPS wetland protection procedures, which include content requirements for WSOFs, can be found at www.nature.nps.gov/water/wetlands/Wetlands_Protection_Manuals.cfm. NPS floodplain procedures are found at http://www.nature.nps.gov/rm77/floodplain.cfm. As the process of preparing a supplemental EIS for barrier island restorations moves forward, we strongly recommend that USACE staff should review these documents so that NPS wetland definitions (Cowardin et al. 1979), wetland/floodplain procedures and SOF content requirements are fully understood and so that the required data, maps, assessments and analyses can be prepared. For example, unvegetated intertidal beaches are considered wetlands under the Cowardin system and, therefore, must be addressed under NPS wetland procedures.

The following excerpt from NPS Procedural Manual #77-1, Section 5.3.5 summarizes content requirements for Wetland Statements of Findings. Example floodplain and wetland Statements of Findings are available from the NPS upon request. The Statement of Findings for wetlands must contain:

- A map at sufficiently large scale to show the locations, boundaries, and types of wetlands at the project site and the aspects of the preferred alternative that would have adverse impacts on them. Wetland mapping must be consistent with wetland definitions and delineation instructions in Sections 4.1.1 and 4.1.2 of this manual.

- Verification that wetland delineation/mapping work has been performed by a qualified wetland professional. This must include the qualifications of the wetland delineators, their affiliations, and a citation for the wetland delineation product or report. WRD strongly recommends the following minimum delineator qualifications: 1) has current "Professional Wetland Scientist" certification through the Society of Wetland Scientists Certification Program, Inc.; or 2) has a certificate of training from a recognized wetland delineation training provider and at least 5 years of experience in wetland delineation. Upon request, WRD staff can review scopes of work for wetland delineation contracts, help evaluate proposals, and review draft products/reports to confirm technical adequacy.

- Detailed descriptions of the affected wetlands (i.e., plant species and communities, hydrologic characteristics, wetland classifications, and so on). Abundance of these wetland types in the NPS unit/area/region must be included in this analysis.

- Detailed functional assessments of the affected wetlands, including evaluation of the biological, chemical, hydrologic, geomorphological, recreational, cultural, aesthetic, and other functions and values listed in Section 5.3.3 of these procedures.

- Full disclosure of the adverse impacts on the wetland habitats, processes, functions, and values at the site (see examples to be considered in Section 5.3.3), and acreages affected, by wetland type.

- A description of alternatives considered in addition to the preferred alternative.

- The reasons why the preferred alternative must be located and designed such that it has adverse impacts on wetlands, and why no non-wetland alternatives or those with fewer wetland impacts were chosen. A discussion of the various factors and trade-offs considered in arriving at this decision must be included.

- A description of how the preferred alternative was designed to minimize wetland impacts to the greatest extent practicable.

- A description of the proposed wetland compensation. What wetland area(s) will be restored to compensate for this loss or degradation and maintain consistency with the NPS "no net loss of wetlands" goal found in D.O. #77-1. The first paragraph of this section should state the total acreage of wetland impact, by type, and the total acreage of restored wetlands, by type, proposed as compensation. This portion of the WSOF must include:
    - a large scale map that clearly identifies the location and boundaries of the compensation site
    - a description of wetland types and wetland functions to be restored at the compensation site, and the degree to which they replace the types and functions lost at the project site
    - a description of the restoration process (e.g., hydrologic restoration, excavation, grading, structure removal, plantings, etc.)
    - the anticipated schedule for project completion
    - the anticipated time-frame for full functioning of the compensation wetlands
    - monitoring and maintenance requirements and schedule
    - the funding source for the project consistent with the funding source restrictions listed in Section 5.2.3 of these procedures.

Page 1-10, Line 34

Substitute appropriate word for "aairly." 50

Page 1-16, Line 18

Change "studies particular" to "studies, particularly." 51

Page 1-16, Line 20-21

Text requests that Tom add a short paragraph relative to coordination, but paragraph not added. 52

Page 2-12, Section 2.2.6.3, Federal T&E Species and Their Critical Habitats, Line 24

The title of this section implies presentation of information regarding "critical habitats" of known threatened and endangered species in the project area. However, designated critical habitats are not discussed in the section text or in Table 2.1. The NPS suggests either deleting "Critical" from the section title, or including text to describe such critical habitats, or perhaps adding a column to Table 2.1 to define designated critical habitat in the project area. 53

Page 2-12, Line 26

Insert, “are shown on Table 2-1 and in Environmental Appendix A in Table 1.4.1-1” to let the reader know that there are two identical tables in the two sections of the EIS.

Page 2-12, Line 29

Sei in “sei whale” is not capitalized, as it comes from the Norwegian word sei for pollock, also referred to as coalfish, a close relative of codfish.

Page 2-12, Section 2.2.6.3, Federal T&E Species and Their Critical Habitats, Line 29-30

The specific epithet for sperm whale is “catodon.” Use of “macrocephalus” is a synonym and is an earlier epithet that is no longer used when citing the scientific name for sperm whale.

Page 2-12, Section 2.2.6.3, Federal T&E Species and Their Critical Habitats, Line 33

Table 2.1 is entitled “Federally Listed Rare T&E Species.” Since T&E species are by definition “rare,” the NPS recommends deleting the word for the table title.`

Page 2-13, Table 2.1

The “heelsplitter” in Inflated heelsplitter is not capitalized, “ridley” in Kemp’s ridley sea turtle is not capitalized, and “plover” in Piping plover is not capitalized. In addition, “Piping” is capitalized only if it is at the beginning of a sentence or in a table as a common name. Other occurrences of these issues occur throughout the document.

Page 3-13, Line 37

Add “at the” between “present” and “site.”

Page 3-47, Line17 – 27

The same text is repeated at the bottom of page 3-47, line 31-36 extending to the top of page 3-48, line 1-4.

Page 4-38, Line 34

Add “the southern boundary of” after “form.”

Page 4-38, Line 43-44

The text should be changed as follows: “The proposed action consists of placement of 22 million cubic yards of sand, 9 million cubic yards within the littoral zone and 13 million cubic yards to be directly placed for restoration of the breach at Ship Island.”

Page 4-39, Line 16

The text should be changed as follows: "impacts to vegetation because the site would be identified to minimize impacts."

Page 4-45, Tables 4-5 and 4-6

Need captions and explanations of their divergent values.

Page 5-29, Line 31

Capitalize the "a" of "and"

Page 5-30, Line 3

Change "Geologic" to "Geological."

Page 5-30, Line 14

Change "maintain" to "maintained."

Appendix A Section 1.1 Coastal Mississippi – The Ecosystem Pre- and Post-Hurricanes & Recovery Analyses, Page 7, Section 1.1.3, Impacts From Hurricanes of 2005, Line 9

The text states, "(t)hreatened birds in the area include a rare Sandhill Crane subspecies. The Mississippi sandhill crane is listed as an endangered species." So as not to confuse the reader, perhaps the text should be revised to state "Threatened birds in the area include the endangered Mississippi sandhill crane."

Appendix A Section 1.1 Coastal Mississippi – The Ecosystem Pre- and Post-Hurricanes & Recovery Analyses, Page 37, Section 1.4.1, Baseline Conditions

The first paragraph begins by stating "Coastal Mississippi is home to 20 federally listed T&E, or candidate species. Federally listed species known to occur within the project area are shown on Table 1.4.1-1." However, Table 1.4.1-1 lists only 19 species. In addition, see comments presented above under Main Report, Page 2-12, concerning the specific epithet for sperm whale.

Appendix A Section 1.1 Coastal Mississippi – The Ecosystem Pre- and Post-Hurricanes & Recovery Analyses, Page 38, Section 1.4.1, Baseline Conditions, Table 1.4.1-1

See above comments for applicability to Main Report, Page 2-12, Section 2.2.6.3, Federal T&E Species and Their Critical Habitats, Table 2.1.

Appendix A Section 1.1 Coastal Mississippi – The Ecosystem Pre- and Post-Hurricanes & Recovery Analyses, Page 155, Line 12-19

Several occurrences where capitalization should be changed: American chaffseed, Venus flytrap, Mississippi sandhill crane, and Mississippi gopher frog. Common names are not capitalized unless it is a proper or place name.

Appendix E Page 45, Section 1.5.7, Inland River System Sand (Dredged Material), Lines 46-48

Referring to Figure 1.5-8, the text states "(n)ote the similarities in color of the Apalachicola River (fourth from left), the Black Warrior (third from left and marked BWT North Star), and the Lower Princess (second from left, Lower Tombigee River)." The sentence should read "Note the similarities in color of the Apalachicola River (second from left), the Black Warrior (third from left and marked BWT North Star), and the Lower Princess (fourth from left, Lower Tombigee River)."

Appendix H Page iii, Executive Summary, Line 18

Remove the apostrophe from "it's"

Appendix H Page iii, Executive Summary, Line 19

Change "he" to "the"

Appendix H Page 1, Line 15

Delete "that"

Appendix H Page 39, Section 4.3, Additional Studies, Lines 2-4

Referring to Figure 4-4, the text states, "(n)ote the similarities in color of the Apalachicola River (fourth from left), the Black Warrior (third from left and marked BWT North Star), and the Lower Princess (second from left, Lower Tombigee River)." The sentence should read, "Note the similarities in color of the Apalachicola River (second from left), the Black Warrior (third from left and marked BWT North Star), and the Lower Princess (fourth from left, Lower Tombigee River)."

Appendix H Page 72, Line 17

Change "on" to "of"

Appendix H Page 72, Line 26

Change "does" to "do"

Appendix H Page 74, Line 5

Delete the apostrophe from "it's."

Appendix H Page 74, Line 38

Change “mans past” to “past human”

Appendix H Page 75, Line 19

Change “deposing” to “disposing”

Appendix H Page 76, Line 4

Change “This sand placements is” to “These sand placements are”

U.S. Fish and Wildlife Service

The Service has been a full and cooperating member of the MsCIP planning team. Their comments and recommendations have been fully considered during the advanced planning stages of the project.

55

In addition, the DEIS supports a Service recommendation for initiating studies for additional MsCIP Comprehensive Plan elements including a Freshwater Diversion at Violet, Louisiana, a long-term high hazard risk reduction plan, and a Escatawpa River freshwater diversion. The Service will provide additional comments related to potential impacts to fish and wildlife resources once supplemental environmental documentation is developed for these project components.

Thank you for the opportunity to review and comment on this DEIS. The efforts of the USACE in early coordination with the Department are greatly appreciated. If you have questions or need additional information I can be reached on 404-331-4524 or by email at gregory_hogue@ios.doi.gov.

Sincerely,

Gregory Hogue
Regional Environmental Officer

cc:
FWS, Region 4
NPS, Southeast Regional Office
USGS, Environmental Affairs Program, Reston
OEPC, Washington

Responses to the Department of Interior Letter dated 02 April 2009

Response Comment 1: Concur – Should additional studies be initiated these concepts will be included.

Response Comment 2: Concur with need for long term monitoring / data collection. Due to scale would need to be multi-agency. USACE will be glad to coordinate & participate to maximum extent possible. The Gulf of Mexico Alliance Governor's Action Plan calls for many of these same issues to be addressed. We will investigate this becoming a specific action item.

Response Comment 3: Numerical modeling to aid in the design alternatives for restoration of the barrier islands will be conducted for both short-term (episodic storms) and long-term evolution, including an assessment of likely relative sea level rise scenarios and possible change in storm frequency and severity.

Response Comment 4: Comment noted. The Corps, Mobile District will ask the NPS to be a cooperating agency in developing the SEIS which will be tiered off from this DEIS and requirements in the NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis and Decision Making will be incorporated.

Response Comment 5: Comment noted.

Response Comment 6: See comment above.

Response Comment 7: Text will be added to emphasize items noted above.

Response Comment 8: The activities described above can be incorporated into the quality assurance program developed by the Corps' Construction Management program. Based on a construction management cost of 6%, ample funds should be available to implement these recommendations.

Response Comment 9: Due to the limited amount data available at Cat Island, it was specifically mentioned in Section 7.2 of the Barrier Island Appendix. This additional study will include bathymetric data, sediment budget and transport, and ecological processes. This additional work is important to identify possible areas for littoral zone sand placements that might benefit Cat Island.

Response Comment 10: This document is a Feasibility Report and integrated EIS. As such it contains info relative to all options evaluated whether recommended or not. As you move thru the discussion – options may be eliminated from further analysis. In the Main Report, Chapter 3 and specifically in the system of accounts tables (Table 3-11) all plans evaluated, the tentatively selected plan identified as Plan H is highlighted. Under NEPA, all alternatives must be evaluated and identified as found in Chapter 4 – Environmental Effects. In Chapter 5: Description of Tentatively Selected

Comprehensive Plan Components, specifically Section 5.18.10, Barrier Island Ecosystem Restoration Alternatives the plan selection is described. (Plan H).

Response Comment 11: Concur

Response Comment 12: Comment noted and procedures will be incorporated into the Supplemental EIS as necessary. If there is any discernable effect, it is likely that sand replenishment of the barrier islands would only reduce wetland losses on the mainland coast, because the restored islands would be more likely to diminish wave erosion on the mainland. The change in wave climate as a function of restoration alternatives will be calculated as part of the numerical modeling study.

Response Comment 13: Comment noted. These issues and others have been identified by the joint team working on freshwater diversion and will be addressed during the formulation and evaluation of alternatives for that project.

Response Comment 14: The future effects of sea level rise was an overriding consideration in the Barrier Island Plan since the intent of the plan was to replace sand that may have been lost from the barrier island littoral system over the last 50 years or so. Replacement of this sand into the system as a one-time project, then allowing existing currents to provide sand migration among the islands is the basis of the plan. The next phase of the study will evaluate long-term evolution of proposed restoration alternatives, including changes due to a potential range in relative sea level rise.

Response Comment 15: Comment noted and procedures will be incorporated into the Supplemental EIS as necessary.

Response Comment 16: Non-concur. The impact analysis is specific to those resources discussed in chapter 2, specifically 2.2.1 for Geology. The positive impacts of barrier island restoration is discussed in a number of other areas, e.g. soils, land use, threatened and endangered species, etc.

Response Comment 17: Do not agree that these are “engineering” definitions, however for the sake of comprehensiveness we have included Gunderson’s definition.

Response Comment 18: Concur.

Response Comment 19: Concur.

Response Comment 20: Non-concur. As stated in Section 3.3.3.3 of the Main Report, Corps regulations require a 50-year period of analysis for the economic evaluation of projects recommended for construction. For sensitivity of analysis, a 100 year period was utilized to investigate the significance of sea level rise. This was then converted to a 50- year period of analysis as required. A detailed discussion of this can be found in Section 5.3.1 of the Economic Appendix (Appendix B).

Response Comment 21: The seven T&E marine species as noted on Lines 27-31 are protected by NOAA, PRD while those in Table 2-1 are protected under USFWS. This is a typical way the Corps, Mobile District documents the differences between the agencies' regulation. We have clarified the text to remove any confusion. West Indian will be placed in front of manatee. "PE" will be deleted from table. The bald eagle is specifically addressed in the Environmental Appendix to show its significance. It is no longer listed under T&E which is what this table depicts.

Response Comment 22: Comment noted and this statement will be qualified as requested.

Response Comment 23: Non-concur. This is strictly a goal established to enhance oyster productivity. Additional info at this point is unnecessary.

Response Comment 24: Non-concur. Information presented is specific to SAV decline in costal Mississippi and includes anthropogenic impacts.

Response Comment 25: Yes. It is estimated that synergistic efficiencies and economies of scale provide the same level of benefits for Plan H as for Plan A for the categories cited, at a substantially reduced cost.

Response Comment 26: Non-concur. The islands are not critical habitat for Gulf sturgeon; however concur Gulf Sturgeon important so will reword to say these coastal systems in lieu of islands.

Response Comment 27: Non-concur. See response to comment 16 above.

Response Comment 28: Of the barrier island restoration tentatively selected plan, the above components are not included. The sentence. ..Planting of marshes.. will be removed. However as we progress with implementation and a need for such vegetative features is identified it could be addressed at that time.

Response Comment 29: Concur. We will revise to only state limited dune re-vegetation would occur.

Response Comment 30: Statement is accurate. The Corps has coordinated with the USFWS and NOAA, PRD in the past on all of its projects – new work and operations and maintenance – and this routinely occurs. In addition, in many biological opinions from both agencies, it has been noted that the species avoids the disturbances.

Response Comment 31: The Corps believes that this statement is accurate and it is a positive benefit to land use.

Response Comment 32: The beneficial use of the sand in inland, disposal areas was initially considered, but it was found to be significantly more expensive during cost

estimating and was therefore dropped as a source due to cost. This sentence will be deleted.

Response Comment 33: See response to comment 32 above.

Response Comment 34: The Corps evaluated potential impacts to critical habitat of the Gulf sturgeon. Dr. Heard said the ghost shrimp- polychaete community can recover "but they have to have a place to recover to." The placement of sandy material within the system will create other sites similar to what is existing; therefore, those sites lost would likely recover in adjacent areas to the barrier islands. This area within Ship Island would be converted to upland habitat but it would help maintain the integrity of one of Mississippi Sound's primary constituent elements for the Gulf sturgeon (i.e. water quality.) Additional evaluation will be conducted in the Supplemental EIS.

Response Comment 35: The statement in the main report refers to the ecosystem restoration only. The barrier islands will be monitored for 11 years as described in Appendix H.

Response Comment 36: The quantity of sandy material for the barrier island restoration is 22 million cubic yards (i.e. 13 million of that would be to fill the Ship Island breach and 9 million cubic yards would be for placement in the littoral zone.) Correction will be made in the documentation.

Response Comment 37: This section was prepared by the USFWS rather than the Corps. Information has been forwarded to USFWS for their consideration.

Response Comment 38: The table provides the responsible agency that ensures compliance of the law.

Response Comment 39: Corrected to 13 million

Response Comment 40: See response to comment 39.

Response Comment 41: Forming "new land mass that would be shaped into dunes and marshes and planted with native marsh, maritime forest and dune vegetation or simply planted with these types of vegetation and allowing the effects of nature to create the land forms" was a bullet helped describe the basis of formulating the options described in the Engineering Appendix and Barrier Island Appendix. While some options were studied and screened out during the plan formulation process, others were adopted and recommended for implementation.

Response Comment 42: Task 3 under Section 7.5 indicates that CHARTS system will be used annually which will continue for the entire monitoring program of eleven years. Task 4 will be modified to indicate that water quality sampling will be conducted quarterly for 5 years, then quarterly every other year for the remaining 6 years.

Response Comment 43: See response to comment 39.

Response Comment 44: See response to comment 39.

Response Comment 45: See response to comment 39.

Response Comment 46: Will change text as recommended.

Response Comment 47: Will change text as recommended

Response Comment 48: Comment noted. Additionally as stated in the response to the earlier comment, monitoring and adaptive management – barrier island ecosystem restoration, these activities described can be incorporated into the quality assurance program developed by the Corps' Construction Management program. Ample funds should be available to implement these recommendations. Also, as discussed in our previous multiagency meetings, this monitoring program will be developed during development of supplemental EIS upon receipt of funding.

Response Comment 49: Comment noted. During our continuing partnership, these requirements will be incorporated to ensure compliance will be met.

Response Comment 50: Corrected as noted

Response Comment 51: Corrected as noted

Response Comment 52: Text was inadvertently omitted. Following is inserted. Natural Resource Conservation Service (NRCS) Continuous coordination has occurred between the NRCS and the MsCIP team. This includes the NRCS' ongoing project to restore the Forrest Heights Levee to pre Katrina (original design) condition where the MsCIP team was invited to participate in the design review process and in public meetings. In addition, the NRCS has participated in MsCIP risk education workshops and public meetings regarding MsCIP's consideration of enhancements to the levee (see description, section 5). With this and continued coordination, future projects to be planned and implemented by either agency would be executed more effectively and efficiently.

Response Comment 53: Concur. We have changed heading to read Habitat Requirement.

Except as noted, the following comments are noted and appropriate corrections made.

Response Comment 54: The Corps does not believe this confuses the reader due to the statement reading that these birds are threatened due to various influences in the area. This statement does not refer to the T&E status.

Response Comment 55: The Corps appreciates your participation and assistance throughout the entire MsCIP process. The Corps looks forward for your agency's continued support and assistance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

March 27, 2009

Dr. Susan I. Rees
Project Manager
U.S. Army Corps of Engineers
Mobile District
P.O. Box 2288
Mobile, AL 36628-0001

Subject: EPA's NEPA Review of the COE's Draft Programmatic Environmental Impact Statement (DPEIS) for the "Mississippi Coastal Improvements Program (MsCIP)" Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (February 2009); Hancock, Harrison, and Jackson Co, MS; CEQ# 20090034; ERP# COE-E39075-MS

Dear Dr. Rees:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) Region 4 has reviewed the U.S. Army Corps of Engineers' (COE: Mobile District) Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (DPEIS = Draft Comprehensive Plan). The DPEIS consists of a main document and eleven appendices (A-K).[1] As a Cooperating Agency, EPA has participated in various meetings and site visits preceding the issuance of this DPEIS. These included Regional Coordination Meetings for scoping in 2006, Risk Analysis Workshops in 2007, a web-based feedback and participation forum in 2007, and wetland field reconnaissance site visits and interagency project deliberations. These meetings and site visits were attended by our Water Protection Division (WPD) and NEPA Program Office.

We commend the COE for their extensive scoping, planning and coordination of this project with federal, state and local agencies as well as non-governmental organizations (NGOs), universities, stakeholders and the general public. Moreover, we also appreciate the project status briefings presented by the COE's South Atlantic Division (SAD) and the coordination provided by EPA's Office of Water in Washington, DC and our Gulf of Mexico Program (GMP) in Mississippi.

Project Overview

The Draft Comprehensive Plan addresses recent (2005-2006) hurricane and storm damage (Katrina, Rita and Cindy) in Hancock, Harrison, and Jackson Counties through

[1] Unless otherwise noted, references in this letter to page numbers, figures and tables are from the MsCIP main document as opposed to its appendices.

the implementation of several projects and the further study and NEPA review of others. Specifically, we note the study of ecosystem restoration of wetlands, fish and wildlife preservation, eroded coastlines and saltwater intrusion; the purchase or flood-proofing of properties in high hazard zones to change their land use; the overall reduction of "...the vulnerability of the region to a recurrence of similar natural disasters" (pg. S-2); and the policy that reduction measures for hurricane/storm damage were provided "...without encouraging re-development in high-risk areas" (pg. S-3). EPA supports the restoration goals of the MsCIP and the overall approach to achieve them taken by the Mobile District. Although we understand that the purpose and need of the MsCIP is not limited to post-hurricane restoration, it is those restoration project components of the MsCIP that we principally support.

The Draft Comprehensive Plan recommends several projects for advanced design and implementation for the COE's "Record of Decision (ROD) for construction". The NEPA requirements for these MsCIP projects are to be met by the PEIS and ROD documents. Page S-3 lists these projects as:

- Coastal Wetland and Forest Restoration (Turkey Creek, Bayou Cumbest, Dantzler, Admiral Island, Franklin Creek)
- Submerged Aquatic Vegetation (SAV) Pilot Project
- Coast-wide Beach and Dune Restoration on Mainland Beaches
- Moss Point Municipal Structure Relocation
- Waveland Flood Proofing Pilot Project
- Forrest (or Forest) Heights Hurricane and Storm Damage Reduction.

In addition to these projects, the restoration of Deer Island may also be ready for construction, although additional NEPA documentation tiering from this PEIS may be needed. The Draft Comprehensive Plan also supports two other projects for construction, subject to additional site-specific study and supplemental NEPA review. These are the 1) High Hazard Area Risk Reduction Plan (near-term HARP) and the 2) Barrier Islands Restoration Plan. HARP entails the land purchase of vulnerable storm-prone coastlands to restrict their redevelopment while the Barrier Islands Restoration Plan involves sand renourishment of the Mississippi barrier islands as a first line of defense to the coastal mainland. We strongly agree that these plans would benefit from additional study of societal issues and sand migration. Beyond these additional studies, the MsCIP also supports the construction of a freshwater diversion project at Violet, Louisiana (per the Water Resources Development Act (WRDA) of 2007), which would provide additional freshwater inflows to the Mississippi Sound for the support of healthy oyster reefs. Finally, there are also other system-wide elements of the Draft Comprehensive Plan proposing the additional long-term HARP land purchases over the next 20-40 years, additional damage reduction alternatives, the coastal Mississippi ecosystem reduction program, and the Escatawpa River freshwater diversion project. Although these projects are currently not being presented for construction by the MsCIP, the PDEIS considers them as reasonably foreseeable in the cumulative effects analysis. Since hurricane damage was not limited to Mississippi, the MsCIP is being conducted concurrently with the Louisiana Coastal Protection and Restoration (LaCPR), which primarily addresses

damage to the Louisiana coast. The MsCIP and LaCPR are separate but coordinated EIS projects.

The Mississippi coastline was divided into five logical lines of defense (Chap. 3) that were considered for armoring (hardening), with each line being considered for a different structural component. The first line of defense was the outer edge of the barrier islands (which would be renourished); the second was the mainland berm and dune system (which would also be restored); the third was an elevated seawall; the fourth was an inland barrier with surge gates; and the fifth was the existing railroad along the coastline which was expected to be the limits of a hurricane surge (the railroad bed would be raised). Although considered, these structural components were not implemented with three exceptions: barrier island renourishment, beach sand dune restoration, and limited ring levee application.

Although we support with the use of structural components where necessary for public safety and for the proposed island and dune restorations, EPA prefers non-structural projects designed to develop a coastline that is more resilient to future storm events. For the MsCIP, these included proposed or future floodplain management of high-risk areas in various coastal zones (i.e., from the coastline to higher elevations) including the generation of a risk zones map of the Mississippi coastline, land purchases of high-risk areas, and relocations from high-risk areas to higher elevations, building and zoning codes, and hurricane evacuation planning (pg. 5-1). To complement these, we suggest adding the conversion of high-risk areas to more storm-compatible land uses such as coastal greenspace areas (e.g., greenways/parks), and the ecosystem restoration of coastal areas to wetlands and other coastal ecotones resembling the historic (e.g., pre-Hurricane Camille) Mississippi coastline.

COE Scoping & Planning

The Mobile District should be commended for their scoping and planning process to address the Congressional mandate (Department of Defense Appropriations Act of 2006).. The scoping allowed the development of sustainable coastal improvement elements that were visionary. The planning process allowed for a true integration of the natural ecosystems and the services they provide along with man's alterations of the landscape resulting from habitation adjacent to the Gulf of Mexico.

This scoping framework embraced non-structural, local-decisional considerations for planning land uses, and structural alternatives which were then evaluated on an even basis. The collected coastal improvement elements were continuously shared with the stakeholders resulting in the identification of improvements and collection of the more effective and efficient elements. A fundamental precept of this method embraced the long term commitment of resources that would be required for the operation and maintenance of the various elements evaluated. The majority of the final selected coastal improvement elements were those that were self sustaining, required the least amount of resources, and had limited "side effects" (i.e., those secondary actions that

are interrelated or interdependent to the original element and usually require further resources necessary for operation and maintenance).

The MsCIP is an exemplary case where the Mobile District fully embraced and implemented the U.S. Army's *Environmental Operating Principles* (EOP). The EOP's keys were integrated from conception to completion through the BALANCE process, i.e., Building and sharing knowledge, Accepting corporate responsibility, Listening to and learning from the stakeholders, Assessing and mitigating the impacts, Negotiating environmental and economic solutions, Considering the consequences, and Encouraging environmental sustainability.

Project Impacts

The damage from the series of hurricanes/storms in coastal Mississippi and adjacent areas was significant due to increased frequency and intensity of wind and tidal action. Ecosystem impact areas included bird populations (e.g., barrier island nesting habitat), shrimp and fish stocks (Mississippi Sound), shorelands (beaches and dune habitat), saltwater and freshwater wetlands (e.g., wet pine savannah), water quality (estuarine and riverine), and terrestrial habitats (e.g., coastal forests). Destruction of homes and infrastructure was also extensive. From an environmental perspective, EPA is primarily concerned about water quality issues such as spill contamination (surge) and turbidity/sedimentation, loss of wetlands and saltwater contamination (surge and salt spray) of shoreland freshwater wetlands, barrier island and mainland beach erosion (surge over-wash and scour), overall loss of habitat (significant wind and tidal action), and the risk to public health and safety.

The present DPEIS is primarily a restoration EIS to repair some of these impacts and help prevent future hurricane/storm damage. Given these positive restoration impacts, the DPEIS principally differs from conventional EISs with negative impacts that require mitigation. Accordingly, most of the effects of the MsCIP projects are restoration benefits rather than impacts. A compilation of EPA's comments and suggestions to further improve the proposed projects during the COE's development of the Final PEIS (FPEIS) and the Final Comprehensive Plan is included in our enclosed *Detailed Comments*. We also offer the following EPA conclusions and recommendations for the MsCIP.

EPA Conclusions & Recommendations

EPA supports the restoration goals of the MsCIP and overall innovative approach taken by the Mobile COE to achieve them. Our conclusions and recommendations for the proposed MsCIP projects are summarized as follows:

- **Overview** – ***The COE should be commended for its consideration and tentative selection (Chap. 5) of several non-structural alternatives for the restoration of coastal Mississippi***. EPA finds that the MsCIP NEPA document considered more

non-structural alternatives than perhaps any other COE document Region 4 has reviewed.

- **Purpose & Need** – ***EPA recommends that the focus of the MsCIP remain on the post-hurricane restoration of the Mississippi coastline with a significant non-structural component.*** Although the FPEIS should clarify this, we understand that the purpose and need of the MsCIP is not limited to hurricane/storm restorations (e.g., WRDA freshwater diversion study at Violet, LA). Nevertheless, because of the broad scope/expense of hurricane/storm restoration in Mississippi – and because project funding has not yet been secured and may be competitive – we recommend that the focus of the MsCIP remain on the post-hurricane restoration of the Mississippi coastline more so than other regional ecosystem projects that are not the direct result of damage from Hurricanes Katrina, Rita and Cindy.

- **Non-Structural Alternatives** – ***EPA recommends that non-structural alternatives be implemented along the Mississippi coastline (as well as other Gulf of Mexico state coastlines) where appropriate to avoid additional hurricane/storm damage.*** We particularly support floodplain management to delineate the mapped locations of high-, moderate- and low-risk zones (Fig. 5-1), land purchases in high-risk areas (HARP) to convert their land use to be more compatible with areas vulnerable to storms, the creation of coastal greenways/parks and areas of coastal ecosystem restoration to resemble their historic ecotones, the relocation of people and their homes/communities to higher elevations to achieve a lower storm risk, and the rezoning of high-risk areas. To a lesser degree, we also support measures such as home elevations and flood insurance; however, these options encourage redevelopment in high-risk areas and may foster a potential false sense of security.

- **Structural Alternatives** – ***Although there may be exceptions, EPA does not recommend the construction of ring levees.*** EPA recognizes that certain structural alternatives can improve protection against hurricane/storm damage and are advisable. However, the heights of future storm surges are difficult to predict so that the actual security of such armoring structures remains uncertain. Accordingly, EPA typically recommends relocations (buyouts) rather than construction of structural ring levees (ring levees are costly to build/maintain and may fill wetlands, must be serviced by an elevated access road, and do not eliminate the need for evacuation) to relocate people to higher elevations on the COE's risk zones map (Fig. 5-1) and to discourage redevelopment in high-risk areas. EPA does not recommend the construction of ring levees, including those listed in Table 5-2. However, Forest Heights may be an exception, given the fact that the levee already exists there and the residents would like for it to remain in place. Also, for unwilling sellers, horseshoe levees would be more preferable than ring levees because they are located at higher elevations and evacuations to higher ground roadways exist.

- **COE Project Decisions** – ***Although EPA typically recommends non-structural over structural alternatives, we also defer to the COE and local governments***

relative to the overall benefits and safety of restoration projects in the context of the local setting. As a cooperating agency to the COE for this PEIS, we request that the COE consider our general preference for non-structural options during their finalization of their FPEIS and Final Comprehensive Plan. At the same time, however, we also give deference to the COE and local governments for the site-specific implementation of restoration projects. For example, a combination of non-structural and structural alternatives could be meaningful on a case-by-case basis. Also on a case-by-case basis, the Clean Water Act (CWA) 404(b)(1) Guidelines (Guidelines) are expected to be very meaningful with specific focus on the project alternatives analysis (which may include the non-structural alternatives) and in the avoidance, minimization and compensatory mitigation process. EPA strongly encourages the Mobile District to evaluate compensatory wetland mitigation within the watershed, especially when the project is within the watershed of an existing impaired water body.

- **COE Section 404 Permit Decisions for High-Risk Areas** – ***The COE's CWA section 404 permit program should be coordinated to be consistent with the COE's recommendations in this DPEIS.*** EPA recommends that the COE use the maximum flexibility within the CWA Guidelines to restrict approvals of CWA section 404 permits in designated high-risk areas for life and structure, especially for non-water-dependent project purposes. Such strict adherence to the Guideline's full application of alternatives analysis, optimized avoidance and minimization applied, and compensatory mitigation that replaces the ecosystem services in the watershed impacted, together with the COE's risk zone map (pg. 5-5) and zoning codes (pg. 5-6), could discourage the development or redevelopment of these vulnerable areas. To address permitting for high-risk areas, we recommend that new sections be added to the main document (5.17.8) as well as in the Environmental Appendix A (ES-2.1) in the FPEIS.

- **Barrier Islands Restoration** – ***We believe that restoring the chain of four Gulf Islands National Seashore barrier islands (Cat, Ship, Horn and Petit Bois Island) in the Mississippi Sound has considerable merit from both a storm protection and Gulf Sound/Barrier Islands ecosystem perspective.*** We also strongly support that additional study be conducted as planned. These studies should finalize the sediment (sand) source, volume and quality needed to efficiently "feed" the islands to achieve the appropriate renourishment to optimize ecological features and mainland protection. Modeling for the offshore sediment mining sites and disposal sites (plume and water quality) should also be finalized. Moreover, from a regional perspective, it should be emphasized that dredging and sediment removal projects upstream of these islands could reduce the volume of sediment available in the system (littoral drift zone) that naturally renourishes the islands. As such, the approval and management of such dredging projects would appear to be critical to future island maintenance. The COE should first consider sands from "new work" dredging for use on the renourishment of the Barrier Islands, as opposed to offshore disposal of sands at an Ocean Dredged Material Disposal Site (ODMDS) or other

options. EPA also supports the restoration of Deer Island, a nearshore barrier island.

- **Draft Comprehensive Plan Projects** – ***Given EPA's full involvement during project scoping, analysis and interagency deliberation, we generally find the MsCIP projects ready for construction to be acceptable as proposed for the restoration of coastal Mississippi.*** Nevertheless, the comments and recommendations offered in this NEPA comment letter should be applied where appropriate.

- **Turkey Creek** – ***EPA recommends that the COE expand the proposed restoration at Turkey Creek.*** Specifically, the four objectives listed on the second un-numbered page (or page 345 of 420 for a CD Adobe Reader) in Section 1.4.5 (*Turkey Creek Restoration Benefits*) of the Environmental Appendix (A) should include a fifth objective: *5. Restore and maintain State water quality.* Since Turkey Creek is listed as an impaired water body on the State of Mississippi's 303(d) list for fecal, pH and biology parameters of concern, we recommend that the maximum restoration activities for this project emphasize assistance in restoring the biological impact areas while maintaining water quality parameters. Also, recent mitigation efforts for a Mississippi Department of Transportation (MDOT) project are underway in the Turkey Creek watershed that significantly encompasses the area considered within the MsCIP project. EPA recommends that the Mobile District coordinate efforts with the Mississippi Department of Marine Resources (MDMR) Coastal Preserve Program and the Land Trust for the Mississippi Coastal Plain (Land Trust) to enhance restoration efforts in Turkey Creek. Preliminary maps of areas proposed for MDOT mitigation and community greenways as well as other comments related to Turkey Creek are included in the *Detailed Comments*.

- **Saltwater Intrusion** – ***EPA offers that the study of the saltwater intrusion component could be somewhat de-emphasized for MsCIP projects in favor of other more significant impacted areas.*** Unlike the well-documented issues with saltwater intrusion in Louisiana (LaCPR), EPA believes that there are no projects in Mississippi that warrant action primarily due to saltwater intrusion – when traditionally defined as the migration of saltwater upstream in coastal rivers and upgradient in groundwater. However, we agree that hurricane surges raised the salinity of Mississippi Sound and storm surges and salt sprays resulted in some coastal freshwater wetlands becoming brackish.

- **Long-Term HARP** – ***Although long-term HARP may not be implemented due to extensive buyout costs and disruptive relocations, EPA recommends to nevertheless consider land acquisitions and buyouts in areas of high-risk.*** That is, even though such wholesale community relocations are likely disruptive, hurricane damage to such vulnerable areas is also (if not more) disruptive to the same community. As previously discussed, the option of a ring levee construction would also be expensive to build/maintain and would not eliminate the need for evacuation. The proposal for additional study and supplemental NEPA review

might compare such costs. However, if such massive relocations of communities or towns do eventuate, we recommend that the buyouts encompass whole communities to limit their segmentation and societal disruption. We also believe that the proposed further study of near- and long-term HARP projects has merit from a societal impact perspective.

- **Implementation & Additional NEPA** – ***In order to avoid/minimize additional harm to the Mississippi coastlands from potential future storm events, we encourage the expedited but sound implementation of the MsCIP projects nearing construction from a design and NEPA perspective.*** We also encourage the completion of the additional NEPA reviews tiering from this PEIS for the other restoration projects (e.g., Barrier Islands Restoration Plan) considered in the MsCIP – to the extent those reviews determine which of these projects merit implementation. Project monitoring and use of adaptive management practices is advised to help insure success.

- Final Comprehensive Plan Application – ***The "lessons learned" from the Final Comprehensive Plan should be broadly applied to other local federal projects as well as the Gulf of Mexico coastline in general.*** Interagency coordination of the Plan should be conducted with the sponsors of other federally-funded and/or federally-permitted projects in Mississippi that may be proposed for high-risk areas so that they may be relocated, if possible, to areas of lower risk. Plan application with the federal, state and local governments of other states along the Gulf of Mexico is also recommended.

Summary & Rating

EPA rates this DPEIS as "LO" (Lack of Objections), although we request that our comments and recommendations on this DPEIS be addressed in the development of the FPEIS, Final Comprehensive Plan and ROD. Overall, we support the objectives of the MsCIP's Draft Comprehensive Plan and the Mobile District's tentative selection of non-structural alternatives and certain structural alternatives. We particularly support the non-structural components of floodplain management (coastal risk zones map) and the prospective HARP purchase of lands in high-risk areas, as well as the structural components of renourishing the barrier islands and the mainland beach dunes. However, additional HARP societal studies and barrier island renourishment modeling are advised. We also encourage the District's continued selection of appropriate non-structural components in the FPEIS and Final Comprehensive Plan. In addition, we wish to emphasize the following:

- Greenspace – To help protect life and structure, high-risk areas should be converted to more storm-compatible land uses such as coastal greenways/parks, and the ecosystem restoration of coastal areas to wetlands and other coastal ecotones resembling the historic Mississippi coastline.

- Section 404 Permitting – The COE's Section 404 permitting process should be coordinated to be consistent with the objectives of this PEIS by discouraging redevelopment or development in designated high-risk areas.

- Final Comprehensive Plan Application – The "lessons learned" from the Final Comprehensive Plan should be broadly applied to other local federal projects in Mississippi as well as other states along the Gulf of Mexico coastline through interagency coordination in order to share "best practices".

- Implementation & Management – The planned additional studies, NEPA reviews and actual improvement plans/projects should be expeditiously implemented, followed by monitoring and adaptive management to help ensure success.

EPA appreciates the opportunity to review the DPEIS and the Mobile COE's coordination with us. Where appropriate, we wish to offer our assistance for the expeditious implementation and application of the Final Comprehensive Plan. Should you have any questions, feel free to contact Ntale Kajumba at 404/562-9620 (kajumba.ntale@epa.gov) or Chris Hoberg at 404/562-9619 (hoberg.Chris@epa.gov) of my staff and Duncan Powell at 404/562-9258 (powell.duncan@epa.gov) in the Region 4 Water Protection Division for wetland issues.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosure: *Detailed Comments* (including Figures 1-3)

Fig. 1: *Land (1,625 ac) Proposed for Acquisition and Mitigation in Turkey Creek by MDOT.*

Fig. 2: *Land identified for a Proposed Greenway Initiative in the Turkey Creek Watershed (Land Trust and Turkey Creek Community).*

Fig. 3: *Land Already Purchased by Land Trust within the Turkey Creek Watershed.*

cc: Mr. Claiborne Barnwell – MDOT: Jackson, MS
Mr. Jeff Clark – MDMR: Biloxi, MS
Mr. David Felder – USFWS: Daphne, AL
Brig. Gen. Joseph Schroedel – COE/SAD: Atlanta, GA
Ms. Judy Steckler – Land Trust: Biloxi, MS
Mr. Dickie Walters – FHWA: Jackson, MS

DETAILED COMMENTS

MAIN DOCUMENT

* **Table S-2 (pg. S-6)** – Project effects information for the proposed MsCIP projects are tabularized in Table S-2. Although we recognize that Table S-2 is intended as a summary table while tables in Chapter 3 are more expanded versions, we note that a "Category of Effects" for wetlands was not provided in Table S-2. Because of the significance of wetland restoration to the MsCIP, we suggest a footnote for Table S-2 and/or discussion in the text clarifying that restoration of various wetland types are discussed under specific listed projects (e.g., Dantzler and Turkey Creek ecosystem restorations).

* **Purpose & Need (pg. 1-1)** – MsCIP would implement a freshwater diversion project at Violet, Louisiana per the intent of Section 3083 of the Water Resources Development Act (WRDA) of 2007. This project would provide adequate inflows to the Mississippi Sound for healthy oyster reefs. This WRDA project appears somewhat out of place for a restoration project for hurricane/storm damage; however, we understand that not all of the MsCIP projects are limited to hurricane/storm restoration. Nevertheless, in the FPEIS, the purpose and need section should clarify this and discuss the rationale for including other projects within MsCIP that are not reactive to Hurricanes Katrina, Rita and Cindy damage.

* **New FPEIS Section 5.17.8 (pg. 5-7)** – Under Section 5, *Description of Tentatively Selected Comprehensive Plan Components*, we suggest that a new Section 5.17.8 could be added to discuss the section 404 permit program. This new section could make the following recommendations: 1) that the federal permitting program use the flexibility within the CWA section Guidelines to their fullest extent, using the information found within this document, the references within, and Environmental Appendix A to ensure that only water-dependent projects be located in the high-risk zones, 2) that these projects go through the maximum review allowed by law to ensure that there are no other upland alternatives, 3) that the waters of the United States within the high-risk areas be avoided to the maximum allowed by law, 4) that the project minimize to the greatest extent allowed by law for impacts to waters of the United States within the high-risk areas, and 5) that any compensatory mitigation replace the ecological services that protect humans from flooding and storm surges. In essence, this new section in the FPEIS would be an analysis of the permits issued by the Mobile District that were in the high-risk areas, identify where the mitigation areas for these permits were located, and recommend that essentially only water dependent projects would be permitted in these high-risk areas.

▸ ENVIRONMENTAL APPENDIX A

* **Saltwater Intrusion** – Saltwater intrusion is traditionally defined as the migration of saltwater upstream in coastal rivers and upgradient in groundwater. Accordingly, EPA currently believes that there are no projects in Mississippi which warrant action primarily due to saltwater intrusion, although we agree that hurricane surges raised the salinity of Mississippi Sound and storm surges and salt sprays resulted in some coastal freshwater wetlands becoming brackish. Saltwater intrusion could be a significant issue if freshwater diversions occur on the mainland or there is a significant change to the barrier islands. Unlike the well-documented issues with saltwater intrusion in Louisiana, this particular component is not as important in Mississippi. Therefore, at this time, we do not agree with the importance of the sixth bullet on page ES-5 (or page 14 of 420 for a CD Adobe Reader) under Section ES-4.1.1.1 in the Environmental Appendix (A) which states: "Recommend implementable projects directed at either the stabilization or retreat of saltwater intrusion in the coastal zone exacerbated by the hurricanes, and to examine opportunities for minimization of saltwater intrusion during future events." We base our concern on the fact that hurricanes are natural events, minimal diversions of freshwater have been documented in Mississippi causing saltwater intrusion; no drinking water wells have shown increased conductivity, no freshwater systems have been replaced by saltwater vegetated systems, and the creation and maintenance of drainage channels along the coast decrease the resistance of saltwater intrusion during storm surges (i.e., the channels flow both ways). There has been no identifiable location where treated sewage effluent would benefit the freshwater head during the last four years of the "wastewater to wetlands" coordinated efforts between EPA Region 4 and Mississippi Department of Environmental Quality (MS DEQ). Relative to saltwater intrusion, we also note the following:

+ Mississippi Sound: Saltwater increased salinity has been linked in this document with saltwater intrusion. Significant changes in the hydrology between the Gulf of Mexico and the Mississippi Sound would change the salinity gradient within the sound and may cause ecological changes within the Sound as expressed on page 45, but the link to saltwater intrusion on the mainland is unclear.

+ Pearl River: Page 21 (or page 50 of 420 for a CD Adobe Reader) in Section 1.2.2.4 in the Environmental Appendix (A) links the loss of sediment with freshwater flows coming from the Pearl River in western Hancock County. When EPA and MS DEQ evaluated these areas, there may have been edges of major intertidal channels recovering from the temporary saltwater flooding and scouring resulting from the surge, but no large landscape-sized areas for projects of concern at this time.

+ Hancock County Marsh: We find that Katrina's impact is accurately described for this project (page 24, or page 50 of 420 for a CD Adobe Reader, in Section 1.2.2.4.2 of the Environmental Appendix A). The physical barrier (sand dune) that allowed freshwater marsh to exist was breached by Katrina, the freshwater marsh was significantly impacted by saltwater intrusion and the breach shows no sign of natural closure.

* **Wetland Restoration** – We strongly support lines 13 and 14 on page 162 (or page 191 of 420 for a CD Adobe Reader) in the category entitled *Advanced Design Studies for Innovative Concepts* in Section 5.6.5 of the Environmental Appendix (A), which state: *Wetland Restoration along main drainage systems to increase capacity of flood storage during rainfall and storm events*. However, we strongly disagree with lines 13-15 on page 18 (or page 291 of 420 for a CD Adobe Reader) in Section 3.1 *Environmental Effects* which states: *Public Safety – It is anticipated there would be minimal positive effects to public safety by implementation of this measure as wetland restoration would benefit water quality, wildlife habitat, and various natural resource functions.* Because we believe there would be public safety benefits, this paragraph should be replaced with:

> *Public Safety – It is anticipated there would be intrinsically significant positive effects to public safety by implementation of this measure as wetland restoration would displace humans and capital improvements preventing loss of life and allowing "attractive nuisances" from luring people into high-risk areas and increasing the economic loss of capital improvements within high-risk areas. Wetland restoration would also benefit water quality, wildlife habitat, and various natural resource functions.*

* **Section 404 Permitting Decisions for High-Risk Areas** – To complement the prospective permitting recommendations in new Section 5.17.8, a reference to the COE's permitting decisions for high-risk areas could also be added in Appendix A. This discussion might also be included in Section ES-2.1 (*Problems and Opportunities*) on page ES-1 (or page 10 for a CD Adobe Reader) of the Environmental Appendix (A) addressing problems and opportunities to underscore the CWA Section 404 Permitting Program. Specifically, we recommend an expansion of the final paragraph on page ES-2, i.e., adding the following second sentence:

> *The Federal government should to its fullest extent support the Governor's guidance with the CWA section 404 permitting program by fully integrating to the maximum extent of the CWA 404(b)(1) to support this direction, especially in high-risk areas.*

* **Turkey Creek Ecosystem Restoration (Sec. 5.18.6.1)** – Turkey Creek is located in north Gulfport within the impaired Turkey Creek Watershed. This watershed is classified as a priority watershed by the State of Mississippi and EPA. According to the DPEIS, the area is "becoming increasingly urbanized and development pressures are resulting in increased wetland degradation and loss by direct filling with the incumbent decrease in flood storage capacity." The area proposed for restoration is an 880-acre site of primarily undeveloped land. It contains a railroad berm that runs east-west, dirt road paths, and several miles of drainage ditches. The Draft Comprehensive Plan indicates that 689 acres are south and 190 acres are north of the existing railway. The area is made up primarily of pine savannah wetlands. The recommended plan includes the restoration of 689 acres of undeveloped land south of the railroad berm. The restoration will include filling the previously drained ditches, excavating and removing existing roadbeds and associated fill, and maintaining vegetative growth by burning the project area (mow and burn).

In an unrelated project within the Turkey Creek Watershed, MDOT recently agreed to purchase approximately 1,625 acres within the Turkey Creek Watershed as part of a mitigation package for impacts related to the proposed Interstate 10 connector. Much of the area proposed for MsCIP restoration may be included within this mitigation area. We have enclosed a copy of a preliminary map overlaying the areas proposed for MDOT purchase for the COE's consideration (Fig. 1). The entire area will be managed by the MDMR in their Coastal Preserves Program and the Land Trust will maintain the right to manage and coordinate the conservation and management of a portion of the property. While MDOT will purchase the property, additional funding and support will be needed to help restore the functions of the wetland. EPA recommends that the MsCIP coordinate with the MDMR Coastal Preserve Program and the Land Trust on this restoration effort.

In addition, EPA suggests that the MsCIP use this as an opportunity to expand the restoration effort in this area (i.e., eastward) given that MDOT has already agreed to purchase some of the acreage proposed in this plan. As the Draft Comprehensive Plan clearly notes, Turkey Creek and its communities are facing ongoing development pressure and have experienced severe storm and hurricane damage in the recent past. The MsCIP Draft Comprehensive Plan, communities of Turkey Creek and the Land Trust have identified areas within the Turkey Creek Watershed for restoration to further reduce future flood and hurricane damage. We have enclosed a map of the proposed greenway (Fig. 2) and the already purchased portion of the greenway (Fig. 3) for your consideration.

* **Forest (Forrest) Heights Alternative (Sec. 4.15 and 5.184)** – The community of Forest (Forrest) Heights, a historical African-American community located within the Turkey Creek floodplain, experienced flood and hurricane damage during Hurricane Katrina. The community currently has an existing earthen levee (6 ft wide and 16.5 ft high, NGVD) that was damaged during Hurricane Katrina and does not meet current standards for certification based on FEMA flood profiles. The Draft Comprehensive Plan proposes to reduce future storm damage to Forest (Forrest) Heights by elevating the levee to 17 feet or 21 feet. EPA does not support levee construction as a viable means of reducing the risk to public health. However Forest (Forrest) Heights maybe an exception, given the fact that the levee already exists and the residents would like it to remain in place. The community should be clear that while this alternative reduces the magnitude of storm and hurricane damage to property, the levees are not intended to be health protective. Therefore, during major hurricane events, there should be a hurricane evacuation strategy in place with which the community is familiar. The proposed 17-foot levee elevation project will impact approximately 19.85 acres of non-tidal wetlands and 23 acres will be impacted by the preferred 21-foot levee. According to the Draft Comprehensive Plan, these impacts will be mitigated within the Turkey Creek Watershed. EPA notes that the Mississippi Land Trust has worked with a number of federal and state resource agencies and communities within Turkey Creek to identify potential mitigation areas, and would therefore be a valuable resource.

* **High Risk Hazard Area Risk Reduction Plan (Sec. 5.17.4)** – The Draft Comprehensive Plan recommends implementing phase 1 of HARP in the most critical areas. EPA supports the use of the maps to identify the risk zones and maximum probable intensity surge (MPI). We also support the necessity for these products for use in federal, state, local and community decision-making and planning. The plan proposes to relocate approximately 2,000 structures or communities within the high-risk areas where owners have not rebuilt. EPA agrees with the COE's assessment that there are numerous advantages to such a program including improved public health and safety (pg. 5-8). Nevertheless, concerns were expressed at public meetings regarding mass community relocation. To alleviate these concerns, opportunities should be created for ongoing communication and meaningful public involvement regarding the recommended proposal. The Long-Term HARP recommendation targets structural acquisition and relocation over the next 20-40 years for the benefit of reducing future storm and hurricane damage. EPA supports measures to study these alternatives further. In addition, it would be helpful to incorporate maps of the demographics within the project area (i.e., income, racial composition, etc.) as an additional tool of comparison. These maps should be related to the recommendations proposed and can be incorporated under the sections that relate to risk reduction or environmental justice.

* **Moss Point Municipal Relocation (Sec. 4.13 and 5.18.2)** – The city of Moss Point is located next to the Escatawpa River shoreline in a low-lying, flood-prone area. The city facilities were seriously damaged and municipal services were affected for a significant period of time. Consequently, the Draft Comprehensive Plan proposes to relocate the municipal facilities (i.e., city hall, police station, fire station, community services) to a lower risk site to minimize the potential for future flood damage. It is anticipated that these relocations will occur in largely developed areas. Therefore, minor vegetative, fish and wildlife impacts are anticipated. The current site will be converted to a community greenspace that would buffer the City from the Escatawpa River. According to the Draft Comprehensive Plan, four relocation sites are shown on the Moss Point Relocations Pilot Map (elevation 12.0: Section 5.18.2). The FPEIS (Section 5.18.2) should indicate where this map is located within the document.

▸ RISK APPENDIX G

The MsCIP used a risk-based planning approach to assess and characterize the public and stakeholder's risks related to existing and future without-project conditions, the potential risks, uncertainties and consequences associated with proposed or recommended measures. The COE used a "Risk-Informed Decision Framework" (RIDF) to request and capture information (environmental, societal, economic, etc) from various stakeholders and the public regarding the risks, costs and consequences of flood control, coastal restoration and hurricane protection. EPA participated in the process with various other federal and state agencies. The framework also involved weighting or ranking of our respective priorities. The COE was then able to provide quick interagency feedback regarding our preferences on specific environmental, social, economic and public health metrics. This information was then used collectively in the analysis, evaluation, comparison of alternatives, and the selection of final project recommendations. EPA

commends the COE on its ability to integrate sound science, state of the art technology, and stakeholder involvement in a relatively seamless and transparent process designed to find solutions to reduce the potential for continued residual risk from flood and storm surge inundation, coastal wetlands loss and degradation, erosion and saltwater intrusion, in ways that would promote greater resiliency in the future.

- **BARRIER ISLANDS APPENDIX H**

The Barrier Island Appendix H should discuss the COE's "Best Use of Dredged Material" with emphasis that clean sands from "new work" (e.g., deepening), as opposed to fines from "maintenance work", be considered first for use on the renourishment of the Barrier Islands. For example, newly exposed sands associated with the Gulfport expansion permit (out on public notice since 2007), which identified upland or an offshore ODMDS for disposal, might be suitable sands for island renourishment. Increased coordination between the Mobile District Planning, Operations, and Maintenance Divisions should help efficiently and effectively find ways of maximizing the best use of dredged material.

FIGURE 1:
Proposed MDOT Lands (1,625 ac) in Turkey Crk.

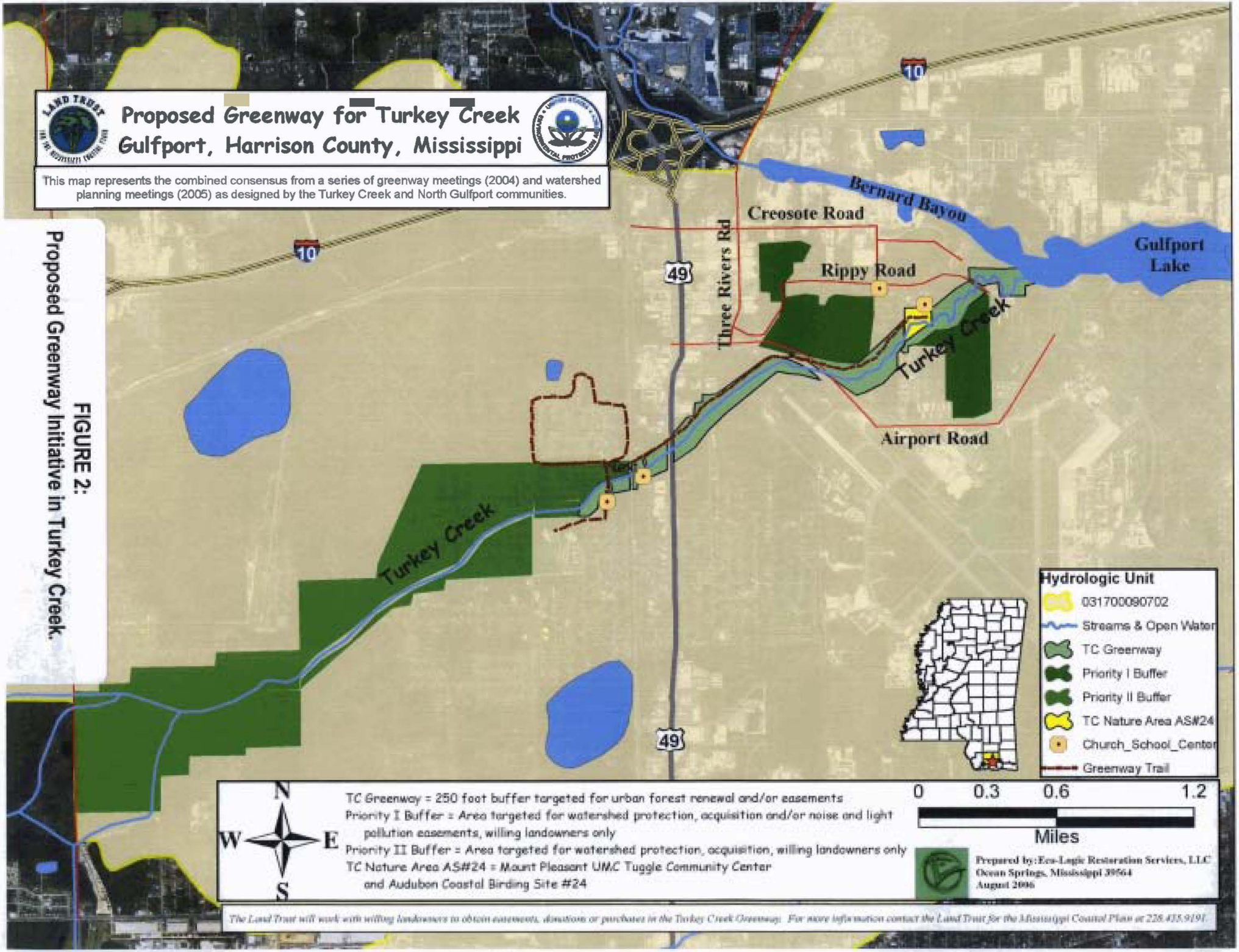


FIGURE 2:
Proposed Greenway Initiative in Turkey Creek.

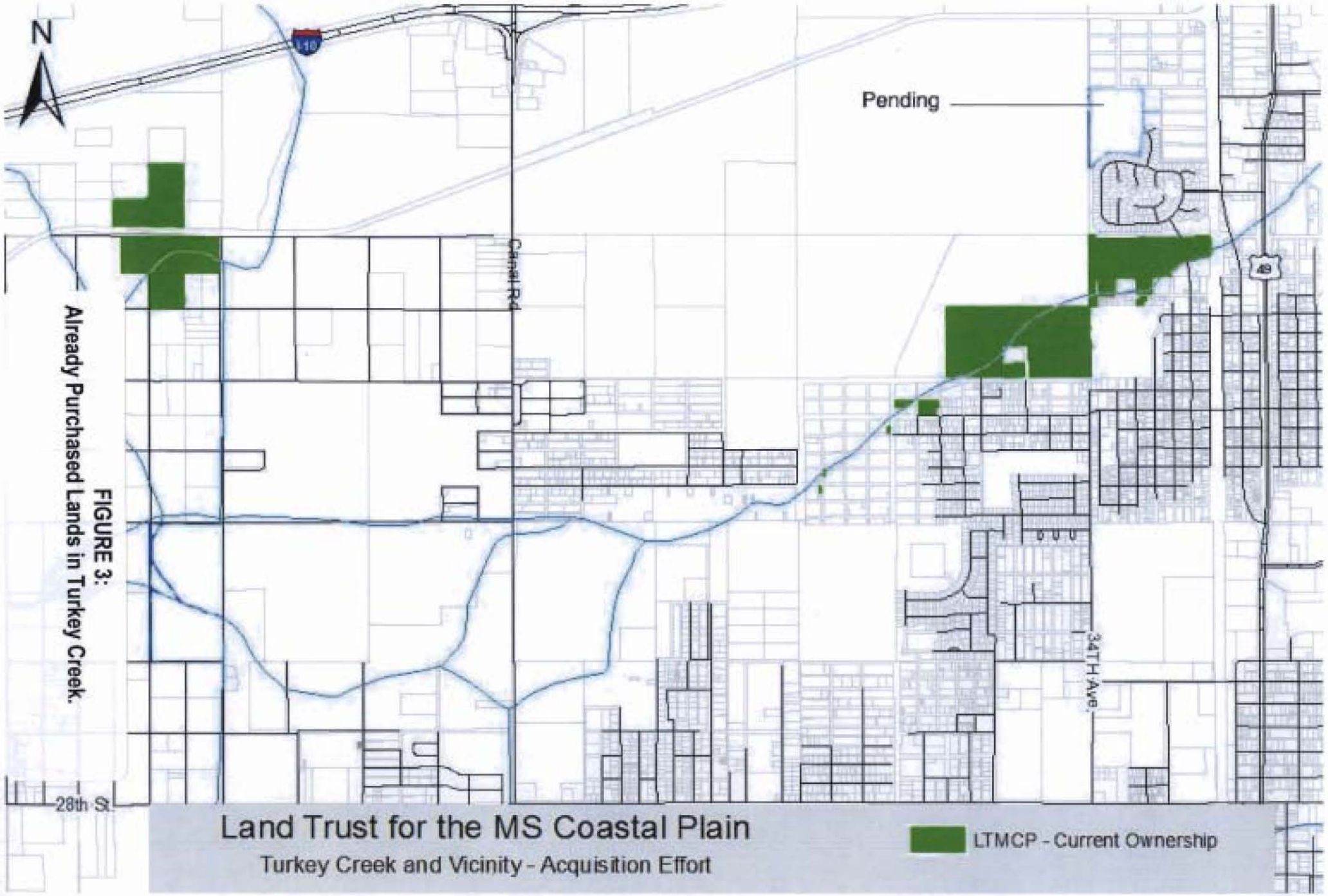


FIGURE 3:
Already Purchased Lands in Turkey Creek.

Response to U.S. Environmental Protection Agency, Letter dated March 27, 2009

Comment Response 1: Thank you for your continued support on the MsCIP effort.

Comment Response 2: Non-concur. In response to major damages on the coast of Mississippi as a result of Hurricane Katrina, Congress directed the U.S. Army Corps of Engineers (Corps) to conduct an analysis and design for comprehensive modifications and improvements in the Mississippi coastal area for the purposes of hurricane damage reduction, prevention of saltwater intrusion, preservation of fish and wildlife, prevention of erosion, and other related water resources purposes. This authorizing language specifically identifies saltwater intrusion.
Repo

Comment Response 3: Comment noted.

Comment Response 4: The MsCIP team has evaluated all feasible means of providing risk reduction in coastal Mississippi. In some cases, ring levees type structures may be acceptable means of reducing risk. We have identified 7 areas which may be appropriate for further study. As discussed in the report risk education is an important component of any structural feature. At Forrest Heights, the levee currently exists but not at an elevation or design configure that can be certified. Our proposal would result in such a certifiable structure and compaptiable with the National Flood Insurance Program.

Comment Response 5: Comment noted.

Comment Response 6: Non-concur due to ongoing coordination internally within the Corps. Regulatory activities in coastal Mississippi are closely coordinated with the MsCIP team to ensure the avoidance of conflict to the maximum extent practical. We do not believe it is appropriate to add information permitting in this report.

Comment Response 7: The additional studies described above are contained in the Barrier Island Appendix, Chapter 7. In accordance with the Regional Sediment Management Practices, all sediments, both from new and maintenance work, is being put to beneficial use. Much of the new work materials contains an over-abundance of fines and thus may make it unsuitable for placement on the barrier islands, but it may be suitable for littoral zone placement.

Comment Response 8: Comment noted.

Comment Response 9: Comment noted and the text reading as the following will be added to the document, “5. Restore and maintain State water quality.” The MsCIP team and Regulatory Division within the Corps, Mobile District continues to coordinate efforts jointly. In addition, the Corps, Mobile District has been coordinating with MDMR to enhance restoration opportunities in the State of Mississippi.

Comment Response 10: Non-concur. Refer to Comment response 2. The State of Mississippi has been coordinating with the State of Louisiana for over twenty years to redirect freshwater flows from the State of Louisiana back into Mississippi Sound. Saltwater intrusion in the MsCIP report is focused upon changing salinities in Mississippi Sound and salinities have been heighted greatly by the loss of the barrier islands. In addition, diversion structures on numerous riverine systems have also greatly reduced freshwater input into Mississippi Sound.

Comment Response 11: Comment noted. The HARP has been designed to be a flexible willing seller program to ensure implementation and reduce community/societal impacts.

Comment Response 12: Comment noted.

Comment Response 13: Comment noted.

Comment Response 14: Comment noted.

Comment Response 15: Concur. We have added a specific category for wetlands.

Comment Response 16: Comment noted – See response to comment 2.

Comment Response 17: Comment noted – See response to comment 6.

Comment Response 18: Non-concur. The State of Mississippi has been coordinating with the State of Louisiana for over twenty years to redirect historic freshwater flows from the State of Louisiana back into Mississippi Sound. Historical flows were diverted by man-made structures built in the State of Louisiana. MDMR has been coordinating with the State of Louisiana to reroute these historic flows, which have been documented in the Corps, New Orleans District's 1984 Feasibility Study for Bonne Carre. This study considered alternatives for a diversion structure at Bonne Carre and Violet. Saltwater intrusion in the MsCIP report is focused upon changing salinities in Mississippi Sound and salinities have been heighted greatly by the loss of the barrier islands.

Comment Response 19: Comment noted and text will be updated.

Comment Response 20: See response to comment 6.

Comment Response 21: We appreciate the provided information by your agency. The MsCIP team and Regulatory Division within the Corps, Mobile District continues to coordinate efforts jointly in coastal Mississippi, and more specifically in the Turkey Creek watershed. In addition, MsCIP team members have been coordinating with Regulatory Division and participated in meetings with MDOT. These recent developments of MDOT purchasing 1,625 acres within the watershed have just happened within the last month during the public comment period of the DEIS. We are aware of the ongoing proposed mitigation effort and will work jointly with all involved entities to

maximize our restoration efforts. The intent of restoration of this coastal land would be to relinquish title and provide to the State of Mississippi, Coastal Preserves.

Comment Response 22: Comment noted. Please note that the impacted acreages were reassessed due the levee realignment following publication of the report and were found to not reflect the most current area of impact. The acreages have changed from 19.85 acres and 23 acres of non-tidal wetlands for the 17-foot and 21-foot levee, respectively, to 1.47 and 3.62 acres. A correction in the report will be made to reflect the change. Mitigation would be accomplished within the watershed following preparation of detailed plans and specifications and the refinement of impacts.

Comment Response 23: The high hazard area is defined by FEMA flood insurance

Comment Response 24: Concur. Maps are included in non-structural appendix.

Comment Response 25: Comment noted.

Comment Response 26: Comment noted.

Comment Response 27: The Corps currently utilizes all suitable sands into littoral zone placements under the practices of the Regional Sediment Management working group. New work in the area of Mississippi Sound and the Barrier Islands typically contains excessive amounts of dark colored, fine grained material that render it unsuitable for use at the Mississippi Barrier Islands, but is being proposed for use at the Chandeleur Islands along the Louisiana coast.

Minerals Management Service

From: Merritt, Stacie [Stacie.Merritt@mms.gov]
Sent: Monday, March 30, 2009 2:13 PM
To: Rees, Susan I SAM
Cc: Wikel, Geoffrey L
Subject: Subject: Draft Supplemental Environmental Assessment (EA) for the Missippi Coastal Improvement Porgram (MsCIP)

March 30, 2009

Hello Dr. Rees,

The Minerals Management Service has reviewed the February 2009 draft Supplemental Environmental Assessment (EA) for the proposed Mississippi Coastal Improvement Program. We appreciate the opportunity to review the draft EA and are pleased to provide the following comments for your use as you prepare the final document.

After reviewing the draft EIS, more information is needed regarding the potential impacts involved with the identification, extraction, and use of sediment resources. While site-specific analysis for marsh creation and beach restoration projects will address the use of specific borrow areas, the programmatic document should consider relevant offshore resources over the appropriate spatial domain and reasonably foreseeable impacts to those resources that may result from the proposed action. For example, the EIS should discuss conflict of use, possible archeological stipulations, oil and gas infrastructure, and method of extraction of sand/sediment.

The document was thoroughly reviewed by our subject matter experts in Headquarters and our regional office. If you have any questions, please feel free to contact me. Also, if you would like our comments in paper form and on letterhead, we could provide them.

Thanks,

Stacie M. Merritt

Physical Scientist

Minerals Management Service

Coastal Program Section - Sand & Gravel

504-736-3276

Response to Minerals Management Service, Email dated March 30, 2009

Comment Response: Additional details will be provided in the tiered environmental documentation, such as the Supplemental Environmental Impact Statement (SEIS), to be prepared for the barrier island restoration efforts. Sites have been identified in only general terms (i.e. St. Bernard Shoal) in this Programmatic Integrated Environmental Impact Statement and will possibly be eliminated due to closer sand sources being identified. Thus, additional details concerning potential impacts involved with identification, extraction, and use of sediment resources will be provided in the tiered NEPA environmental documentation.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505

March 30, 2009 F/SER46:MT

Colonel Byron G. Jorns
District Engineer, Mobile District
Planning and Environmental Division
Department of the Army, Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628-0001

Dear Colonel Jorns:

NOAA's National Marine Fisheries Service's (NMFS), Southeast Region, Habitat Conservation Division, has reviewed the Draft Programmatic Environmental Impact Statement (DPEIS) dated February 2009 regarding the Mississippi Coastal Improvement Program (MsCIP) proposed plan for Hancock, Harrison and Jackson Counties, Mississippi.

Federal agencies that have jurisdiction by law or special expertise with respect to any environmental impact resulting from an agency action are required to comment on draft environmental impact statements (*See* 40 C.F.R. §1503.2). NOAA maintains expertise and jurisdiction by law over the nation's marine resources and offers the following comments and recommendations on the DPEIS.

Description of the Proposed Action

The DPEIS analyzes the potential environmental consequences of implementing a comprehensive plan in the interests of hurricane/storm damage reduction, ecosystem restoration, erosion control, and saltwater intrusion prevention. The Corps of Engineers recommended plan consists of system-wide and site specific structural and non-structural solutions that would aid in the recovery of coastal Mississippi from damages caused by Hurricanes Katrina, Rita, and Cindy that occurred in 2005. The NMFS has participated in the development of the plan and finds the DPEIS adequate in identifying and addressing those projects that are acceptable for advanced design and implementation.

The following components of the plan are presented in support of a Record of Decision: Coastal Wetland and Forest Restoration at Turkey Creek, Bayou Cumbest, Dantzler, Admiral Island and Franklin Creek; Submerged Aquatic Vegetation (SAV) restoration; Coast-wide Beach and Dune

Restoration; Waveland Flood Proofing; and Forrest (Forest) Heights Hurricane and Storm Damage Reduction. The DPEIS does address other components of the plan, such as Deer Island restoration, barrier island restoration, freshwater diversion at Violet, Louisiana, and others, but they are not presented in support of a Record of Decision at this time.

Magnuson-Stevens Fishery Conservation and Management Act (16 U. S. C. SS 1801 et seq.) and Fish and Wildlife Coordination Act (16 U.S.C. §§ 661-667e)

The Coastal Wetland and Forest Restoration component will potentially involve 1,494 acres for restoration of coastal habitats by: 1) acquisition; 2) removing debris and exotic vegetation; 3) filling of the ditches; 4) excavating and removing existing roadbeds and any additional fill; and 5) maintaining the area as necessary. The NMFS supports this component and believes that it will result in a positive impact to essential fish habitats (EFH) and associated living marine resources.

The SAV pilot project will provide important information that also has the potential to result in positive impacts to EFH and associated living marine resources. The NMFS supports this component as well. The decline in SAV in the Mississippi Sound since the late 1960's appears to be a result of various factors, both natural and anthropogenic. The basic restoration principle for the SAV restoration project is to locate an area that historically supported SAV, determine what factors contributed to its demise, and abate these factors. Some of the factors that should be individually and cumulatively considered in the pilot project include: light limitation; nutrient loading; freshwater inflows; and mechanical disturbances such as uncontained open water disposal of dredged material, shrimping, and recreational boating activities. We refer you to *Guidelines for the Conservation and Restoration of Seagrasses in the United States and Adjacent Waters*[1] to assist in developing the pilot project.

The Coast-wide Beach and Dune Restoration; Waveland Flood Proofing; and Forrest (Forest) Heights Hurricane and Storm Damage Reduction components are expected to have no or minimal effects on EFH and living marine resources. For the components of the plan, such as Deer Island restoration, barrier island restoration, freshwater diversion at Violet, Louisiana, and others, that are not presented in support of a Record of Decision at this time, an EFH Assessment will need to be prepared and coordinated with NMFS as required by the Magnuson-Stevens Fishery Conservation and Management Act, once the plans are more fully developed.

The NMFS commends the Corps on this comprehensive approach for providing protection to the citizens of Mississippi from many of the potential effects of future hurricane or severe storm events. The NMFS looks forward to continuing our collaborative working relationship with the Corps on the implementation of this recommended plan and in the further consideration of the other components currently being considered by the MsCIP. Please direct related habitat questions to the attention of Mr. Mark Thompson at the Panama City, Florida Office. He may be

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1 Fonseca, M.S., et al. 1998. Guidelines for the Conservation and Restoration of Seagrasses in the United States and Adjacent Waters. NOAA Coastal Ocean Program Decision Analysis Series No. 12

reached at 3500 Delwood Beach Road, Panama City, Florida 32408-7403, by telephone at (850) 234-5061, or by email at Mark.Thompson@noaa.gov.

Sincerely,

for Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

Response to National Marine Fisheries Service, Letter dated March 30, 2009

Comment Response 1: Comment noted.

Comment Response 2: Comment noted.

Comment Response 3: Comment noted.

Comment Response 4: Comment noted and additional coordination will be conducted by the Corps, Mobile District with the NMFS-HCD for EFH assessments on projects, such as Deer Island restoration, barrier island restoration, freshwater diversion at Violet. Louisiana.

MDAH

HISTORIC PRESERVATION
Ken P'Pool, director • Jim Woodrick, acting director
PO Box 571, Jackson, MS 39205-0571
601-576-6940 • Fax 601-576-6955
mdah.state.ms.us

March 5, 2009

Dr. Susan I. Rees
Program Manager, Mississippi Coastal
Improvement Program
Mobile District, Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628-0001

RE: Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (EIS) for the Mississippi Coastal Improvements Program (MsCIP), MDAH Project Log #02-069-09, Hancock, Harrison and Jackson Counties

Dear Dr. Rees:

We have reviewed the Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (EIS) for the Mississippi Coastal Improvements Program (MsCIP), received on February 9, 2009, in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After review, there is certainly the potential to affect cultural resources. As such, we look forward to working with the Mobile COE to develop an overall process through which potential impacts would be addressed for specific project development, as indicated on page 4-32 of the document.

If you have any questions, please call me at 601-576-6940.

Sincerely,

Jim Woodrick
Review and Compliance Officer

FOR: H.T. Holmes
State Historic Preservation Officer

c: Clearinghouse for Federal Programs

Response to Mississippi Department of Archives and History, Letter dated March 5, 2009

Comment Response: Comment noted.

STATE OF MISSISSIPPI
HALEY BARBOUR
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
TRUDY D. FISHER, EXECUTIVE DIRECTOR

March 31, 2009

Ms. Susan I. Rees, Ph.D.
Program Manager
Mississippi Coastal Improvement Program
Mobile District, Corps of Engineers
P.O. Box 2288
Mobile, Alabama 36628-0001

Re: Draft Comprehensive Plan and Integrated Programmatic EIS For the Mississippi Coastal Improvements Program Jackson, Harrison, and Hancock Counties, Mississippi

Dear Dr. Rees:

We have reviewed the Draft Comprehensive Plan and Integrated Programmatic EIS for the MS Coastal Improvements Program. The plan proposes a number of activities including rebuilding the barrier islands, wetland restoration, levees and real estate acquisition and relocation. We support the goals of the Mississippi Coastal Improvements Program as outlined in the Plan. As per our discussion, I understand that the Corps is not requesting a Water Quality Certification for the entire suite of projects at this time, but will bring the projects forward individually as they are designed. We expect to handle the projects in our normal review process as they are submitted for Water Quality Certification or other environmental approvals.

Thank you for the opportunity to review this document. We look forward to working with you on this effort.

Sincerely,

Robert H. Seyfarth, P.E., DEE
Chief, Water Quality Certification Branch
Environmental Permits Division

Response to Mississippi Department of Environmental Quality, Letter dated March 31, 2009

Comment Response: Comment noted and concur with statement.

MISSISSIPPI
DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

Sam Polles, Ph.D.
Executive Director

May 4, 2009

U.S. Army Corp of Engineers
Mobile District
P.O. Box 109 St. Joseph Street
Mobile, AL 36602

To Dr. Susan I. Rees:

The Mississippi Department of Wildlife Fisheries and Parks would like to formally withdraw comments provided by the Mississippi Natural Heritage Program concerning the Mississippi Coastal Improvements Program (dated March 31, 2009). Please find attached a revised response letter (dated May 4, 2009) submitted in place of the previous (March 31, 2009) comments. We regret any inconvience this withdrawl process may cause you.

Sincerely,

Dr. Sam Polles
Executive Director
Mississippi Department of Wildlife, Fisheries and Parks
P.O. Box 451
Jackson, MS 39211
(601) 432-2400

MISSISSIPPI
DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

Sam Polles, Ph.D.
Executive Director

May 4, 2009

U.S. Army Corp of Engineers
Mobile District
P.O. Box 109 ST. Joseph Street
Mobile, AL 36602

To Susan I. Rees:

The Mississippi Natural Heritage Program on behalf of the Mississippi Department of Wildlife, Fisheries and Parks has reviewed the Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement for the Mississippi Coastal Improvements Program (MsCIP) Hancock, Harrison, and Jackson Counties, MS. We concur with all information directly related to Sections 4.1.11 Comprehensive Plan Threatened and Endangered Species Impact and 4.2.10 HARP Threatened and Endangered Species Impact provided within this document.

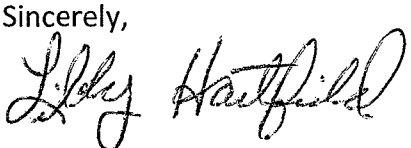
Should further biological consultation be needed in regards to threatened and endangered species and/or their required habitats, we welcome the opportunity to work with you further. Please find the contact information listed below for MDWFP biologists that can be contacted for additional information about the specific T&E species listed in Table 2-1 of the MsCIP.

Species	Contacts
Alabama red-bellied Turtle (*Pseudemys alabamensis*) Black pine snake (*Pituophis melanoleucus* spp. *iodingi*) Eastern indigo snake (*Drymarchon corais couperi*) Gopher tortoise (*Gopherus polyphemus*) Green sea turtle (*Chelonia mydas*) Gulf sturgeon (*Acipenser oxyrhynchus desotoi*) Inflated heelsplitter (*Potamilus inflatus*) Kemp's ridley sea turtle (*Lepidochelys kempii*) Loggerhead sea turtle (*Caretta caretta*)	Dr. Bob Jones, MDWFP-MMNS 2148 Riverside Drive Jackson, MS 39202 (601) 354-7303 Bob.jones@mmns.state.ms.us

Manatee (*Trichechus manatus*) Mississippi gopher frog (*Rana capito sevosa*) Yellow-blotched map turtle (*Graptemys flavimaculata*) Pearl darter (Pascagoulas River System)	
Brown pelican (*Pelecanus occidentalis*) Mississippi sandhill crane (*Grus canadensis pulla*) Piping plover (*Charadrius melodus*) Red-cockaded woodpecker (*Picoides borealis*)	Nick Winstead, MDWFP-MMNS 2148 Riverside Drive Jackson, MS 39202 (601) 354-7303 Nick.winstead@mmns.state.ms.us
Louisiana black bear (*Ursus americanus luteolus*)	Brad Young, MDWFP 1505 Eastover Drive Jackson, MS 39211 (601) 432-2400
Louisiana quillwort (*Isoetes louisianensis*)	Heather Sullivan, MDWFP-MMNS 2148 Riverside Drive Jackson, MS 39202 (601) 354-7303 Heather.sullivan@mmns.state.ms.us

Please feel free to contact us if we can provide any additional information, resources, or assistance that will help minimize negative impacts to threatened and endangered species and/or ecological communities. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Sincerely,



Libby Hartfield
Museum Director
Mississippi Museum of Natural Science
2148 Riverside Drive
Jackson, MS 39202
(601) 354-7303
Libby.hartfield@mmns.state.ms.us

Response to Mississippi Department of Wildlife, Fisheries, and Parks

1. Thank you for your comments.

2. We will continue to work with the Mississippi Museum of Natural Science as we move through implementation of the comprehensive plan.

City of Long Beach

March 23, 2009

Dr. Susan I Rees
MsCIP Program Manager
Mobile District, U.S.
Army Corps of Engineers
P.O. Box 2288
Mobile, Al 36628

Re: Draft Comprehensive Plan and for the Mississippi Coastal Improvements Program (MsCIP)

Dear Dr. Rees:

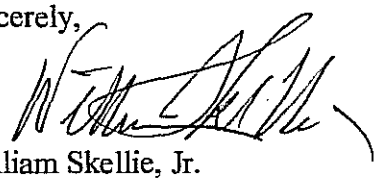
On behalf of the citizens of Long Beach, Mississippi, I am writing to object to the exclusion of Cat Island from the initial restoration funding request described in Appendix H of the referenced report. From my constituent's perspective, Cat Island, which lies directly between the City of Long Beach and the Gulf of Mexico, is the most important of Mississippi's barrier islands as it protects our citizens and their property. Your draft report calls for additional study for Cat Island with no specific restoration funding included in table 8.1 "Summary of Costs for the Comprehensive Barrier Island Restoration Plan." In light of the current strain on the federal budget, it is imperative that the Corps pursue the restoration of Cat Island with the same sense of urgency and to the same degree as the barrier islands that protect our neighboring cities to the east.

As someone who grew up on the Mississippi Coast fishing and boating around Cat Island, it is obvious that the island needs additional sediment. According to a 2007 U. S. Geological Service Report, island land losses can be attributed to intense storm events, sea level rise, and the reduction in sand supply related to dredging navigation channels through the outer bars of tidal inlets. The report states: "Sand supply is the only factor contributing to barrier island land loss that can be managed directly to mitigate the losses by placement of dredged material so that the adjacent barrier island shores receive it for island nourishment and rebuilding."

We urge the Corps of Engineers and the State of Mississippi to revise the current draft plan and to prioritize the restoration of Cat Island by including it in the initial funding request along with Mississippi's other barrier islands.

Thank your for considering my comments.

Sincerely,



William Skellie, Jr.

cc: Congressman Gene Taylor
Dr. William Walker
George Boddie

Response to Mayor William Skellie, Jr., dated 23 March 2009

1. Thank you for your interest in the Mississippi Coastal Improvements Program and specifically the barrier island comprehensive restoration feature of the Comprehensive Plan.

2. Cat Island was never intended to be excluded from the barrier island comprehensive plan however, as described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies seem to indicate that littoral currents do not move sediments across the area known as Ship Island Pass. . Nourishment of Cat Island is not dependent upon a direct link with the other barrier islands, as it by itself if a critical component of the entire Mississippi Sound ecosystem. These and other issues, notably the private ownership of much of the island, will be addressed during the first year following authorization and funding and would be concurrent with other required studies for the remainder of the islands. We have indicated a requirement to perform additional studies to finalize the sediment budget and sediment transport processes and gain a full understanding of the nourishment needs of Cat Island.

In response to your and other concerns, we have revised the Barrier Island Appendix, specifically Chapters 3 and 7, to provide more detail for proposed studies at and immediately around Cat Island. In addition, the Summary of Costs, Table 8-1, will be amended to detail the $1 million dedicated for additional studies at Cat Island and a figure will be inserted in Section 7.3 that's shows a potential location for littoral zone placement east of Cat Island. The estimated cost of implementation of the comprehensive restoration plan feature contains funding for placement at Cat Island once the specific plan is designed.

NORTH GULFPORT
COMMUNITY
LAND TRUST

The Mission of the North Gulfport Community Land Trust is to protect the land, preserve t
African American cultural heritage, and honor the ancestors of the North Gulfport Commun
through the creation of permanently affordable housing, community advocacy and reinvestme

March 31, 2009

Army Corps of Engineer
District, Mobile
Dr. Susan I. Reese
Program Manager, Ms CIP
P.O. BOX 2288
Mobile, AL

Dear Dr. Reese

We are writing to express concerns with the plan to construct a levee in the Forest Heights subdivision as part of the Mississippi Coastal Improvement Program.

It is important to first state for the record that we strongly support the need for flood protection for the residents of Forest Heights. However, we feel that flood protection should be part of a larger plan to protect and restore the wetlands of the Turkey Creek watershed.

The current plan to build the levee fails to adequately consider the negative effects that it would have on wetlands, nearby homes, and the North Gulfport neighborhood. Due to poor drainage and clogged ditches, water cannot flow freely in the North Gulfport Community. While the Corps appears to believe that clearing and snagging of Turkey Creek will alleviate this problem, we believe that much of the problem is currently being caused by ditches that have been filled with sediment due to causes such as sediment pollution from construction sites. Much of this problem would be alleviated if the Corps did not issue a large number of section 404 permits to fill wetlands within the Turkey Creek watershed.

We are also concerned that this project will require operation and maintenance by a non-federal sponsor. The levee that currently surrounds Forest Heights is in a state of disrepair. The ditches in the North Gulfport Community are clogged from sediment runoff. If this infrastructure cannot be maintained currently, how are we to expect proper operation and maintenance of a larger levee system?

While it is true that there is a flooding problem within the Forest Heights subdivision, we have witnessed just as much flooding in North Gulfport after two days of heavy rainfall. We believe that this project would exacerbate flooding in the North Gulfport community. Water that once occupied the floodplain will now be blocked by this levee, worsening flooding in other areas of the community. In addition, this project will result in the loss of 19.85 acres of wetlands, an amount that the community cannot afford to lose. While the Corps has estimated the loss due to construction, there are no detailed plans of how

8208 Ohio Avenue, Gulfport, MS 39501
tel. 228-868-0250 / fax: 228-868-0701 / www.ngclt.org / nglandtrust@gmail.com

the Corps will mitigate for this loss within the watershed. We believe that a detailed mitigation plan should be included in this plan.

We recognize the need to protect all the communities in the Turkey Creek watershed and request that before this project is begun that the ditches in the community are unclogged and that the Corps wetland regulatory division halt future development in the wetlands of Turkey Creek. We strongly feel that the only way to prevent these communities from flooding is to stop the filling of wetlands in the Turkey Creek watershed and begin to restore what has been lost.

Sincerely,

Rose Johnson
Board President

Veronica Mulazeem
Executive Director

Response to North Gulfport Community Land Trust, dated 31 March 2009

Response: The Mississippi Coastal Improvement Comprehensive Plan (MsCIP) feature at Forrest Heights includes the improvement of an already existing levee that would allow the residents of the community to be in compliance with the National Flood Insurance Program. This plan element is included specifically at the request of the Forrest Heights community and includes the provision for handling the interior drainage within the levee system. The wetland loss documented in the draft report was in error. Approximately 4 acres of nontidal wetlands would be impacted with the improvements. These wetlands will be mitigated within the Turkey Creek watershed. In addition we have included limited clearing and snagging of the Turkey Creek to facilitate the flow of rainwater into Bernard Bayou. Other activities in the Turkey Creek Watershed include the acquisition and restoration of over 600 acres of wet pine savannah habitat through the restoration of the hydrology and removal of exotic species.

We currently coordinate permitting activities in the Turkey Creek watershed between Regulatory Division and the MsCIP team to ensure that additional flooding would not result from permitted activities. We have investigated flooding in the North Gulfport area for a number of years but have not been able to develop a feasible solution. Although some of the problems are due to the permitted loss of wetlands a large amount of the flooding is due to development which falls outside of the USACE regulatory arena. For example, the issue of local drainage, which you mention as being of prime concern, is not a mission of the USACE but rather of local government. We will work with the residents of the area, to the maximum extent possible, to resolve thee issues.

WAVELAND

John Thomas Longo, Mayor

March 25, 2009

Dr. Susan I. Rees
Program Manager, MsCIP
Mobile District USACE
P.O. Box 2288
Mobile, AL 36628

Dear Ms. Rees,

Please consider comment to the Corps on their draft MsCIP program.

The Corps is proposing to nourish all of the islands east of the ship channel with no definitive nourishment activities planned for Cat Island. Actually, they have produced a new study that contradicts every written study and report about coastal processes in Mississippi, now claiming that Cat Island is not part of the same littoral system.

Points to consider including comments:

Coastal processes included in the draft document are contrary to almost all previous coastal studies and documents ever written by coastal scientist, academia, and even the Corps of Engineers.

Cat Island lies between the western half of the Mississippi mainland and the Gulf of Mexico and it should be give equal importance, as it protects the western half of our state from storm events.

This includes the cities of Waveland, Bay St. Louis, Pass Christian, Long Beach and the western half of Gulfport.

The NPS owns approximately 40% of Cat Island, and discussions are under way with the State of Mississippi and NPS to purchase most of the remainder. A 20-year implementation plan absent more definite restoration plans for Cat Island is short sided.

The Draft Mississippi Coastal Improvements Program (MsCIP) doesn't include any definitive restoration items to be implemented for Cat Island.

Goose Point on the southern most end of the island should be restored as one of the early features of the plan.

Lili Stahler, Alderman Ward #1 • Ricky Geoffrey, Alderman Ward #2 • Brian Schmitt, Alderman Ward #3
Charles Plazza, Alderman Ward #4 • Robyn C. Gavagnie, City Secretary • Zach Butterwoth, City Attorney
Post Office Box 539 • Waveland, Mississippi 39576 • 228-467-4134 • Fax 228-467-3177
mayorsoffice@mchsi.com / w.cityhall@mchsi.com

A littoral zone disposal area west of the Gulfport Ship Channel and southeast of Cat Island should be included in the plan similar to the disposal zones identified for the eastern half of the coast.

Costs for this nourishment site for Cat Island should be included in Table 8-1 of the document.

All material from the ship channel maintenance and improvements should be pumped westward to the Cat Island littoral zone.

The refurbishment of Cat Island is extremely important to the future protection and quality of life in the City of Waveland. Thank you for your consideration of this much-needed project.

Sincerely,

Mayor John Thomas Longo

Response to Mayor John Longo, dated 25 March 2009

1. Thank you for your interest in the Mississippi Coastal Improvements Program and specifically the barrier island comprehensive restoration feature of the Comprehensive Plan.

2. Cat Island was never intended to be excluded from the barrier island comprehensive plan however, as described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies seem to indicate that littoral currents do not move sediments across the area known as Ship Island Pass. . Nourishment of Cat Island is not dependent upon a direct link with the other barrier islands, as it by itself if a critical component of the entire Mississippi Sound ecosystem. These and other issues, notably the private ownership of much of the island, will be addressed during the first year following authorization and funding and would be concurrent with other required studies for the remainder of the islands. We have indicated a requirement to perform additional studies to finalize the sediment budget and sediment transport processes and gain a full understanding of the nourishment needs of Cat Island.

In response to your and other concerns, we have revised the Barrier Island Appendix, specifically Chapters 3 and 7, to provide more detail for proposed studies at and immediately around Cat Island. In addition, the Summary of Costs, Table 8-1, will be amended to detail the $1 million dedicated for additional studies at Cat Island and a figure will be inserted in Section 7.3 that's shows a potential location for littoral zone placement east of Cat Island. The estimated cost of implementation of the comprehensive restoration plan feature contains funding for placement at Cat Island once the specific plan is designed.

From: Smith, Thomas E SAM
Sent: Monday, March 23, 2009 7:48 AM
To: Rees, Susan I SAM; King, Ruda L SAM
Subject: Fw: Willing Seller Henderson Point Property Mississippi Baptist Convention Board

Attachments: ALTA SURVEY DATED 06-28-07.pdf; GBA Certificate of Title.pdf

---
Message sent via my BlackBerry Wireless Device

_____

From: Barri Shirley
To: Smith, Thomas E SAM
Sent: Fri Mar 20 16:38:36 2009
Subject: Henderson Point Property Mississippi Baptist Convention Board

Mr. Smith,

It was a pleasure meeting you this past Monday evening. You and your staff provided a well-organized and informative setting for the public hearing. That type of straight-forward approach is greatly appreciated.

Please officially add the Mississippi Baptist Convention Board as a "potential seller" to your property acquisition list for the first phase of the High Hazard Area Risk Reduction Program.

I will serve as the primary contact:

Mr. Barri A. Shirley

Associate Executive Director, Business Services

Mississippi Baptist Convention Board

P.O. Box 530

Jackson, MS 39205

601-292-3240

bshirley@mbcb.org

Attached you should find a description of the MS Baptist Convention-owned property at Henderson Point. Please let me know if/when additional information is needed.

Also, as discussed, if the Corp is interested in the concrete of the remaining buildings at our Henderson Point property, kindly connect me with the appropriate personnel to explore that option.

Again, thank you for your assistance in this matter.

In His service,

Barri A. Shirley

Response to Barri Shirley, dated 23 March 2009

Response: Thank you for your support of the Mississippi Coastal Improvements Program. We will keep you informed of the program progress.

Mississippi Coastal Improvements Program

MsCIP

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: Aneice R. Liddell Address: 4519 Jefferson Ave

City: Moss Point State: MS Zip: 39563 Email: arliddell@gmail.com

***Primarily* Participating as a...**

- ○ *Local Resident*
- ● *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
- ○ *Academic Institution*
- ○ *Local Gov't Agency*
- ○ *State Gov't Agency*
- ○ *Federal Gov't Agency*
- ○ *Other* _____

==========

Please Check an Environmental Tentatively Selected Plan Element

Island and Beach Restoration

- ○ *Barrier Island Restoration*
- ○ *Mainland Beach Restoration*

Nonstructural Solutions

- ○ *High Hazard Risk Reduction (HARP) Phase 1 Property Acquisition*
- ● *Pilot Projects: Moss Point Municipal Facility Relocation*
- ○ *Pilot Projects: Waveland Flood Proofing*

Environmental Restoration

- ○ *Coastal Wetland and Forest Restoration*
- ○ *Deer Island Ecosystem Restoration*

Studies

- ○ *Violet Freshwater Diversion*
- ○ *Submerged Aquatic Vegetation*
- ○ *Ecosystem Restoration Studies*
- ○ *Local Flood Risk Management Projects (Barriers and Levees)*

- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

==========

Comments

This is a vital project for the City of Moss Point. All of our City facilities (first response entergy) must be relocated to better serve the citizens of Moss Point. This effort would take 20 yrs are more yrs withmt the help of the Corps of Engineers.

Following tonight's meeting you may continue to submit comments via our web portal at:

http://meetingroom.groupsolutions.us/

Comments will be collected for the U.S. Army Corps of Engineers, Mobile District through ***March 31, 2009.***

Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: Betty Wilson Address: 4200 Joseph St.

City: Moss Point State: MS Zip: 39563 Email: wilsonbetty42@yahoo.com

***Primarily* Participating as a...**

- ● *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
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- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*
- ○ ***Other*** _____

==========

Comments

I whole heartily support the plans for Moss Point.

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: Bobby Johnson Address: 4329 McInnis Ave

City: Moss Point State: MS Zip: 39563 Email: _____

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
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- ○ *Local Gov't Agency*
- ○ *State Gov't Agency*
- ○ *Federal Gov't Agency*
- ● *Other* Deputy Chief of Police

==========

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- ○ *Local Flood Risk Management Projects (Barriers and Levees)*

- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*
- ○ ***Other*** _____

==========

Comments

The Moss Point Police Dept building has been a corner stone in the city of Moss Point for many years. During these years this building has endured hurricanes & other related storms. This building is sitting in a flood zone and should be relocated to better serve the citizens of Moss Point.

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Mississippi Coastal Improvements Program

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: BRENDA KAY RAMM Address: 5107 GRIFFIN ST

City: Moss Point State: MS Zip: 39563 Email: Bkramm@bellsouth.net cbcworldwide.com

Primarily Participating as a...

- [x] Local Resident
- [ ] Elected Official
- [x] Industry/Commercial
- [ ] Native American Tribe
- [ ] Nongovernmental Organization
- [ ] Academic Institution
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- [ ] Other _____

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- [ ] Ecosystem Restoration Studies
- [ ] Local Flood Risk Management Projects (Barriers and Levees)

- [ ] **Structural Projects**
- [ ] Forrest (Forest) Heights Levee
- [ ] **Other** _____

Comments

Please consider Moss Point for funding. We have great Resources and high potential.

Thank you
Brenda Kay Ramm
228 327 1669

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: CHARLES L. MOLDEN Address: 6332 MOSS POINT AVE.

City: MOSS POINT State: MS Zip: 39563 Email: _____

***Primarily* Participating as a...**

- ○ *Local Resident*
- ✓ *Elected Official*
- ○ *Industry/Commercial*
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- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

==========

Comments

I AM IN FAVOR OF THE NEED FOR THE PILOT PROJECT: MOSS POINT MUNICIPAL FACILITY RELOCATION

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

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Name: Donna Joseph Address: 4400 Denny Ave.

City: Moss Point State: MS Zip: 39563 Email: mossof@bellsouth.net

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
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- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

==========

Comments

I am very much in support of the plans for Moss Point

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Mississippi Coastal Improvements Program

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Name: Jackie Webb Address: 4400 Denny St.

City: Moss Point State: MS Zip: 39563 Email: jwebb65@yahoo.com

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
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- ○ ***Other*** _____

==========

Comments

I'm visited about plans for Moss Point.

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

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Name: Michael A. Middleton Address: 4730 Gen Ike

City: Moss Point State: MS Zip: 3956 Email: Michael Middleton SR@ hotmail.com

***Primarily* Participating as a...**

- ○ *Local Resident*
- ☒ *Elected Official*
- ○ *Industry/Commercial*
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- ○ *Nongovernmental Organization*
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Structural Projects
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

==========

Comments

I AM IN SUPPORT OF Moss Point Municipal Facility Relocation

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: MICHAEL DACE Address: 4323 McINNIS

City: MOSS POINT State: MS Zip: 39563 Email: _____

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
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- ○ *Local Flood Risk Management Projects (Barriers and Levees)*

- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

==========

Comments

THESE PROJECTS ARE IMPORTANT FOR OUR RECOVERY HERE MOSS POINT

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: Robert Lavinghouse Address: 4323 McInnis Ave

City: Moss Point State: MS Zip: 39563 Email: fireeater1951

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
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- ○ ***Other*** _____

==========

Comments

These projects are needed in order to revitalize the area and bring it to its pre-katrina status. To continue our progress to normal living and working conditions all along the coast.

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Mississippi Coastal Improvements Program

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Mobile District

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Name: Roland Mims Address: 3818 Davis St.

City: Moss Point State: MS Zip: 39563 Email: roland.mims@yahoo

***Primarily* Participating as a...**

- ● *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
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- ○ ***Other*** _____

==========

Comments

I support this project.

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Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: Sheila Smallman Address: 4329 McInnis Ave

City: Moss Point State: MS Zip: 39563 Email: chiefsmallman@cableone.net

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ○ *Nongovernmental Organization*
- ○ *Academic Institution*
- ○ *Local Gov't Agency*
- ○ *State Gov't Agency*
- ○ *Federal Gov't Agency*
- ● *Other* Chief of Police

==========

Please Check an Environmental Tentatively Selected Plan Element

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- ○ ***Other*** _____

==========

Comments

This is the best news I've received in months. In moving forward with my Department, a new building is a must. The current building's exterior is somewhat of an eye sore. The interior is small and cluttered, and the lobby + briefing room are only two of the areas I wish I could refrain from the public. I'm excited about a new building and know that my staff will be grateful as well. THANKS

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US Army Corps of Engineers
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Name: Tabbitha S. Mosely Address: 3617 Hopewood Pl.

City: Moss Point State: MS Zip: 39563 Email: tabbithamosely@yahoo.com

***Primarily* Participating as a...**

- ● *Local Resident*
- ○ *Elected Official*
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- ○ *Native American Tribe*
- ● *Nongovernmental Organization*
- ○ *Academic Institution*
- ○ *Local Gov't Agency*
- ○ *State Gov't Agency*
- ○ *Federal Gov't Agency*
- ○ *Other* _____

==========

Please Check an Environmental Tentatively Selected Plan Element

Island and Beach Restoration
- ○ *Barrier Island Restoration*
- ○ *Mainland Beach Restoration*

Nonstructural Solutions
- ○ *High Hazard Risk Reduction (HARP) Phase 1 Property Acquisition*
- ● *Pilot Projects: Moss Point Municipal Facility Relocation*
- ○ *Pilot Projects: Waveland Flood Proofing*

Environmental Restoration
- ○ *Coastal Wetland and Forest Restoration*
- ○ *Deer Island Ecosystem Restoration*

Studies
- ○ *Violet Freshwater Diversion*
- ○ *Submerged Aquatic Vegetation*
- ○ *Ecosystem Restoration Studies*
- ○ *Local Flood Risk Management Projects (Barriers and Levees)*

- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

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Comments

Please consider Moss Point for funding. Moss Point may have great resources and high potential.

Following tonight's meeting you may continue to submit comments via our web portal at:

http://meetingroom.groupsolutions.us/

Comments will be collected for the U.S. Army Corps of Engineers, Mobile District through ***March 31, 2009.***

Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: Tayna L. Franklin Address: 4412 Denny Street (Mailing Address)
City: Moss Point State: MS Zip: 39563 Email: taynafranklin@yahoo.com

***Primarily* Participating as a...**

- o *Local Resident*
- o *Elected Official*
- o *Industry/Commercial*
- o *Native American Tribe*
- o *Nongovernmental Organization*
- o *Academic Institution*
- X *Local Gov't Agency*
- o *State Gov't Agency*
- o *Federal Gov't Agency*
- o *Other* _____

==========

Please Check an Environmental Tentatively Selected Plan Element

Island and Beach Restoration
- o *Barrier Island Restoration*
- o *Mainland Beach Restoration*

Nonstructural Solutions
- o *High Hazard Risk Reduction (HARP) Phase 1 Property Acquisition*
- X *Pilot Projects: Moss Point Municipal Facility Relocation*
- o *Pilot Projects: Waveland Flood Proofing*

Environmental Restoration
- o *Coastal Wetland and Forest Restoration*
- o *Deer Island Ecosystem Restoration*

Studies
- o *Violet Freshwater Diversion*
- o *Submerged Aquatic Vegetation*
- o *Ecosystem Restoration Studies*
- o *Local Flood Risk Management Projects (Barriers and Levees)*

- o ***Structural Projects***
- o *Forrest (Forest) Heights Levee*

- o ***Other*** _____

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Comments

Please consider The City of Moss Point, MS for funding on The Community Center, Central Fire Station, City Hall & Police Station Projects as Facility Relocation Pilot Projects. Our city has a great need for these public facility buildings for services our → citizens as first responders.

Following tonight's meeting you may continue to submit comments via our web portal at:

http://meetingroom.groupsolutions.us/

Comments will be collected for the U.S. Army Corps of Engineers, Mobile District through ***March 31, 2009.***

Mississippi Coastal Improvements Program

US Army Corps of Engineers
Mobile District

A partnership of the Mobile District, U.S. Army Corps of Engineers and Local, State and Federal Agencies

Name: VIRGINIA JACKSON Address: 3607 SHERMAN DR.

City: MOSS POINT State: MI Zip: 39563 Email: VCSMOSSPOINT@YAHOO.COM

***Primarily* Participating as a...**

- ○ *Local Resident*
- ○ *Elected Official*
- ○ *Industry/Commercial*
- ○ *Native American Tribe*
- ● *Nongovernmental Organization*
- ○ *Academic Institution*
- ○ *Local Gov't Agency*
- ○ *State Gov't Agency*
- ○ *Federal Gov't Agency*
- ○ *Other* _____

==========

Please Check an Environmental Tentatively Selected Plan Element

Island and Beach Restoration

- ○ *Barrier Island Restoration*
- ○ *Mainland Beach Restoration*

Nonstructural Solutions

- ○ *High Hazard Risk Reduction (HARP) Phase 1 Property Acquisition*
- ● *Pilot Projects: Moss Point Municipal Facility Relocation*
- ○ *Pilot Projects: Waveland Flood Proofing*

Environmental Restoration

- ○ *Coastal Wetland and Forest Restoration*
- ○ *Deer Island Ecosystem Restoration*

Studies

- ○ *Violet Freshwater Diversion*
- ○ *Submerged Aquatic Vegetation*
- ○ *Ecosystem Restoration Studies*
- ○ *Local Flood Risk Management Projects (Barriers and Levees)*

- ○ ***Structural Projects***
- ○ *Forrest (Forest) Heights Levee*

- ○ ***Other*** _____

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Comments

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Following tonight's meeting you may continue to submit comments via our web portal at:

http://meetingroom.groupsolutions.us/

Comments will be collected for the U.S. Army Corps of Engineers, Mobile District through ***March 31, 2009.***

Response is applicable to the following 15 commenters from the Moss Point area:

Anise Liddell
Betty Wilson
Bobby Johnson
Brenda Kay Ramm
Charles Molden
Donna Joseph
Jackie Webb
Michael Middleton
Michael Jace
Robert Lavinghouse
Roland Mims
Shelia Smallman
Tabbitha Mosely
Tayna Franklin
Virginia Jackson

1. Response. Comment noted. Thank you for your interest in the Mississippi Coastal Improvements Program.

23098 Freddie Frank Rd.
Pass Christian, MS 39571

Five Star Assoc.

Fax

To: DR. Susan **From:** Andrew Park (91742)

Fax: 601-914-2907 **Pages:** 1

Phone: 228-324-3063 **Date:** 3/19-09

Re: Land meeting **CC:**

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply

• **Comments:**

Enjoyed the meeting/Company with Everyone. I agreed with all issues they are long over due

Sincerely
Andrew

Response to Andrew Park dated 19 March 2009

Response: Thank you for comment and support of the Mississippi Coastal Improvements Program.

From: BStone001@aol.com
Sent: Monday, March 30, 2009 3:47 PM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, general comments

Overall, I think that USACE did a good job on The Plan. It really represents lots of hard work by lots of people !!!

This Plan is very complex, technical, lengthy (nearly 2800 pages), and difficult to read for the general public and/or non-technical persons. Whenever I review such a document, I try to read it from the viewpoint of the general reader (not technical, engineer, environmentalist, etc.). Consequently, I concentrated on the Main Report & especially the Summary.

Suggest that a "Roadmap" be included somewhere in the Main Report prior to where the main text starts (Introduction page 1-1). This "Roadmap" will provide a cross-reference where the reader can locate all the information on a particular project, topic, or major subject. It is usually a table or spreadsheet relating for each salient item (project, topic, subject) where all the related information is located (which document, section and/or page number). Some Document software does this automatically. This really assists the reader to locate all the info or an item of interest & really saves the reader valuable time.

Oh sorry. I just realized that I forgot to include my name/contact on some of my previous e-mails.

Again, I greatly appreciate all USACE's efforts. Hopefully, Congress will approve & fund many of MsCIP plans for implementation.

THANX,
Bill Stone
Director, Pineville Community Assoc.
home (228)863-9703, cell (228)342-2969
bstone001@aol.com

Bill Stone_9

From: BStone001@aol.com
Sent: Monday, March 30, 2009 1:54 PM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, 8 Glossary of Terms

This Glossary of Terms is really just an Acronym list. A glossary should really include a list of difficult or technical terms with definitions and/or brief description. This would really be helpful in addition to the acronyms.

Bill Stone
Director, Pineville Community Assoc.
home (228)863-9703, cell (228)342-2969
bstone001@aol.com

****

Bill Stone_8

From: BStone001@aol.com
Sent: Monday, March 30, 2009 1:36 PM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, Summary, Public Involvement...,page S-9

Overall I do not think that enough public involvement was nearly enough for such a vast, complex, costly & controversial project. It even seemed that USACE did not desire any public input or just ignored the public's comments/concerns.

During my 30 years of managing & working on many federal programs & projects for NASA, DoD, DoI, USAF, NOAA, USGS, etc., whenever applicable we really encouraged public input throughout the project. Since Hurricane Katrina the public has had way too many problems resulting from government agencies (e.g., FEMA, New Orleans levees, Mr. GO, etc.) trying to help but only creating more problems and generating way too much bureaucracy & paper work. We need immediate help to protect us from future storms !!!

I think that Congress would have a better Plan if the public was much more involved such as:

- Have more than a couple of public meetings where USACE presented very high level plans & limited public input.
- Suggest that USACE have several 1 or 2 day public workshops throughout the Plan development.
- My experience indicates having public representation as actual team members really improves the product.
- Suggest 1-2 day Final Review Workshops be held in various communities to obtain public support.

By getting much more Public involvement along with other federal/state/local agencies, Congress will be better assured of a much better Plan that is really representative of the Ms Coastal communities. The Public would be more likely to voice support for MsCIP to Congress. Currently, very little of the community is even aware of MSCIP.

Bill Stone
Director, Pineville Community Assoc.
home (228)863-9703, cell (228)342-2969
bstone001@aol.com

Bill Stone_7

From: BStone001@aol.com
Sent: Monday, March 30, 2009 12:44 PM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, Summary, page S-3

It seems like the text at top of page S-5 should not be included under "Tentatively Selected Plan Features".

• Suggest adding a new title for clarity such as : "Water Resource Development Projects".

• Suggest adding an estimate of the costs to perform these studies.

Page S-5, line 20: Suggest adding a new title "Environmental Considerations and Analyses".

****

Bill Stone_6

From: BStone001@aol.com
Sent: Monday, March 30, 2009 12:38 PM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, Summary, Tenatively Selected Plan Features, pg S-3

Tentatively Selected Plan Features

• "These Projects are presented in support of a Record of Decision for construction:" What does "Record of Decision for construction" mean? Suggest a brief definition.

• Why are the "bullet" topics not even discussed? Suggest a very brief description of each "bullet" be added.

• Why are Deer Island, HARP & Barrier Islands discussed but are not included in the bullets?

• Under HARP no mention is made of the Pilot Project to purchase of a few (30?) properties in Hancock County. Also need to include cost.

• Table S-1: Suggest adding approximate Total Cost, so reader can see the total estimated costs that USACE is recommending for approval.

****

Bill Stone_5

From: BStone001@aol.com
Sent: Monday, March 30, 2009 11:52 AM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, Summary, page S-1

paragraph titled "Planning & NEPA Process"

• NEPA is not defined. Assume it is National Environmental Policy Act. What is it? Suggest adding a brief description. NEPA is not mentioned or discussed in this section.

****
Feeling the pinch at the grocery store? Make dinner for $10 or less.
(http://food.aol.com/frugal-feasts?ncid=emlcntusfood00000001)

Bill Stone_4

From: BStone001@aol.com
Sent: Monday, March 30, 2009 11:19 AM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, Summary - general comments

I assume that members of Congress will not attempt to read this very complex Report of nearly 2800 pages. Congress recently passed an extensive Stimulus Bill without even reading it !!!

So, the Summary is very important as this may be the only text read by some of Congress. Suggest that the Summary be written with less complex, engineering acronyms, language, and terms; so that is more "readable & understandable" by the majority of Congress who lack such engineering expertise.

****

Bill Stone_3

From: BStone001@aol.com
Sent: Thursday, March 26, 2009 2:57 PM
To: Rees, Susan I SAM
Subject: MsCIP Main Report, sections 3.17.5.x & 3.17.6.x

The numbered subparagraphs under section 3.17.5 are miss numbered 3.15.5.x. These subparagraphs should be numbered 3.17.5.x. Same for section 3.17.6.x

Bill Stone
Director, Pineville Community Assoc.
bstone001@aol.com

Bill Stone_2

From: BStone001@aol.com
Sent: Wednesday, March 25, 2009 2:44 PM
To: Rees, Susan I SAM
Subject: MsCIP: Harrison Co. Inland Barrier

Building 20 to 40 foot levees along the railroad is absurd !!!

This will cause the coastal cities which will be on the waterside of the levees to disappear !!!

It will eliminate any coastal commercial/residential development, as insurance will be impossible to obtain.

Most of the most valuable real estate in the coastal counties will be made worthless or greatly reduced in value. The only somewhat appropriate solution is for the Corps to propose to purchase all structures & property (municipal, commercial & private) at today's fair market value, which would greatly increase the cost of building such levees.

Am not sure why the Menge Ave. levees are even an option. As by far most of Menge Ave. did not even flood in Hurricane Katrina. So why even consider Menge Ave. levees?

I really think that the Corps understands the economic impact this will cause coastal community.

Bill Stone
Director, Pineville Community Assoc.
bstone001@aol.com

From: BStone001@aol.com
Sent: Wednesday, March 25, 2009 2:22 PM
To: Rees, Susan I SAM
Subject: MsCIP: Surge Barriers

Has the Corps ever designed/built Surge Barriers? I think not, so why even propose such a high risk & costly project? This surely does not represent very sound engineering principles.

Will submerged Barriers restrict the tidal flow in the bay?

Hopefully, Congress will not fund this. But the current Congress is out of control in spending so who knows, as this will stimulate the economy & create jobs.

Bill Stone
Director, Pineville Community Assoc.
bstone001@aol.com

Rees, Susan I SAM

From: BStone001@aol.com
Sent: Wednesday, March 25, 2009 2:10 PM
To: Rees, Susan I SAM
Subject: MsCIP Harrison Co. Public Meeting

Dr. Rees,
I was very disappointed with the Harrison County Public Meeting !!!

Very little of the nearly 2800 page document was presented. I learned more at the workshop, but got different answers from the Corps representatives. The Corps representatives need to give the correct or at least the same answers.

Really disappointed that no Q&As were allowed !!! How can we really understand what this complex Plan encompasses when we cannot ask questions. No one can take the time to read 2800 pages & submit numerous written questions. If we were told in advance that no Q&As were permitted and that only public comments would be allowed, we could have prepared in advance !!!

Most of the public that was present were ecologists & environmentalists who do not really represent the concerned silent majority.

I got the feeling that the Corps really does not want public input & are just going to do what the Corps desires !!!

Finally, most of the presentation was on Jackson & Hancock County. I got the feeling that the Corps is not doing much for Harrison Co., by far the most populated of the 3 counties.

Bill Stone
Director, Pineville Community Assoc.
bstone001@aol.com

****

Response to Bill Stone, e-mails dated 25 – 30 March

1. Thank you for your interest in the Mississippi Coastal Improvement Program (MsCIP) comprehensive planning effort.

2. Response to comment 1. Section 10 of the Main Report provides an index for the reader to facilitate the ease of use of the documents. In addition, we have provided reference in the Main Report to the various appendices so that the reader will be able to learn more detail on a specific topic.

3. Response to comment 2. We have attempted to define all terms at the appropriate point in the discussion so that the reader does not have to refer elsewhere in the document for the definition. We will change the title of Chapter 8 of the Main Report to clearly reflect what is contained.

4. Response to Comment 3. We concur wholeheartedly with the need for public involvement but we must disagree with your statement that there was a lack of public involvement during the development of the MsCIP. There were over 50 public meetings, workshops, small group presentations that occurred between March 2006 and the last meetings held in March 2009. In most instances we held specific meetings in each of the counties and in some cases in each of the towns and cities. We had several multi-day workshops at which the public was encouraged to participate. In addition, we utilized the web as an avenue for public involvement through public auditoria at which the public could interact electronically with the team. The web site also had an active e-mail which was updated on a regular basis and served as an avenue for individuals to provide comment as the planning progressed.

5. Response to Comment 4. We do not understand the basis for your comments. This section is a very general summarization discussion of all those features that are being recommended for construction, advanced engineering and design, and additional study and the basis for those recommendations. The costs of any future studies are detailed in Chapter 5.

6. Response to Comment 5. We have revised the summary to make it easier to understand. Additional details are not provided for some of the 'bullet' topics as these are recommended for construction without any caveat for the need for additional documentation.

There is no pilot project in Hancock County to purchase property. The HARP is comprehensive plan feature that recommends the acquisition of 2000 parcels across all three coastal counties. There is a pilot program recommended for Waveland (Waveland Floodproofing Pilot Project) that would result in the elevation of 25 existing homes in this area to demonstrate the different requirements associated with floodproofing in the coastal area.

Corps decision documents present both 'First Cost' (today's dollars) and 'Fully Funded Costs' (including escalation to the midpoint of construction). Both of these costs are included in the report in order to aid in the decision making process. Fully funded costs are presented in Chapter 5.

7. Response to Comment 6. NEPA has been spelled out. It is the National Environmental Policy Act. Discussion of the requirements of the act are addressed elsewhere in Chapter 1.

8. Response to Comment 7. Comments noted.

9. Response to Comment 8. This was a formatting error which has been corrected in the final report.

10. Response to Comment 9. As directed by Congress the Corps has investigated all engineeringly feasible options for hurricane and storm damage reduction. These options include both structural measures such as levees and nonstructural measures such as floodproofing and acquisition. Due to the costs and environmental impacts a number of these options were dropped from further consideration during the planning process. There are no recommendations for the construction or further study of long linear levee systems across the coast. Rather the report has identified one levee project, Forrest Heights, for construction which calls for the enhancement of an existing levee. In addition 7 areas have been identified which might benefit from the construction of levee however the detailed analysis of these was not possible at this time. We have indicated these locations and the costs of further study in Chapter 5. Should the local community decide to want to participate in further evaluation of these structures they can request this from Congress. The economic impacts to the community, both positive and negative, with and without a proposed project are fully evaluated in the economic appendix.

11. Response to Comment 10. Surge barriers are routinely used in Europe to ameliorate the impacts of flooding, e.g. Netherlands and Great Britain. The Corps is currently constructing surge barriers as part of the hurricane recovery efforts in Louisiana. They are technically feasible means of achieving the desired solution of preventing flooding and therefore were evaluated by the MsCIP. As a part of the long linear levee systems they are not recommended due to increase cost over other applicable nonstructural measures. These barriers are specifically designed to not impact tidal flow when they are not operational (i.e. times when storm surge is not an issue).

12 Response to Comment 11. Following standard procedure only comments are received by the Corps of Engineers during a Public Hearing on a Draft Environmental Impact Statement. To facilitate public input we also scheduled a workshop prior to the hearing to allow for discussion and question and answers. The public notices that were released for the March meetings clearly stated this process. The general presentation was the same for each of the three meetings that were held, one in each of the coastal counties, and only presented examples of the types of comprehensive plan elements that were being considered. The comprehensive restoration of the barrier islands, beach and

dune restoration, Turkey Creek Restoration project, Forrest Heights levee, and the High Hazard Area Risk Reduction Program are all applicable to Harrison County and were discussed in detail at each of the meetings. We apologize that you felt you got different answers from the subject matter experts that were at the meeting and will take actions in the future to ensure the same information is presented to all.

Charles Gallagher_1

From: Charles Gallagher [charlesgallagher@bellsouth.net]
Sent: Saturday, March 28, 2009 12:24 PM
To: Rees, Susan I SAM
Subject: Draft Comprehensive plan and Integrated programmatic Environmental Impact statement - Cost comment

Dr Rees

The Waveland project is estimated at $4,425,000 on pages 5-10 and S-4. It is quoted at $4,611,000. The latter value is based on August 2008. I could not determine the date for the former. I suggest that all cost estimates be adjusted for escalation to the same date in order to permit different parts of the report to be more easily comparable.

Thank you

Charles Gallagher

Charles Gallagher_2

From: Rees, Susan I SAM
Sent: Saturday, March 28, 2009 1:22 PM
To: Rees, Susan I SAM
Subject: Fw: Draft Copmprehensive plan and Integrated Programmatic Environmental Impact Statement - Comment

---
Sent from my BlackBerry Wireless Handheld

_____

From: Charles Gallagher
To: Rees, Susan I SAM
Sent: Sat Mar 28 12:07:44 2009
Subject: Draft Copmprehensive plan and Integrated Programmatic Environmental Impact Statement - Comment

Dr Rees

I suggest that the reporting of the population racial makeup should not be included in the plan.

Sincerely

Charles Gallagher

From: Rees, Susan I SAM
Sent: Saturday, March 28, 2009 1:22 PM
To: 'charlesgallagher@bellsouth.net'
Cc: Rees, Susan I SAM
Subject: Re: Draft Comprehensive Plan and Integrated Programatic Environmental Impact Statement - Waveland Question

Team members were not assigned to individual municipalities. If you have a specific question let me know and I will facilitate an answer.
Susan Rees

Sent from my BlackBerry Wireless Handheld

From: Charles Gallagher
To: Rees, Susan I SAM
Sent: Sat Mar 28 12:04:42 2009
Subject: Draft Comprehensive Plan and Integrated Programatic Environmental Impact Statement - Waveland Question

Dr Rees

Who represented Waveland on your team?

Thank you

Charles Gallagher

Responses to Charles Gallagher, e-mail dated 28 March 2009

1. Response to comment 1. Comment noted. The two costs described are indeed different and are called 'First Cost' (today's dollars) and 'Fully Funded' (including escalation to the midpoint of construction). Both of these costs are included in the report in order to aid in the decision making process.

2. Response to comment 2. Non-concur. The use of socio-economic data, one such being population racial makeup, is required for Corps studies. US Army Corps of Engineer policy, specifically Engineering Regulation (ER) 1105-2-100 referred to as the 'Planning and Guidance Notebook', requires the considerations of Other Social Effects as one of four economic benefit accounts. Further, Executive Order 12898 dated February 11, 1994 requires agencies under the Executive Branch of the President to consider as part of any action the impacts on minority and low-income populations.

City of Pass Christian
PO Drawer 368
Pass Christian, MS 39571
Phone (228) 452-3310
Fax (228) 452-5435

Louis Rizzardi, Alderman Ward 1
Joseph Piernas, Alderman Ward 2
Anthony Hall, Alderman Ward 3
Huey Bang, Alderman Ward 4
Philip Wittmann, Alderman-at-Large

Leo "Chipper" McDermott, Mayor

March 23, 2009

Dr. Susan I. Rees
Program Manager, MsCIP
Mobile, District USACE
P.O. Box 2288
Mobile, AL 36628

Dear Dr. Rees,

It has come to my attention that the US Corp has no definite nourishment plans for Cat Island under your MsCIP program. Although I am glad that all of the islands east of the ship channel are to be nourished, I am concerned for not just Pass Christian and Long Beach, but all of the areas west of the ship channel. Cat Island with all of its trees and vast size is the main protector of direct storms from West Gulfport to the state line. As a person that goes to Cat Island to enjoy its beauty, I have been concerned about the erosion of Goose Point and the east and west ends of this natural barrier since Katrina, and have wondered if anything was going to be done to save this protector island. Having heard you and Dr. Walker speak about restoration of the barrier islands I was encouraged that this would take place in the near future, therefore, this news that Cat Island is not slated for nourishment has concerned me and our citizens greatly.

Dr. Rees, please have Cat Island added to the restoration Littoral System that the other islands are slated to receive. As we all know, the west received the highest storm water and the most damage from Katrina and our future depends on this project.

Thank you,

Chipper McDermott, Mayor

Response to Mayor Leo “Chipper” McDermott, dated 23 March 2009

1. Thank you for your interest in the Mississippi Coastal Improvements Program and specifically the barrier island comprehensive restoration feature of the Comprehensive Plan.

2. Cat Island was never intended to be excluded from the barrier island comprehensive plan however, as described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies seem to indicate that littoral currents do not move sediments across the area known as Ship Island Pass. . Nourishment of Cat Island is not dependent upon a direct link with the other barrier islands, as it by itself if a critical component of the entire Mississippi Sound ecosystem. These and other issues, notably the private ownership of much of the island, will be addressed during the first year following authorization and funding and would be concurrent with other required studies for the remainder of the islands. We have indicated a requirement to perform additional studies to finalize the sediment budget and sediment transport processes and gain a full understanding of the nourishment needs of Cat Island.

In response to your and other concerns, we have revised the Barrier Island Appendix, specifically Chapters 3 and 7, to provide more detail for proposed studies at and immediately around Cat Island. In addition, the Summary of Costs, Table 8-1, will be amended to detail the $1 million dedicated for additional studies at Cat Island and a figure will be inserted in Section 7.3 that’s shows a potential location for littoral zone placement east of Cat Island. The estimated cost of implementation of the comprehensive restoration plan feature contains funding for placement at Cat Island once the specific plan is designed.

To: Army Corp of Engineers District Mobile
Atten: Dr Susan I. Rees

March 29, 2009

From: Doug Seal, City Councilman Bay St. Louis

Dear Dr. Rees,

Let me start by thanking you for all the work you and your group has devoted to helping the citizens of the Mississippi Gulf Coast with your Mississippi Coastal Improvements Program, I do understand you got your marching orders from the United States congress to conduct this study. I have read thru both the Comprehensive Plan and also the Appendix C Real Estate and agree that a lot of time and effort went into the study. I only have a few points that I would like to address.

(1) **Resiliency (i.e., ability to withstand / survive) to storm events equaling or exceeding the 2005 hurricanes was also an evaluation criteria that was applied to the formulation of projects recommended as part of the Comprehensive Plan. In response to the Federal Goal, as established by Congress, the following goals were established (S-2 39-41)**

1

During Hurricane Katrina coastal Mississippi was the point of impact of the greatest tidal surge that has hit the mainland of the U.S. in its recorded history. (Page 1-1)

Response: Why would any study that was to be completed on a disaster be based on a one-time event versus an average of events over some time period? In my current professional role it is my job to conduct Hazard and Operability (HAZOP) studies for a World wide Chemical company, in the private sector we base our risk on the frequency and severity of an incidents, not a one-time incident. It appears now that the Corp of Engineers is using this as their STANDARD, so each time a river overflows it banks the Corp of Engineers should embark on a BUYOUT of ever town located on any river as the probability is there that ONE DAY there will be another flood. As a taxpayer I see this as a waste of my tax dollars and the destruction of a way of life for people who live on any river or coastal community.

(2) **The HARP provides for purchase of properties located in the high hazard zones of the three coastal counties of Mississippi (S-3 38-39)**

2

Response: FEMA did a detailed study of the 3 Coastal counties after Hurricane Katrina, this study produced new elevation requirements and Velocity zones for each county and city. These new elevations are what FEMA says will MITIGATE losses in the future due to the new HIGHER elevation. My contention is that if there is NO structure on a vacant lot, then what is being MITIAGATED ?, the MITIGATION comes in when the property owner builds to the NEW elevation, therefore the buying of VACANT land is not necessary as there is no hazard on that property. Also if there was a Repetitive Loss structure on the property, that Repetitive loss status was erased when the structure was destroyed during Hurricane Katrina, when a new structure is built it will conform to the NEW FEMA elevations, therefore the hazard has been MITIGATED.

1.7.3.5 Federal Emergency Management Agency, Region 4

All hydrodynamic modeling and the development of stage-frequency curves for coastal flooding were closely coordinated with the FEMA. The numerical modeling methodologies were similar and both teams used consistent grids. Results from the FEMA and Corps modeling efforts were generally consistent, with 90% of all results being within +/- 1.0 feet of each other. Final stage frequency values were established by taking an ensemble average of the Corps and FEMA results, to ensure consistency of end results.

3

Response: The City of Bay St. Louis was successful in its appeal of the new DFIRM maps that FEMA spent 3 years trying to get right. As a result of the appeal by the city 12 preliminary FIRM panels changed, it appears that the Corp of Engineers study was based on those errors for the City of Bay St Louis in defining the Coast Mississippi Risk zones, Figure 5-1. As a result of this major change in the DFIRM maps it could be concluded that the Corp of Engineers study is flawed when it comes to the number of affected properties in the city of Bay St Louis. How will this study be updated so that the information that is presented to Congress is not inflated?

5.18.1.1 Phase I HARP

Limited rebuilding is occurring within the surge-plain, at a variety of elevations. Those that are rebuilding at former elevations are largely self-insured (or un-insured), while those rebuilt prior to approval of the revised FIRMs at higher elevations are doing so with an assumption as to what the Base Flood Elevations (BFE) may be for their area. Regardless, most of those that would need flood insurance have not rebuilt at the time of this report, due to changes in National Flood Insurance Program (NFIP) requirements relative to BFE or lack of available and affordable hazard insurance.

4

Response: The study is correct that affordable hazard insurance is creating a problem but the National Flood Insurance program is still writing policies using the 1984 FIRM maps. The 1984 maps are currently still in affect for the city of Bay St. Louis, and will be until the city adopts the new DFIRM maps. It is my understanding that property owners can still build to the 1984 FIRM elevations and STILL will be able to get flood insurance based off those maps. The rebuilding has been STOP over and over by unwarranted BUYOUT scares.

Appendix C Real Estate

1. STUDY Authority/Background

The nonstructural component of the comprehensive plan is to acquire or flood proof all properties within the 1 percent annual chance inundation zone commonly referred to as the '100-yr' floodplain. This equates to an estimated 58,000 parcels of which an estimated 15,000 parcels are within the high hazard zone. Obviously it is not realistic to consider that this action could be undertaken within a short timeframe due to impacts on local tax base, ability to acquire etc. It is more realistic to consider that the component could be phased in over an extended multi-year period. For this reason phased implementation was developed including a flood proofing demonstration, a municipal acquisition and relocation project, a high hazard area risk reduction plan or HARP, and a comprehensive long-term risk reduction plan coordinated between HUD, FEMA and the Corps. The HARP would address approximately 2,000 parcels in the highest risk areas that are not suitable for flood proofing that could be implemented over a five-year period. The long-term risk reduction plan is envisioned as a coordinated effort between HUD, FEMA, and the Corps to be applied over a Much longer period and would include acquisition of additional parcels, flood proofing of existing structures and designated elevation requirements for new

5

structures. In order to maximize benefits under the HARP, the plan would be implemented in the most high-risk areas first and, initially, with owners who are still displaced and willing to sell. However, eminent domain may be used when warranted
Response: The Roadway protection project slated for downtown Bay St. Louis is considered a LOD project, the Corp of Engineers have stated that EMINET DOMAIN could not be used, as a result this project has been held up due to property issues. Why can EMINENT DOMAIN be used here but not on an existing Corp project, there appears to be a double standard.

In closing these are issues that I have pulled out of the 2 reports that I have read, I'm sure with more time there would be more questionable issues that should be addressed. The responses above are my own views and not that of the City of Bay St. Louis or the people I represent as a city councilman. Again thank you for your time and I would like a response to the above issues so that I may continue spread the correct information.

Sincerely,

Doug Seal,

(228) 222-0097 (c)
(228) 467-0561 (h)

Responses to Doug Seal, City Councilman Bay St. Louis dated 29 March 2009

1. Response to Comment 1. Nonconcur. The formulation of the Mississippi Coastal Improvements Program Comprehensive Plan is not based on a one-time event but rather on the full suite of storm events that may impact on the Mississippi coast. One of the specific system-wide goals as stated on S-3 is to "Identify measures to minimize risk to loss of life and safety caused by hurricane and storm surge". This is a general goal. While it is true that we considered Katrina and Katrina-like events in the evaluation the comprehensive plan is not formulated specifically in response to the 2005 storms. These storms were merely the impetus for the development of a comprehensive plan. The approach taken in formulation involved a series of 'lines of defense' (LODs) beginning with the offshore barrier islands and moving inland with progressive levels of risk reduction. Only LOD 5, the farthest inland, would offer significant risk reduction from a Katrina-like storm. A full discussion of the line of defense approach and the surge modeling in presented in Appendix E, Engineering Appendix.

The formulation of nonstructural measures for the MsCIP was based upon the Congressional authorization language, the project goals and objectives developed by the MsCIP team, the damage data developed by the USACE, FEMA and the State of Mississippi and the combined experience of the NS team in addressing flood and surge damages through nonstructural (NS) measures. The NS team determined early in the planning process that the appropriate minimum level of protection for the MS coast would be the FEMA mapped 1% annual chance zone that included the V and VE zones and various A zones included in local Flood Insurance Rate Maps (FIRM). The 1% annual chance event (a.k.a. the 100 year flood and the Base Flood Elevation) formed the basis of the local floodplain management ordinances and hundreds of flood insurance policies in affect at the time that Katrina made landfall. Although eligibility for receiving assistance from the NS program would be based upon surge inundation and wave damages brought on by Katrina, the minimum level of protection for the project area was established as the 1% annual chance event. To select a lesser level of protection defied the local floodplain management ordinance requirements already in affect and to go much higher (even when the damages wrought by Katrina may have dictated a need for a higher level of protection) would have economically and socially gutted all of the coastal communities.

When the NS planning process started, FEMA had already issued the Advisory Base Flood Elevations (ABFE) for those wishing to rebuild along the coast. Based upon FEMA published information, each community and county within the project area had either adopted the new ABFE levels or just added 4 feet of freeboard to the existing BFE in their ordinances for the purposes of new construction. The NS team used the new ABFE (with a reduction (2 feet) in its elevation based upon USACE hydrologic data) as the basis for formulating the NS measures based upon FEMA's published new mapping. So, in fact, the NS measures described in the Main Report and Real Estate Appendix aren't based upon a single event, but on FEMA's analysis of the previous 25 years of hurricanes including Katrina that resulted in the interim ABFE mapping and surge profiles.

Prior to formulating the NS measures, the NS team reviewed all of the damage data generated by USACE, FEMA and the State of MS and spent several days looking at the surge and wave damages between Pascagoula and Waveland. A multitude of residential and commercial structures elevated in accordance with the original local NFIP ordinances were swept away by Katrina's surge and waves resulting in total loss of the structures and in some cases loss of life for those who chose to "ride-out" Katrina. This high-energy surge/wave zone appeared to closely follow the designated V and VE zones mapped by FEMA and the zone designated by FEMA following Katrina as the "catastrophic damages zone" in which insured structures suffered damages estimated by FEMA to be more than 50% of the structures' value. In truth, most of the structures in the catastrophic damages zone were completely demolished by Katrina's surge and waves. The NS team determined that such a high-hazard zone was not a wise place to elevate structures due to the uncertainties of securing solid foundations under the supporting posts, uncertainties about surge and wave heights and the potential for occupants to attempt to "ride-out" the storm in elevated structures. Should a structure fail under those extreme conditions there would be little chance for survival of any occupants and too much risk for emergency responders to attempt a rescue.

In addition, the Digital Flood Rate Maps (DFIRMS), prepared by FEMA, that were used as part of the study were based on the best available data on the hazards of flooding and wave action modeling. The process for map modernization for the Mississippi Coastal counties was begun prior to Hurricane Katrina using existing technology. Hurricane Katrina showed the urgency for providing the new maps sooner rather than later. While Hurricane Katrina may have been a catalyst for expediting map production for the lower 3 coastal counties, it did not set the standard used to associate risk. While Katrina damages may have played a role in evaluation of risk, risk was determined largely by using data provided by LIDAR, bathymetric data, wave modeling, topography and other associated factors normally developed in producing maps.

2. Response to Comment 2. Non-concur. Building to the new higher elevations as stipulated on the DFIRMS is one method of mitigating future flood losses in the Special Flood Hazard Areas (SFHA). While elevation is one method of mitigation it is not the only method of mitigation available. If a parcel of land that at one time had a structure and it was substantially damaged or destroyed is purchased and reserved in perpetuity as facilitating open space use then that property is also mitigated seeing that there will no longer be any flood losses associated with that particular parcel (no structures, no losses). The same would hold true for repetitive loss properties regardless of whether they reside within or outside of the SFHA. As stated in response to question 1, design elevations were not based on storm surge levels seen during Hurricane Katrina, but by the risk associated to that zone during the map modernization. These levels establish the 1% chance of flooding in any given year (100 year flood) and anything above that level could possibly produce flood losses on these properties.

The MsCIP plan is based upon a planning period of analysis that extends for the next 100 years to account for such possible long-term events as sea-level rise in the project formulation. The basic redevelopment assumption over those 100 years is that all

properties along the coast have the potential for being redeveloped during that period of time. Regardless of their current real estate or ownership situation, during that 100 year time period, conditions of ownership can change sufficiently to lead to new development of property (heretofore undeveloped) that has been determined through the NS formulation process (see the answer to question # 1 above) to be within the high-hazard zone. Although there may not be a structure on the property at this time, the potential future hazard posed by hurricane surge and waves still remains a threat; purchasing the vacant property now without a structure present eliminates that potential future loss (over the 100 year period of analysis) at a reduced cost to the taxpayers.

It has been determined by the NS team that although the new FEMA DFIRMs may have provided a higher level of protection than that in affect during Katrina, the new DFIRM does not sufficiently account for the level of damages witnessed during Katrina and still allows landowners to elevate structures within the expanded V/VE zones. Acquiring vacant properties under the MSCIP NS program would forego any future redevelopment in high-hazard zones where new construction may or may not be accomplished in compliance with the new DFIRM or existing building codes (as many being rebuilt now indicate) and would be subject to future loss. In addition, the USACE will not spend Federal funds to elevate structures (using the current guidelines and ordinances) in areas where future storms could destroy the structure and potentially lead to loss of life during the event.

3. Response to comment 3. Non-concur. While portions of the City of Bay St Louis were upheld and several map panels were revised the only noticeable change to these maps was the removal of velocity zones within the 603 corridor, replacing them with AE zones. The revised panels have been reissued to the Cities of Bay St Louis, Waveland and Hancock County. Once the Letter of Final Determination (LFD) is issued for Hancock County these maps will the official Flood Insurance Rate Maps (FIRMS) six months from the date of LFD issuance. Because of the revisions that were supported by the appeal these revised maps are the best available data and shall be used for any decisions regarding mitigation within the FEMA community.

The plan formulation process used by the NS team used the best data and information available at that time. The NS plan formulation process used the FEMA published ABFE (Advisory Base Flood Elevation) mapping and surge profile data as the basis for determining what types of NS measures would be applicable in the different designated flood zones. The ABFE mapping was generated by FEMA based upon 25 years of storm records along the Gulf Coast, not just Katrina. The NS team lowered the FEMA published ABFE elevations by 2 feet to reflect surge profile data generated by Corps hydrologists and to better estimate what the new BFE's published by FEMA in 2008 may reflect. FEMA published information shows that Bay St. Louis modified the required freeboard heights for elevating structures within its own floodplain management ordinances to account for the increased heights of the FEMA ABFE. Unless Bay St. Louis has modified their ordinances since that change, the existing ordinance still maintains that increased freeboard requirement for new development.

At the time when the NS plan was being formulated, FEMA had not modified the existing V/VE zones to reflect the damages seen in Katrina, but had identified the "catastrophic damages zone" based upon damages to insured structures across the MS coast. The modified V/VE zones published in the new FEMA DFIRMS are a close rendition of the combination of the original V/VE zone and the FEMA identified "catastrophic damages zone". Rather than being considered to be "inflated", the numbers of structures affected by Katrina and any future storms of that magnitude that would be eligible for some form of damage reduction through the USACE nonstructural plan measures is very understated by using the ABFE surge profiles. Actual Katrina storm surge profiles are much more extensive and show deeper flooding depths than the ABFE. Using the 1% annual chance flood profile based upon the FEMA ABFE (slightly reduced) for NS plan formulation is fully in keeping with what local ordinances already require.

As a part of the MsCIP plan recommendations, the Corps has requested authority and funding to purchase 2,000 properties within the designated "high-hazard" zone (the original FEMA V/VE zone and FEMA designated "catastrophic damages zone"), to elevate 25 structures in the Waveland, MS area and to formulate protection measures for the municipal structures in Moss Point that may include replacement of that municipal complex at another flood safe location. The MsCIP plan recommendations also request authority and funding to develop more detailed plans for reducing future surge and wave damages along the MS coast through a long-range planning process with the municipalities and counties as well as FEMA and HUD and other state agencies involved. Those more detailed plans for future high-hazard zone acquisitions, floodproofing and relocations within the 1% annual chance surge inundation zone will use whatever Base Flood Elevations and V/VE zones are included within the locally adopted floodplain management ordinances at the time of the planning effort.

4. Response to Comment 4. Comment noted. The City of Bay St Louis adopted 4 feet of freeboard into their Flood Damage Prevention Ordinance (FDPO) following Hurricane Katrina in lieu of adopting the Advisory Base Flood Elevation Maps (ABFE's). Adoption of the ABFE's would have qualified homeowners who had flood insurance, were substantially damaged (greater than 50%) and subject to a higher elevation, up to $30,000 through the Increased Cost of Compliance (ICC) clause within their flood insurance. The 1984 maps are still in effect for insurance rating purposes until the new DFIRM maps go effective. Flood insurance is still available to **all** residents of the City of Bay St Louis and policies purchased prior to the new maps going effective will be rated in the current zone as long as there is nogaps in coverage. A gap in coverage may place the policy holder with a new zone as defined by the DFIRM maps. Individuals wishing to rebuild prior to the DFIRMS becoming effective must comply with elevations as shown on the current effective FIRM maps as well as the City of Bay St Louis FDPO which required 4 feet of freeboard. The construction of new structures in compliance with the new DFIRM elevations should be encouraged to assist in mitigating future losses.

5. Response to Comment 5. Comment noted. During the development of the Mississippi Coastal Improvements Program Interim Report we evaluated a number of possible projects for interim recommendation that would aide in the recovery of the coast. The reconstruction of the Bay St. Louis seawall was identified as a critical project in that it was necessary for the reduction of possible damages to Beach Boulevard which was going to be reconstructed. To qualify as an interim, projects had to meet several criteria including: no adverse environmental impacts, no need to detailed engineering studies to design the solution, no public controversy, and support of the state and community for construction of the project. During the initial planning, the team was led to understand that the community would totally support this project and provide necessary easements to facilitate construction. In general the Right of Eminent Domain is a necessary requirement for cost share projects and the exercise of such is considered on a case by case basis and may or may not be exercised depending on project specific factors and circumstances. Specifically for the Bay St. Louis seawall, the construction was authorized as 100% Federal and we chose not to exercise Federal use of eminent domain based on our initial selection criteria. To facilitate construction of this critically important project to Hancock County, the County has graciously stepped in to assist with the acquisition of rights over those property owners who choose not to voluntary provide easements.

The HARP is to be implemented on a willing seller basis first and we do not plan to routinely exercise eminent domain during the implementation. However, we reserve the right to exercise such in special circumstances, if necessary. Any decision to apply eminent domain proceedings would emanate from a joint decision-making process between the State and the Corps of Engineers.

CITY *of* GULFPORT

Ella Holmes-Hines
Councilwoman, Ward Three

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Fax: (228) 868-3856
ehines@ci.gulfport.ms.us

2309 15th Street
Gulfport, Mississippi 39501

P.O. Box 1780
Gulfport, Mississippi 39502

Mayor-Council Form of Government

March 31, 2009

Delivery: Via Facsimile

Dr. Susan I. Rees
Department of the Army
U.S. Army Corps of Engineers, Mobile District
P.O. Box 2288
Mobile, AL 36628-0001

Re: Public Comment for MsCIP and Forrest Heights Levee

Dear Dr. Rees:

Please accept the following public comments as a comprehensive plan for the Turkey Creek artery and basin:

1. Forrest Height Community consented to the 21-feet Levee around their homes for removal from the Flood Way.
2. Pastor George Rouse of the Forrest Height Missionary Baptist Church, 5215 Ohio Avenue, Gulfport, MS (228-864-7112) would like a protection Levee around his church.
3. The Turkey Creek Community Homeowners and North Gulfport community residents will not accept any additional storm water runoff into their neighborhoods and would like support to eliminate the storm water off into the neighborhoods.
4. Moratorium on impacted wetlands in the Turkey Creek basin.
5. Desnag, debris removal, clearing, planting vegetation in the Turkey Creek basin.
6. Support to Long Beach, Mississippi, Turkey Creek artery and feeder ditches.
7. Purchase more wetlands in Turkey Creek basin.
8. Feeder ditches in Floral Estates, Rolling Meadows, East North Gulfport and West North Gulfport, Turkey Creek community and the business district are in need of support to drain properly.
9. Support to all drainage ditches within the Turkey Creek basin.
10. Support of the maintenance to the Turkey Creek basin.

Thank you for your consideration,

Ella Holmes-Hines
Councilwoman, Ward 3

Response to Ella Holmes-Hines, Councilwoman City of Gulfport, dated 31 March 2009

1. Response: We look forward to working with the City and local leaders in providing risk reduction to the Forrest Heights community and in support of activities in the Turkey Creek watershed.

March 25, 2009

Dr. Susan I. Rees
MsCIP Program Manager
Mobile District,
U. S. Army Corps of Engineers
P. O. Box 2288
Mobile, AL 36628

Re: US Corps of Engineers Coastal Improvement Program (MsCIP, Feb., 2009). Protection issues; vulnerability and restoration needs; The case for Cat Island.

Dr. Dr. Rees:

Please allow me to share my thoughts with you regarding certain important aspects of the program you are presently managing. My comment mainly involve the role of Cat Island in the planned island nourishment projects.

Introduction

A recent Draft Program by the Mobile District, US Corps of Engineers (2009) proposes very substantial nourishment efforts in island restoration to combat erosion problems exacerbated by land loss to catastrophic recent Hurricanes Camille and Katrina. I take exception to some of the statements made regarding the natural littoral/longshore sand supply that reaches Cat Island. This also included the easily challenged claim voiced in the present Corps Draft Program (2009) regarding alleged total absence of sand transport from Ship and Cat as the result of changed positions of the eastern part of the Mississippi River Delta.

Littoral sand transport from Ship Island to Cat Island and points to the west was the process that enabled formation of the western members of the Alabama-Louisiana (New Orleans) islands. There is no reason to doubt that sand transport, driven by the dominantly westward-directed waves from the Gulf does carry sand across the bottom of Ship Island Pass to reach the east shore of Cat Island. This highlights the need for a sediment bypass of the Ship Channel that avoids permanent sediment loss from dredging to its transport to Cat Island . To facilitate the sand reaching Cat Island, as done downdrift from Petit Bois Pass, sediment dredged from the channel should be deposited in a spoil pile on the western (downdrift) side of the channel.

The thrust of the Corps recommendations essentially favors partial restoration of Ship Island only. However, I would argue that a more even-handed restoration strategy may benefit Cat Island's protection and its long term survival chances with well-planned placement of sand resources along its eastern and northern shore sector.

Sand transport issues in island chain; subaqueous sand transport from West Ship to Cat Island

It has been well established that littoral drift along the island beaches and the nearshore littoral current plays an overwhelming role in east-west sand transport along the Alabama-Mississippi barrier island chain. This transport at present involves the entire barrier chain, starting in Dauphin Island, Alabama and continuing along the shores of Petit Bois, Horn, East and West Ship Islands, finally reaching Cat Island. As the sand-transmitting role and capacity of shallow ebb tidal deltas between the islands clerarly indicates, transport processes do not stop, only slow when they encounter passes and man-made, regularly dredged deep ship channels. Examples include the role of the giant Mobile Pass ebb tidal delta and of the smaller ebb-deltas off Horn Island and Dog Island Passes. Ship Island ship channel also acts as a "temporary sediment sink" in slowing but not entirely stopping the westward-directed littoral sand transport. By removing spoil material from shore-parallel downdrift sand transport, the regular dredging of the Ship Island navigation channel certainly diminishes the volume of sand that traveling along the Ship island shore, eventually reaches Cat Island in the west.

In recent geological history (Otvos and Giardino, 2004) Cat Island has been the offshore transmitting point of sand from Ship Island toward the south Hancock County, Mississippi - New Orleans Pine Island barrier chains that existed until growth of Mississippi River's St. Bernard delta lobes surrounded and partially buried these barriers and stopped littoral drift but *only west of Cat Island* more than 2000 years ago. While subsequent further growth and partial blocking Ship Island Pass probably diminished westward transport from Ship to Cat, the subsequent disintegration of easternmost St. Bernard Delta that previously has partially obstructed Ship Island Pass, now allowed the resumption of sand transport to Cat Island. The claim (USCE Draft Program, 2009, p.74) of "termination of littoral current transport due to the southward extension of the Mississippi Delta" is, as the Program Statement itself admits in a separate passage, not very well substantiated and therefore rather questionable. According to another far less than accurate statement, "portions of the barriers rolled over towards the Sound"; p.27).

Causes for land losses in Cat and Ship islands. Contrast between island elevation and morphology and its impact on island reduction and area reduction

Between 1848 and 2005, the total area of the two Ship islands has been reduced from ~600 ha to 204 ha, while Cat Island shrunk from ~1200 to 743 ha (Otvos and Carter, 2008; with similar values in Morton, 2007). A major reason for the historically steadily increasing, by now catastrophic shrinkage of Ship island may be its generally low surface elevation and exposed position. Most of Ship, especially its former central and eastern sectors consist of low sand flats that are reduced quickly to underwater shoals during major storms only to recover relatively slowly thereafter. In contrast, only very

minor areas in Cat Island (located exclusively in the SE spit area) are represented by shallow subtidal and low supratidal sand flats.

As historical data shows, recovery of the sand flat sectors remains incomplete even after several years of relative calm following a storm. It is reversed suddenly by the passage of a new hurricane. The much higher ground in West Ship proved to be more resistant to storm effects but even the relatively high relict beach ridges of East Ship, due to their unprotected setting were almost completely wiped out by Hurricane Katrina. Restoration of the low Ship island sectors by sand nourishment may bring only a very temporary respite at an unreasonably high cost.

Cat Island has been much better protected in the past. It is shielded from the Gulf by a pair of north-south-oriented wide, although steadily narrowing sand spits. Surface elevations especially in the higher dunes- covered northern spit and the E-W trending central strandplain-"shank" of the island are relatively high. Slow subsidence effects mostly a small NE sector of the island west of and in the protection of the northern spit. Most of the island's area loss took place by recession of the southern spit that recovers quickly each time after hurricane passage. The new shoreline usually forms somewhat west of the pre-storm shoreline. It is these spit areas that receive the westward transported sand that crosses Ship Island Pass from West Ship Island. Without the protection of the still relatively wide eastern spit belt the central and western areas of Cat Island would relatively quickly waste away under the recurring major hurricanes that regularly strike it from the Gulf.

Littoral drift, aided by wave refraction at this critical site constantly moves sand from this location both toward the northern and southern spit areas. Stockpiling would augment sand supplies that reach the island from West Ship via westward wave transport over the bottom of shallow Ship Island Pass. This natural transport process probably plays a significant role in keeping the spits relatively well supplied with sand and thus bolsters the island's defenses.

The spit zone is a major protection for the rest of the island that, because sheltered by the eastern spit belt suffered remarkably little overall erosion during the past 160 years. While central and eastern Ship Island, with or without massive nourishment efforts will inevitably waste away, *Cat Island would be more efficiently and effectively protected by regular nourishment, Repeatedly applied sand stockpiles may significantly lengthen the island's life. Deposition of significant sand volumes at the central sector of the eastern island shore thus could play a crucial role by mitigating the long-term effect of island erosion due to hurricane strikes.*

Recommendations

I recommend the regular placement of dredged and other sand resources along the central sector of Cat Island eastern shore to augment the northeastern and southeastern island spit. The two wide spit sectors undoubtedly play a crucial role in slowing the slow westward retreat of the eastern island shoreline, thereby diminishing and delaying steady destruction of the entire island. In view of the contrast between the two islands' geological framework and development history, sand nourishment at critical Cat island sites appear to be incomparably more cost-effective, of more enduring impact, and therefore more rewarding than sand placement on Ship Island sites would be. Therefore, at least some of the sand resources intended for Ship should be diverted to protect Cat Island. The transport scheme should also include sand bypassing around the Ship Island (Gulfport) Ship Channel. The establishment of a dredge spoil pile west (downdrift) of the ship channel. as engineered also at the west tip of Petit Bois Island. This would increase sand volumes that reach Cat Island by natural wave transport across Ship Island Pass.

Key References

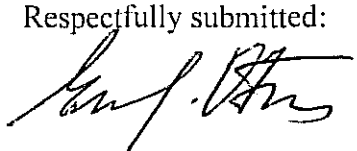
Morton, R. A., 2007, Historical changes in the Mississippi-Alabama barrier islands and the roles of extreme storms, sea level, and human activities. US Geological Survey Open-File Report No. 2007-1161.

Otvos, E. G. and Carter, G. A., 2008, Hurricane degradation- barrier development cycles, NE Gulf of Mexico: Landform evolution ands island chain history. Journal of Coastal Research, v. 24, p. 463-478.

Otvos, E. G. and Giardino, M. J., 2005, Interlinked barrier chain and delta lobe development, northern Gulf of Mexico. Sedimentary Geology, v. 169, p. 47-73.

US Corps of Engineers Mobile District, 2009, Mississippi Coastal Improvement Program (MsCIP), Hancock, Harrison and Jackson Counties, Mississippi. Appendix H. Barrier Islands, 80 p.

Respectfully submitted:



Ervin G. Otvos, Ph.D.
Professor Emeritus, USM
336 Oakridge Circle
Biloxi, MS 39531-2027

cc. Dr. William Walker, Mississippi Department of Marine Resources
Mr. George Boddie, Pass Christian, MS

Response:
Thank you for your letter dated March 25, 2009 in which you identified concerns with the Draft Mississippi Coastal Improvement Project report. We have listed each of your concerns, below, and explain how each of these was addressed in the report.

Response to comment 1.

As discussed in the MsCIP sediment budget report, analysis of bathymetric and shoreline position data from 1917/20 to 1960/71 indicated an absence of morphologic change west of Ship Island Pass over to Cat Island (see Figure 16, reproduced below). Note that the red and blue bathymetric change (indicated erosion and accretion, respectively) occurring at Dog Keys Pass, between Horn and Ship Islands, is absent west of Ship Island Pass over to Cat Island. This absence of any morphologic signature indicates that there was not a pathway of sediment transport from Ship Island to Cat Island, nor from the Ship Island disposal sites (shown as light green areas to the west of the Ship Channel) to Cat Island during this time period. It may be that this pathway would be evident in the recent 2008 data set. Before beach nourishment is designed for the Mississippi barrier islands, we will analyze the most recent data and conduct numerical modeling studies to determine the best areas for placement of sand. The report has been modified to more completely detail these plans.

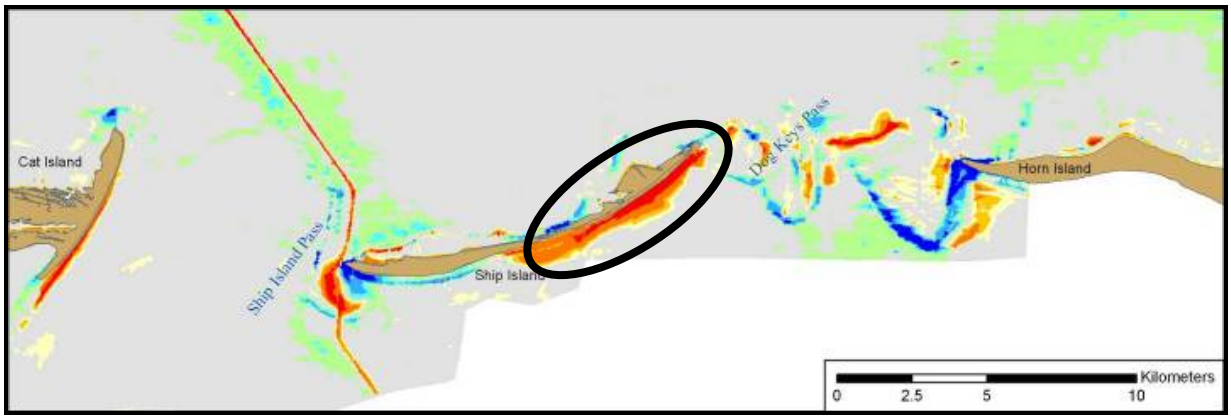


Figure 16. Bathymetric change (1917/20 to 1960/71) for the Mississippi Sound study area - Cat Island to Horn Island (from Byrnes and Griffee 2007)

Response to comment 2.

Your suggestion will be evaluated when we conduct the numerical modeling simulations that will evaluate various placement locations east of Cat Island. The report discusses these future plans.

Response to comment 3.

Please refer to the discussion pertaining to 1, above. These data indicate that there was not significant westward-directed littoral sand transport west of Ship Island from 1917/20 to 1960/71. More recent data will be analyzed to determine if westward transport between the Ship Channel and Cat Island is occurring now.

Response to comment 4.

The report says: "Formation of the St. Bernard deltaic complex and reworking of this delta to form the Chandeleur Islands reduced wave energy and transport of littoral sediments reaching Cat Island." The word "reduced" is used in the report, not "termination." We believe this is a reasonable statement.

Response to comment 5.

This statement refers to Figures 15 (reproduced below) and 16 (shown previously). Notice the circled areas on the figures, which show how the islands eroded (red areas) and reformed further into the Sound. This morphologic change is the "rollover" process.

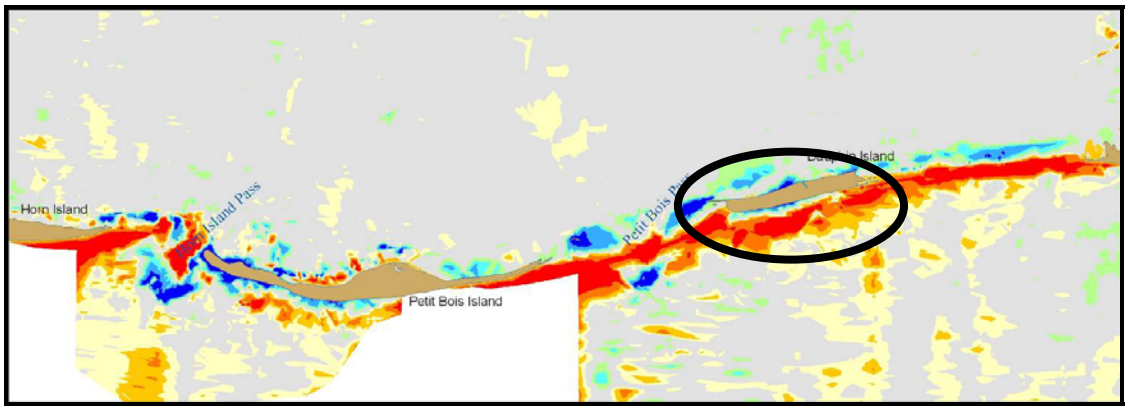


Figure 15. *Bathymetric change (1847/52 to 1917/20) for the Mississippi Sound study area - Horn Island to Dauphin Island (from Byrnes and Griffee 2007)*

Response to comment 6.

The primary benefits provided by closure of Camille Cut and the addition of sand into the littoral system that feeds sand to Ship Island are mostly environmental in nature. The additional salinity levels in Mississippi Sound that are occurring due to the presence of Camille Cut and the gradual loss of the islands are having an effect on the local

ecosystem. While our modeling has indicated that the restoration at Ship Island will only provide limited storm surge benefits, the presence of the island chain will provide sea-wave protection for the mainland coast. Also, the National Park Service has a vested interest and mission in preserving cultural artifacts on Ship Island (Fort Massachusetts and the French Warehouse). The NPS has deemed that restoration of Ship Island is necessary for maintaining these cultural resources.

Response to comment 7.

This may be a very good location for dredged material placement, one we will evaluate with numerical modeling as we design alternatives for the barrier islands.

Response to comment 8.

Once again, we will evaluate this placement option with numerical modeling in the next phase of the study.

Response to comment 9.

All viable placement locations, including those on Cat Island, will be evaluated with the most recent bathymetric and shoreline data with a system of numerical models. These models will evaluate episodic and long-term evolution of the islands and dredged material placement sites. The sites most critical to maintaining integrity of the islands will be selected for full design.

George Crozier

From: George Crozier [gcrozier@disl.org]
Sent: Wednesday, April 01, 2009 11:51 AM
To: Rees, Susan I SAM
Subject: MS Coastal Improvement Comment

Susan - Thanks for sending me the CD. I hope that you will add this e-mail to the comments re the draft plan. Foremost in my mind is the logic that would extend the planning process to include all of Mississippi Sound. You and I know better than most just how integral Dauphin Island is to the barrier island chain that literally defines the Sound so I'm not going to waste our time expanding on that.

I was on the Environmental Advisory Board long enough that I obviously understand the language that defined the Corps' authorization for the initial study and that it could only be modified by Congress at this point - but the science and logic of such a recommendation is not beyond
your authority at this point and I would hope that it could be included in the final report as the system moves slowly toward implementation.

If you find that I can assist that process in any way, please contact me.

George Crozier
Executive Director
Dauphin Island Sea Lab

Response to George Crozier, Dauphin Island Sea Lab, e-mail dated 1 April 2009

1. Response: Thank you for your comment. As you mention the Congressional authorization for the Mississippi Coastal Improvements Program was specific to the coastal area of Mississippi and as such the MsCIP focus on the three coastal counties and those waters defined by the State boundaries. To the maximum extent possible we have utilized data covering the entire northern Gulf of Mexico coast in the formulation of the comprehensive plan. In addition, we have evaluated all the proposed plan features to ensure that no negative or unintended impacts would occur in neighboring areas, e.g. Alabama and Louisiana. All of our recommendations, however, are specific to coastal Mississippi due to the authorizing language.

DE-
DY-C
PD 16

March 24, 2009

407 Diard Circle
Dauphin Island, Alabama 36528

COL Byron Jorns, District Engineering Commanding
U.S. Army Corps of Engineers
P.O. Box 2288
Mobile, AL 36628

Dear COL Jorns:

I am writing to provide my comments on the Draft Mississippi Coastal Improvements Program (MsCIP) Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (EIS). Although the Corps has done its usual commendable job, a critical defect of the report is its failure to include Dauphin Island in the Comprehensive Barrier Island Restoration Plan.

The Draft Report states that the primary purpose of the Comprehensive Barrier Island Restoration Plan is to create a "First Line of Defense" to protect the mainland Mississippi Coast and the estuarine resources of Mississippi Sound. Even before Hurricane Katrina, all of the Mississippi Sound barrier islands, including Dauphin Island, were suffering from varying degrees of coastal erosion. Without assigning specific blame, the Draft Report lists storms, sea level rise, and anthropogenic forces as being the causative factors for the erosion problems. The report further states that there is a progressive reduction in sand supply across the islands and an overall regional shortage of littoral sand for barrier island maintenance.

While the sand shortages are manifested throughout the barrier island chain in Mississippi, the sand shortage actually begins on Dauphin Island in Alabama. However, the report does not clearly address this crucial fact, failing almost entirely to acknowledge that Dauphin Island is a critical component of the barrier island chain. Although the significant coastal erosion problems that are being experienced by Dauphin Island are well known and have been recently investigated in other documents, the Draft Report makes no mention of Dauphin Island in its treatment of the Mississippi Sound barrier island chain or what the long-term consequences will be to the down-drift Mississippi barrier islands if Dauphin Island's shoreline erosion problems are not addressed.

Without explicitly addressing the importance of Dauphin Island as the lead island in the Mississippi Sound barrier island chain, the MsCIP study process gives implicit understanding to the important role that Dauphin Island plays in the formation and maintenance of the Mississippi barrier islands by including Dauphin Island in the sediment transport modeling and sediment budget investigations that were performed to develop the Comprehensive Barrier Island Restoration Plan. The report's findings would be greatly enhanced if it openly addressed the critical importance of Dauphin Island as the lead island in the Mississippi Sound barrier island chain and as the original source of sand from which all of the down-drift Mississippi barrier islands were formed. The report should also point out that the Mississippi islands continue to owe their existence to the sand transported from Dauphin Island via the natural east-to-west

littoral drift processes. Lastly, the report should acknowledge that without a viable and robust Dauphin Island, the continued existence of the Mississippi barrier islands will remain in jeopardy.

Evidence of the significant effects that Dauphin Island's coastal erosion problems are having on the down-drift Mississippi barrier islands is reflected in the Comprehensive Barrier Island Restoration Plan recommendation to place 4,000,000 cubic yards of sand on Petit Bois Island. Petit Bois Island is a mere three miles to the west of Dauphin Island. The necessity of placing sand on Petit Bois Island is a direct result of the shortage of sand that is being transported from an ever-diminishing Dauphin Island, the shortage of which is having adverse consequences for the entire Mississippi Sound barrier island chain. Unless actions are taken to include Dauphin Island in the Comprehensive Barrier Island Restoration Plan, the recommended work on Petit Bois Island can only be considered to be a "stop-gap" measure since after the placed sand is transported to the west by littoral drift, additional sand will have to be artificially placed again at Petit Bois Island at some point in the future. Until Dauphin Island, as the lead island in the barrier island chain, is included in the Comprehensive Barrier Island Restoration Plan and addressed in a holistic fashion with the Mississippi islands, the plan cannot in fact be viewed as truly being a "comprehensive" approach to restoring the Mississippi Sound barrier islands.

It is interesting to note that the sand identified for placement at Petit Bois Island is targeted to come from one of two sources in Alabama (i.e., from the shallow waters surrounding the western end of Dauphin Island's or from the lower Tombigbee River disposal sites). I have trouble with the logic of the approach that would use sands taken from Alabama sources to satisfy the sand shortage needs of Mississippi's barrier islands while ignoring even the existence of the equally serious coastal erosion problems affecting Dauphin Island.

In summary, Dauphin Island is experiencing significant coastal erosion problems, a fact with which no one disagrees. If Dauphin Island's erosion problems are not addressed, the long-term consequences for the Mississippi barrier islands, Mississippi Sound and the Mobile County mainland will be catastrophic. For the first time, the MsCIP provides the comprehensive mechanism needed to address the coastal erosion problems affecting all of the Mississippi Sound barrier islands, including Dauphin Island. Continuing to ignore Dauphin Island's erosion problems will not contribute to the much needed stability of the down-drift barrier islands in Mississippi.

I fully understand that the Congressional authority that called for the MsCIP Study to be conducted established the present limits of the study area as the three coastal counties of Mississippi. However, after working for the Corps for over 31 years in Planning and Project Management I also know that, when appropriate, the Corps can elect to seek permission to expand the geographic limits of a study area if such an expansion will improve the resulting study recommendations. During my career, I have seen that approach used on more than one occasion, with the result being that a superior end product was eventually produced. The point being, the Corps can, if it so chooses, initiate a request to expand the MsCIP Study Area to include Dauphin Island, the Mobile County mainland, and the Alabama portion of Mississippi Sound. I think there is a compelling justification to pursue an expansion of the present MsCIP study area so that a comprehensive solution to the Mississippi Sound barrier island erosion

problems can in fact be developed – Dauphin Island must be included in the study if that is to occur. In conclusion, I request the Corps to take the necessary steps to expand the study area.

I appreciate your consideration of my comments.

Sincerely,

Glen Coffee

Response to Glen Coffee dated 24 March 2009

Response: Thank you for your comments. We do not concur that the report should be revised to include Dauphin Island as part of the plan formulation effort. The decision to not include Dauphin Island as part of the Mississippi Coastal Improvements Program (MsCIP) was not an arbitrary decision of the USACE but rather in response to the authorizing language which states in part "*the Secretary shall conduct an analysis and design for comprehensive improvements or modifications to existing improvements in the coastal area of Mississippi in the interest of hurricane and storm damage reduction, prevention of saltwater intrusion, preservation offish and wildlife, prevention of erosion, and other related water resource purposes at full Federal expense"*. The Congressional authorization is specific to the coastal area of Mississippi and as such the MsCIP focus on the three coastal counties and those waters defined by the State boundaries. To the maximum extent possible we have utilized data covering the larger region of the northern Gulf of Mexico in the formulation of the comprehensive plan. In addition, we have evaluated all the proposed plan features on a regional basis to ensure that no negative or unintended impacts would occur in neighboring areas, e.g. Alabama and Louisiana. All of our recommendations, however, are specific to coastal Mississippi due to the authorizing language.

There is no doubt that Dauphin Island suffered damages as a result of Hurricane Katrina but as stated above the authorizing language was directed to the coastal area of Mississippi and therefore did not include the coastal area of Alabama. We included discussion of the Louisiana area because Congress authorized a similar study for this area, the Louisiana Area Coastal Protection and Restoration Study, as a result of Hurricane Katrina, and we were directed to ensure that the two studies were closely coordinated through their development. In addition, there is concern on the part of many Mississippi stakeholders that existing and future hurricane protection efforts in eastern Louisiana would have significant negative impacts due to induced flooding in western Mississippi.

That Dauphin Island is part of the barrier island chain of the northern Gulf of Mexico and that is a part of the sand budget of the northern Gulf is not in dispute. It is well known that the origination of the sand transport system which supports the northern Gulf shoreline originates in the Apalachicola Bay area with sediments of an Appalachian origin. The Florida panhandle shoreline, Fort Morgan, the Mobile ebb tidal delta, Dauphin Island, and the Mississippi islands are all part of this system. It is not accurate to say that the Mississippi island chain owes its existence to Dauphin Island.

The comprehensive barrier island plan is not being recommended to protect the Mississippi mainland. The main purpose of proposing to restore these National Park Service Gulf Islands National Seashore barrier islands is to maintain the integrity of the Mississippi Sound ecosystem and the ecosystems of the Mississippi mainland. Granted there are incidental benefits which may accrue to the Mississippi mainland due to the reduction of wave generated erosion specifically from everyday climatic events and possibly low level tropical storms. Restoration of the islands will not provide significant

risk reduction to higher energy hurricane events. The major risk reduction feature of the MsCIP is the High Hazard Area Risk Reduction Program which will initially acquire approximately 2000 parcels along the mainland Mississippi coast. This represents approximately 13 percent of the mainland coast. Over the long term over 15000 parcels could be acquired in the high hazard area.

As part of the plan formulation, we considered all appropriate sources of sand to fill the need required by the barrier island restoration, including offshore and inland. As part of this effort we evaluated the transport of sand stored in upland navigation dredged material disposal sites on the inland waterway system of Alabama. The challenges with utilizing this sand included the physical characteristics of color and grain size as well as the economic cost of transporting the material. For these reasons the use of 'river sand' was eliminated from consideration.

In conclusion, we believe we have fulfilled the intent of Congress as expressed in the authorizing language. The Mississippi Coastal Improvements Program Comprehensive Plan makes recommendations for projects within the political boundary of Mississippi while considering the positive and/or negative impacts that may occur outside this boundary if the plan is implemented.

Again thank you for your comments.

Rees, Susan I SAM

From: Smith, Thomas E SAM
Sent: Monday, March 30, 2009 12:39 PM
To: Rees, Susan I SAM
Subject: FW: MsCIP Question

Attachments: Graveline at Bayou Lamotte.pdf

Graveline at Bayou Lamotte.pdf...

FYI

TOm Smith
Project Manager, Mississippi Coastal Team Corps of Engineers, Mobile District
251.690.3270 (Cell)251.605.0637

-----Original Message-----
From: GORDON QUESENBERRY [mailto:gquesenberry@mcwinc.com]
Sent: Friday, March 27, 2009 2:29 PM
To: Smith, Thomas E SAM
Subject: MsCIP Question

Tom,

Earlier today, someone in Gautier approached me regarding an extreme-high-tide roadway flooding problem. The flooding location is Graveline Road at Bayou Lamotte. I have noted the location on the attached map.

This Bayou never came up in past discussions regarding restoration of natural drainage ways because the Bayou is mostly encompassed within Shepherd State Park and would not benefit from dredging.

Solution to the flooding is fairly straightforward, raise the road. But, this is one time when raising the road via a bridge (probably less than 100 feet total span length) would provide much more than improved public safety. Specifically, it would open up the man-made constriction of the Bayou (culverts under the roadway) and permit better exchange of fresh and salt waters targeting natural restoration of the marine ecosystem within the park. The project would be a mini-example of the one jointly constructed by the Mississippi State Port Authority and Jackson County for Fountainbleu Road at Graveline Bayou back in maybe 2003. That project replaced an earth-filled causeway with a bridge about 1/2 mile long.

Not sure why this idea was not mentioned back when the MsCIP was taking shape. Guess I was more fully using my BS in Civil Engineering degree than my ME in Environmental Engineering Sciences degrees. If it is not too late in the game, I would ask that the District give this project a once over. If it seems to have value and a possible place in your list of doables for the next round of construction, I am certain Gautier will do whatever is needed to assist the District in getting the project added.

Thanks for your support. Should you need anything else at this time, please let me know.

Gordon

Gordon S. Quesenberry, P.E.
Gautier City Engineer
McCrory & Williams, Inc.
(251) 476-4720

<<...>>

Response to Gordon Quesenberry, e-mail dated 30 March 2009

Response: Thank you for your comment. This area was not identified in any of our sessions on problems to be addressed by the Mississippi Coastal Improvements Program. Based on the description provided it does not appear that this project would fall under hurricane storm surge risk reduction and without much additional study we would not be able to determine the degree of environmental restoration. We suggest you contact the Natural Resource Conservation Service as they may be able to assist you with this roadway.

97444 Diamondhead Drive West
Diamondhead, MS 39525

3-17-09

Dr. Susan Rees
Program Manager, MsCIP
Corps of Engineers
Mobile, AL

Dear Susan:

President Obama has repeatedly called on citizens to send their concerns to him. Accordingly, I have sent the attached letter to him.

I look forward to hearing you speak Wednesday in Bay St. Louis.

Thank you,

Harold Dawley

Harold Dawley
228 467 4210

97444 Diamondhead Drive West
Diamondhead, MS 39525

3-17-09

Dear President Obama:
The White House
Washington, D.C.

I have a question about financial loss experienced by businesses that rebuilt/reinvested in Gulf Coast communities hard hit by Katrina who are now un-expectantly being adversely affected by US government policies.

My specific question relates to businesses in these communities who used SBA commercial disaster loans to rebuild/reinvest. When these loans were made, most businesses making them assumed that their communities would more or less return to their pre-Katrina population levels. But the pre-Katrina residents of many hard hit communities have not returned. In some communities less than one-third of the pre-Katrina residents have returned and less than 25% of the businesses have returned. There are a number of factors related to this problem with one being the increased flood elevation requirements that make it more difficult and expensive to rebuild and another being the significant increase in the cost of insurance. Since the success or failure of many small businesses can be related to the number of local residents living nearby, US government polices that have discouraged local residents to return to these communities are making it more difficult for these businesses to survive.

The potentially most significant adverse factor for SBA commercial disaster loan funded businesses survival is the proposed Corps of Engineers buy out along the Mississippi Gulf Coast. While the merits of this proposal are clearly evident, one adverse consequence that may not be readily evident is the increased likelihood of many residents opting to sell there land and either move out or not rebuild. This presents an added burden for SBA commercial disaster loan funded businesses whose viability is closely related to the size of the local population.

I would like to suggest that consideration be given to forgiving SBA commercial disaster loans for businesses struggling to survive in areas hard hit by Katrina where the Corps of Engineers buy out is being proposed. Since there is still a shortage of housing along the Mississippi Gulf Coast, to facilitate the development of new housing, forgiveness of the SBA commercial disaster loan could even be in the form of a credit to be used to build housing in designated areas.

I would appreciate an opportunity for input into whatever policy is adopted to address the issue I raise above. I have sent copies of this letter to the Director of the SBA Regional Office in Birmingham, the Corps of Engineers person handling the proposed buy-out along the Mississippi Gulf Coast, among others.

Thank you.

Harold H. Dawley, Jr.

Cc; SBA Administrator
SBA Regional Office, Birmingham, AL
Congressman Gene Taylor
Dr. Susan Reese, US Corps of Engineers ✓

Response to Harold Dawley, 17 March 2009

Response: Thank you for comment and support of the Mississippi Coastal Improvements Program. We have taken into account both the negative and positive impacts to regional businesses, including small businesses, in our evaluation of the High Hazard Area Risk Reduction Program. Although there may be negative impacts to some existing businesses we believe that the additional opportunities for business associated with the need for new housing, infrastructure, and changed land use would offset any negatives. We will keep your concerns in mind as we move forward toward authorization and implementation.

Town of Dauphin Island

1011 Bienville Blvd. • Dauphin Island, Alabama 36528
Phone: (251) 861-5525 • Fax: (251) 861-2154 • Email: dialgovmt@townofdauphinisland.org

March 13, 2009

U.S. Army Corps of Engineers
ATT: Dr. Susan I. Rees (CESAM-PD)
P.O. Box 2288
Mobile, AL 36628

Dear Dr. Rees:

The Town of Dauphin Island respectfully submits the following comments on the Draft Mississippi Coastal Improvements Program (MsCIP) Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (EIS). While our immediate concerns are obviously related to the long term stability of Dauphin Island's shoreline and the viability of our community, our comments are also provided in the broader context of protecting Alabama's portion of the Mississippi Sound ecosystem, the Mobile County mainland shoreline, and our sister coastal communities of Bayou La Batre, Coden, and Alabama Port.

The central theme of our comments is that Dauphin Island, the Alabama portion of the Mississippi Sound, and Mobile County shoreline should also be included within the Coastal Improvements Program in a similar manner as Mississippi's three coastal counties. As we make our case for expanding the geographic scope of the study, we understand that the Corps has been constrained up to now from doing so because of the present Congressional language that limits the study to conducting "...an analysis and design for comprehensive improvements or modifications to existing improvements in the coastal area of Mississippi".

However, the arbitrary decision to define the eastern limit of the study area as the political boundary separating Alabama and Mississippi ignores the ecosystem approach that should be pursued to thoroughly address the Hurricane Katrina related problems that affect the entire

Mississippi Sound barrier island chain, including Dauphin Island, and the significant estuarine resources that occur within the eastern portion of the Sound.

Comment 1 – The Adverse Effects of Hurricane Katrina on Dauphin Island, the Mobile County Coastline, and the Estuarine Resources of Alabama's portion of the Mississippi Sound Should be Addressed in the Report. The report should be revised to clearly state that Dauphin Island and the Mobile County shoreline was also significantly impacted by Hurricane Katrina. The report makes no mention of those impacts which are essentially the same as those experienced by the three coastal Mississippi counties. The breach in Dauphin Island created by Hurricane Ivan in 2004 was enlarged by Katrina in 2005, allowing the intrusion of higher salinity waters from the Gulf of Mexico into Mississippi Sound which has eliminated production from Alabama's principal oyster reefs. Significant quantities of sand were eroded from Dauphin Island as the island was shifted to the north and its western end completely denuded of vegetation and substantially lowered in elevation. The present conditions now expose the Mobile County mainland natural and man-made environment to the risk of higher wave heights from future storm events in a manner similar to that of the Mississippi coastal counties to the west. In addition, though never explicitly stated in the Draft Report, the adverse effects of a diminished Dauphin Island will pose severe long-term negative consequences for the Mississippi barrier islands of Petit Bois, Horn, East Ship, and West Ship Islands.

We believe these significant impacts must be addressed in an equal manner to the discussion devoted to the Mississippi study area since Dauphin Island is the lead island in the chain of barrier islands that forms the entirety of Mississippi Sound. Dauphin Island's importance is related to the littoral drift processes by which sands are transported to the west – the process by which the Mississippi barrier islands were originally constructed and continue to be maintained. A substantial Dauphin Island is critical to maintaining the long-term integrity of the entire barrier island chain. The fact that a diminished Dauphin Island will have dramatic adverse consequences for Mississippi's barrier islands can be interpreted from the reference to Dauphin Island in the National Park Service's (NPS) Vision Statement contained in Appendix H to the report. The NPS Vision Statement states that:

"...by 'capturing' the sand that arrived from the Alabama mainland shore [i.e., the Fort Morgan Peninsula] through current and drift processes via the Mobile Bay ebb-tidal delta and steering it westward along its south shore, eastern Dauphin Island probably played an important role in originally determining the offshore position of the whole barrier island chain which extended well into southeastern Louisiana".

The Vision Statement also clearly states that Petit Bois Island was once connected to Dauphin Island in the days of the early French explorers until it was severed from Dauphin Island by a powerful historic hurricane. In short, the entire Mississippi Sound barrier island chain, of which Dauphin Island is the lead island, owes its very existence over geologic time to Dauphin Island. Despite the information provided by the NPS, the Draft Report ignores both the fact that Dauphin Island was equally affected by Hurricane Katrina and that those effects can seriously jeopardize the long-term recovery of the down-drift barrier islands located in Mississippi. As a result, the Draft Report fails to address measures to restore Dauphin Island.

Further evidence of the Draft Report's failure to recognize the importance of Dauphin Island to the barrier island chain and the damages created by Hurricane Katrina is provided in lines 35-38 on page 1-7 which state that:

"...in addition to the regional impacts of the Hurricanes of 2005, the two states [i.e., Louisiana and Mississippi] share key resource issues including shoreline erosion and barrier island loss, wetlands loss, salinity intrusion, and storm surge and waves. The barrier islands reduce wave energy and help significantly in reducing erosion to the mainland."

This discussion represents a succinct description of the same Hurricane Katrina impacts that also affected Dauphin Island, the Mobile County shoreline, and the estuarine resources within the eastern portion of Mississippi Sound. However, the Draft Report ignores the impacts that occurred in Alabama's coastal environment while addressing the very same effects in Louisiana. Even with the restrictive nature of the present authorizing language, we contend that the Corps should not be constrained from identifying the Alabama impacts, and in the interest of presenting an ecosystem based

approached to fully address the impacts on the Mississippi Sound barrier island ecosystem, the Corps is duty bound to do so. This is particularly true since the shoreline damages and sand losses experienced by Dauphin Island are of more critical importance to the future of the barrier islands located in Mississippi and the consequences on the estuarine resources within Mississippi Sound if they cease to exist than any of the hurricane impacts that occurred in Louisiana.

In this connection, lines 17 through 20 on page 1-8 state that "...all potential impacts, both adverse and beneficial impacts, are being considered without regard to geographic boundaries... and that several measures have beneficial impacts outside specific study boundaries". While the context of these referenced lines deals with the effects of the considered measures on areas within Louisiana to the west of Mississippi Sound, we again express our disappointment that the Draft Report is silent on the substantial damages that occurred from Hurricane Katrina in Alabama's portion of Mississippi Sound to the east. At a minimum, the Draft Report should be revised to describe the shoreline changes and sand losses experienced by Dauphin Island and the associated impacts on the Mobile County coastline and eastern portion of Mississippi Sound since these areas constitute a major component of the Sound's entire ecosystem.

Comment 2 – The Lines of Defense Concept Should Also be Applied to Dauphin Island. Section 2 explains that in formulating storm protection plans for the Mississippi mainland "...a Lines of Defense (LOD) concept was developed based on existing natural and manmade coastal features...Barrier islands are the first LOD and the first natural barrier against future storms". We completely support the fundamental nature of the LOD concept in guiding the development of corrective measures since this approach recognizes the importance of stable and healthy barrier islands in reducing wave heights on the mainland coastline during storm events. Accordingly, we again contend that the damages from Hurricane Katrina to Dauphin Island should also be addressed in the study. Further, the long-term viability of the down-drift barrier islands in Mississippi are being, and will continue to be, adversely impacted by the sand erosion losses experienced by Dauphin Island that are directly attributable to Hurricane Katrina.

We understand that the federal government's (i.e., the NPS) ownership of most of the barrier islands in Mississippi was a factor considered in developing the scope of the $477,200,000 Comprehensive Barrier Island Restoration Plan. We are also familiar with the established Corps policy espoused in ER 1165-2-130 which states that "...all costs assigned to the protection of Federally-owned shores [i.e., Gulf Islands National Seashore] are Federal, and the Federal agency benefiting from the project is responsible for these costs". However, the Executive Summary contained in Appendix H clearly states that restoration of the Mississippi barrier islands is being recommended principally to protect the Mississippi mainland which is privately owned, and not solely to protect the Gulf Islands National Seashore. This is again borne out by lines 12-14 on page 71 which specifically state that:

"...stabilizing the outermost barrier islands appears to be the best way to ensure the Mississippi Sound and coastal shoreline ecosystems remain intact. These islands also are the first natural features that protect the coastal counties of the State of Mississippi [sic]".

Thus, it is clear that ownership of the islands on which the restoration work will be performed is actually irrelevant to the primary purpose for which restoration of the barrier islands is being recommended – that is "...to protect the Mississippi mainland and to maintain Mississippi Sound as an estuary formed by the barrier islands". This represents a desirable deviation from established Corps policy regarding land ownership issues, similar to the non-traditional nature of the authorizing language that states the Coastal Improvements Program is to be pursued "...at full Federal expense..." instead of under a cost-shared arrangement as is typically the case for traditional Federal shore protection projects.

Extending this logic as exemplified in the work performed to date in Mississippi, restoration of Dauphin Island should also be viewed in a similar manner with the primary objective being to protect the Mobile County mainland shoreline. In our view, the primary objective of restoring the damaged shoreline of Dauphin Island should be focused on protecting the Mobile County mainland and Mississippi Sound as is being done with the Mississippi barrier islands and not on the manner in which the land is owned on Dauphin Island. Once an island restoration measure is developed for recommendation, the

appropriate institutional arrangements, including those based on the private vs. public sector land ownership issue, can be explored and resolved to allow the measure to be implemented. From our review of the Draft Report, that appears to be the approach that is being pursued for the barrier islands in Mississippi.

Comment 3 – Dauphin Island Should be Added to the Comprehensive Barrier Island Restoration Plan. In reviewing Appendix H which presents the results of the Comprehensive Barrier Island Restoration Plan, we are pleased to note that the engineering investigations performed for the Study did not recognize the political boundaries that prevented restoration measures from being recommended for Dauphin Island. For example, the sediment transport modeling and sediment budget analyses correctly established the Mobile Pass region as the eastern boundary of the study area. By doing so, these investigations recognized the critical importance of Dauphin Island to the down-drift Mississippi barrier islands and the integral nature of the Alabama and Mississippi islands as a system. Lines 14-18 on page 33 point out that:

"...the net longshore sand transport rate for the barrier islands is from east-to-west. The barrier islands are migrating towards the west and, as they move west, also move the Passes between the islands in a westerly direction. The source of sand for this region is the Mobile Pass ebb tidal shoal and the sandy shelf and shoreline to the east of Mobile Pass."

Figure 3.4-7 on page 32 also portrays the hypothetical present-day sediment budget and macrobudget for Dauphin Island and Petit Bois Pass.

These investigations revealed a progressive reduction in sand supply and an overall regional shortage of littoral sand for barrier island maintenance. While these problems are manifested throughout the barrier island chain in Mississippi, the sand shortage actually begins on Dauphin Island, with the shortage being significantly intensified in the aftermath of Hurricane Katrina. Despite the findings of the engineering investigations that demonstrate the adverse effects of Katrina on the littoral drift process and the long-term consequences to the down-drift barrier islands in Mississippi, Dauphin Island was excluded from being considered for restoration. As a result, the

present reference to the plan as the "Comprehensive Barrier Island Restoration Plan" is actually a misnomer. Until Dauphin Island, as the lead island in the barrier island chain, is included in the plan and addressed in an equal fashion to the barrier islands in Mississippi, the plan cannot in fact be viewed as truly being a "comprehensive" approach to restoring the Mississippi Sound barrier island chain.

Lines 4-9 on page 60 of Appendix A summarized the collective conclusion of the Corps, NPS, US Geological Survey, National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, and the Mississippi Department of Marine Resources that "...specific emergency actions and long-term restoration of the sediment transport system and budget are crucial and necessary for preserving and protecting the Mississippi barrier islands' natural and cultural resources". This is followed by the following statement on lines 38-44 on page 63 that the:

"...overarching goal [of the Comprehensive Barrier Island Restoration Plan] is to restore the crucial sediment transport system and budget, including littoral zone geologic processes around the Mississippi barrier islands, to a natural state as much as possible given the realities of navigation channel dredging, climate change (sea level rise, increased frequency of storms, etc.) and other anthropogenic activities. Restoring the sediment transport processes of the Mississippi barrier islands to a condition similar to the natural system that functioned before human intervention offers the best opportunity to ensure the long-term viability of these islands."

We concur with the above stated conclusion and goal. However, we also maintain that the present restoration plan represents an incomplete approach to restoring the entire Mississippi Sound barrier island chain if Dauphin Island, as the critical lead island in the chain, continues to be excluded from the restoration strategy.

Based on our review of Appendix H, we maintain that it is not too late to add Dauphin Island to the Program. Since the sediment transport modeling and sediment budget investigations include Dauphin Island, these essential engineering investigations have already laid the foundation that should make it relatively easy to add Dauphin Island to future Study efforts without adversely affecting the pace of work within Mississippi. Further, since a Programmatic EIS has been

prepared at this point in the Study to address the environmental effects associated with the recommended restoration measures, this approach also makes it easy to expand the geographic scope of the study area to include Dauphin Island and the Alabama portion of Mississippi Sound. As you well know, the programmatic approach to analyzing environmental effects was advocated by the Council on Environmental Quality to add flexibility in project planning when all information is not available to construct a final analysis of the potential impacts associated with considered Federal actions.

Comment 4 – Sand Originating from Sources within Alabama Should be Used to Also Restore Dauphin Island. Appendix H states that additional study is required before the Comprehensive Barrier Island Restoration Plan can be implemented. Specifically, the additional investigations will be aimed at (1) confirming the quantity and quality of sand in offshore borrow areas near the barrier islands identified in the initial studies; and (2) determining the optimal locations to place both littoral zone additions of sand and the locations for disposal of material from future maintenance dredging.

Of particular interest to us is the source of the 4,000,000 cubic yards of sand proposed to be placed in the littoral zone east of Petit Bois Island. Appendix H states that two potential sources will be considered to provide the needed sand for Petit Bois Island. Figure 6.5-4 on page 70 shows that one potential "sand resource target" source to be investigated includes the offshore areas surrounding the western tip of Dauphin Island. The second source under consideration is the Alabama inland river system that flows into Mobile Bay, provided additional testing demonstrates that sand source is compatible with the sand within the barrier island chain's littoral system. The river sand would be excavated from the numerous upland disposal sites located along the lower Tombigbee River and transported by barge to Petit Bois Island for placement.

We find it ironic that the Comprehensive Barrier Island Restoration Plan is proposing to use sand obtained from sources within Alabama for placement on Petit Bois Island to protect Mississippi's estuarine resources and coastline, while ignoring the similar and equally damaging Hurricane Katrina created shoreline erosion problems that significantly eroded Dauphin Island, now threaten the estuarine resources of the Alabama portion of the Mississippi Sound, and have

exposed Alabama's coastline to increased risk from future storm events. There is an inherent disconnect in the study's logic that ignores the shoreline erosion problems of Dauphin Island as the lead island in the barrier island chain which happens to be located within Alabama, while proposing to take sand from locations within Alabama to use in restoring the barrier islands in Mississippi.

Comment 5 – Sand Could be Placed in Dauphin Island's Nearshore Littoral Zone to Avoid Land Ownership Issues. At numerous locations within Appendix H, reference is made to the restoration strategy that will place sand within the littoral zone in water depths affected by normal to moderate wave action and no deeper than 15 feet. This strategy avoids the direct placement of sand on the Mississippi barrier island beaches and takes advantage of the natural littoral drift processes to transport the sand along the chain of barrier islands. We contend that this same method of placement could be employed on Dauphin Island to restore its highly eroded shoreline. By not placing the sand directly on Dauphin Island, it should be possible to avoid the land ownership issues that are often associated with traditional Federal shore protection projects. We contend this approach also warrants evaluation for Dauphin Island.

Comment 6 – Report Should Identify Navigation Channels Located to the East of Petit Bois Island. Our final comment seeks clarification of the intent of specific language on line 17 on page 66 in Appendix H that discusses Long-term Restoration Actions. The entire paragraph within which the statement occurs is repeated in the following so as to assure that our review does not take the meaning of the statement out of context:

"Restoring and replicating the sediment transport processes and budget of the Mississippi barrier islands to a condition similar to the natural system that functioned before human intervention offers the best opportunity to ensure the long-term viability of these islands. Therefore, the best long-term restoration solution is to plan for the bypassing of compatible sand routinely dredged *from navigation channels in the area that are located east of Petit Bois* [emphasis added] and Horn Islands. Appropriate volumes of sediment would then be available in the littoral zone transport system to replenish sand lost from all of the Mississippi barrier islands due to natural geologic processes. Any long-term planning to achieve this objective must be

based on sound scientific information and understanding of the barrier island sediment budget and transport system, and must be consistent with NPS mandates."

The only navigation channel that we are aware of to the east of Petit Bois Island that crosses the littoral zone of the barrier island chain is the Mobile Harbor Ship Channel, with Dauphin Island being located in the intervening distance between that navigation channel and Petit Bois Island. We recommend the statement be clarified to identify the specific navigation channel that is located to the east of Petit Bois Island to which reference is made.

We believe the above comments make a compelling case as to why Mobile County should also be included in the Coastal Improvements Program. Accordingly, the Town of Dauphin Island strongly requests that the Corps utilize its considerable influences to seek Congressional support to expand the present authorizing language to add Mobile County to the three Mississippi coastal counties already included in the Program. Failure to address the Hurricane Katrina related damages to Dauphin Island will make it impossible to develop a comprehensive and environmentally sustainable barrier island restoration strategy for the complete chain of barrier islands that form the entire Mississippi Sound.

Sincerely,

Honorable Jeff Collier,
Town of Dauphin Island

Response to Jeff Collier, Mayor Dauphin Island dated 13 March 2009

Response: Thank you for your comments. We do not concur that the report should be revised to include Dauphin Island as part of the plan formulation effort. The decision to not include Dauphin Island as part of the Mississippi Coastal Improvements Program (MsCIP) was not an arbitrary decision of the USACE but rather in response to the authorizing language which states in part "*the Secretary shall conduct an analysis and design for comprehensive improvements or modifications to existing improvements in the coastal area of Mississippi in the interest of hurricane and storm damage reduction, prevention of saltwater intrusion, preservation offish and wildlife, prevention of erosion, and other related water resource purposes at full Federal expense"*. The Congressional authorization is specific to the coastal area of Mississippi and as such the MsCIP focus on the three coastal counties and those waters defined by the State boundaries. To the maximum extent possible we have utilized data covering the larger region of the northern Gulf of Mexico in the formulation of the comprehensive plan. In addition, we have evaluated all the proposed plan features on a regional basis to ensure that no negative or unintended impacts would occur in neighboring areas, e.g. Alabama and Louisiana. All of our recommendations, however, are specific to coastal Mississippi due to the authorizing language.

There is no doubt that Dauphin Island suffered damages as a result of Hurricane Katrina but as stated above the authorizing language was directed to the coastal area of Mississippi and therefore did not include the coastal area of Alabama. We included discussion of the Louisiana area because Congress authorized a similar study for this area, the Louisiana Area Coastal Protection and Restoration Study, as a result of Hurricane Katrina, and we were directed to ensure that the two studies were closely coordinated through their development. In addition, there is concern on the part of many Mississippi stakeholders that existing and future hurricane protection efforts in eastern Louisiana would have significant negative impacts due to induced flooding in western Mississippi.

That Dauphin Island is part of the barrier island chain of the northern Gulf of Mexico and that is a part of the sand budget of the northern Gulf is not in dispute. It is well known that the origination of the sand transport system which supports the northern Gulf shoreline originates in the Apalachicola Bay area with sediments of an Appalachian origin. The Florida panhandle shoreline, Fort Morgan, the Mobile ebb tidal delta, Dauphin Island, and the Mississippi islands are all part of this system. It is not accurate to say that the Mississippi island chain owes its existence to Dauphin Island.

The comprehensive barrier island plan is not being recommended to protect the Mississippi mainland. The main purpose of proposing to restore these National Park Service Gulf Islands National Seashore barrier islands is to maintain the integrity of the Mississippi Sound ecosystem and the ecosystems of the Mississippi mainland. Granted there are incidental benefits which may accrue to the Mississippi mainland due to the reduction of wave generated erosion specifically from everyday climatic events and possibly low level tropical storms. Restoration of the islands will not provide significant

risk reduction to higher energy hurricane events. The major risk reduction feature of the MsCIP is the High Hazard Area Risk Reduction Program which will initially acquire approximately 2000 parcels along the mainland Mississippi coast. This represents approximately 13 percent of the mainland coast. Over the long term over 15000 parcels could be acquired in the high hazard area.

As part of the plan formulation, we considered all appropriate sources of sand to fill the need required by the barrier island restoration, including offshore and inland. As part of this effort we evaluated the transport of sand stored in upland navigation dredged material disposal sites on the inland waterway system of Alabama. The challenges with utilizing this sand included the physical characteristics of color and grain size as well as the economic cost of transporting the material. For these reasons the use of 'river sand' was eliminated from consideration.

Based on your last comment we have made minor changes to the Barrier Island appendix to qualify our discussion on placement of suitable sandy materials dredged from USACE navigation channels in the area and have specifically referenced the continuing use of the Sand Island beneficial use area as well as other littoral zone disposal sites.

In conclusion, we believe we have fulfilled the intent of Congress as expressed in the authorizing language. The Mississippi Coastal Improvements Program Comprehensive Plan makes recommendations for projects within the political boundary of Mississippi while considering the positive and/or negative impacts that may occur outside this boundary if the plan is implemented.

Again thank you for your comments.

March 25, 2009

Susan.I.Rees@usace.army.mil

Dr. Rees:

Please accept my comments on the MSCIP.

1. Massive earth moving projects such as those proposed have huge impacts on folks like me who live in their path.

2. I'm not totally blaming COE since Congress directs your work, but there is a dismal history of unintended consequences resulting from COE projects, perhaps best exemplified by MRGO.

3. Such massive earthworks contribute to climate disruption. I ask you to provide estimates of the carbon footprints of these projects and also estimates of the carbon reductions that could be achieved if these funds went into energy efficiency projects instead.

4. As yet-to-be-controlled greenhouse gasses careen us toward an ice free planet http://www.climatesciencewatch.org/index.php/csw/details/hansen_et_al_whats_needed/ please include plans for dealing with the likely 200 feet of sea level rise. Please note that anything short of that will be of only temporary value. Please estimate the useful lifetime.

5. If the trackhoe crazies have their way and these construction projects go forward then please work with the NPS (http://sites.google.com/site/gulfcoasttrails/) and put a recreation trail along any levees or canals that are modified in any form.

Thank you for taking my comments and best of luck getting this right.

PS: I have 40 acres of waterfront property I'd like to sell you…

Jerry Landrum
5278 Menge Ave
Pass Christian, MS 39571

228-669-9446

Response to Jerry Landrum, e-mail dated 25 March 2009

Response: Thank you for your comments. With the exception of the improvement to the existing levee at Forrest Heights we are not recommending the projects suggested by your comment.

Jim & Sandra Grissom

From: King, Ruda L SAM
Sent: Monday, March 23, 2009 8:34 AM
To: Rees, Susan I SAM; Smith, Thomas E SAM
Subject: FW: MsCIP Pascagoula Property Question

Forwarded from the MsCIP mailbox. This one looks like it needs a reply.

-----Original Message-----
From: jpgrissom@yahoo.com [mailto:jpgrissom@yahoo.com]
Sent: Sunday, March 22, 2009 5:04 PM
To: MsCIP
Subject: MsCIP Pascagoula Property Question

Dear Crops,
We own Pascagoula property (1115 Farnsworth Ave, Pascagoula, MS) located east of Pascagoula Street and south of Washington Ave, north of Beach Blvd and have many questions concern Ms(S)CIP's impact on our property. If Option A or B proposal is approved for the Pascagoula Moss Point levee system how much property will be affected north of Beach Blvd, present southern most seawall street in Pascagoula, to Washington Ave? The height of the levee system proposals is in question or is unclear. Will the levees Option A or B, be constructed to 20 ft or 30 ft. above sea level or above elevation at the designed locations as per the specific option designs? Our Farnsworth property has been surveyed to be at 14' 1" above sea level falling into FEMA flood zone "B." If fact we were not even required to purchase flood insurance by our mortgage holder, even though we did have flood coverage before Katrina. I can't imaging the scope of a level system at 20-30 ft. above the present site elevations for those points within the proposed Pascagoula-Moss Point Levee system. The Corps' design for a 20-30 ft. above sea level levee system appears to us as a more appropriate long term flooding control solution. Katrina's storm surge crested, according to FEMA/ SBA, at 18 ft. for the Pascagoula St-Washington Ave intersection. This PS-WA intersection is one city lot from our Farnsworth Ave property. A 30 ft. levee, Option B ringing P-MP, would serve as the best flood protection for our property. If Option C is selected what will become of the property between Washington Ave Alternate Alignment and the MS Gulf, all property south of Washington Ave? Would properties south of Washington Ave be considered "buffer zone lands?'" A 30 ft. high levee at Washington Ave would seemingly require a large "footprint" of land to construct. Will the roads, such as Washington Ave or Beach Blvd.,be relocated within the toe of the levees? Many questions remain but please respond to these questions and future questions will be based on the Corps response. We currently live in Ridgeland, MS as indicated in our return address and would like a response to this mail and would like to kept abreast of the Ms(S)CIP events and decisions.

Jim & Sandra Grissom
419 Berkshire Dr. Ridgeland, MS 39157
(601)790-4034 (Home) (601)862-8105 (Cell)

Response to Jim Grissom, e-mail dated 23 March 2009

Response: At this time the only structural element that is recommended for implementation is the Forrest Heights levee in Gulfport. We have identified a number of areas in which a structural levee system could provide substantial risk reduction, however these are not recommended for implementation. These areas are identified for further feasibility study in the event that the local governmental agencies request additional efforts. At this time, the detailed information necessary to answer your questions would be available. We will keep you on the MsCIP mailing list for future information.

From: King, Ruda L SAM
Sent: Monday, March 23, 2009 12:42 PM
To: Smith, Thomas E SAM; Rees, Susan I SAM
Subject: FW: Island Restoration and High Hazzard Risk Reduction

Forwarded from the MsCIP mailbox.

-----Original Message-----
From: SANTOBIANCO@bellsouth.net [mailto:SANTOBIANCO@bellsouth.net]
Sent: Monday, March 23, 2009 12:34 PM
To: MsCIP
Cc: //cochran.senate.gov/email.html;
//wicker.senate.gov/public/index.cfm?FuseAction=Contact.EMailSenatorWicker;
//forms.house.gov/childers/webforms/contact.htm;
//forms.house.gov/benniethompson/contact-form.shtml; //harper.house.gov/contact/;
//forms.house.gov/genetaylor/webforms/zipauth.htm
Subject: Island Restoration and High Hazzard Risk Reduction

To whom it may concern:

Name: John G. Santobianco

Address: 4957 East Belle Fontaine Road
Ocean Springs, MS 39564

email: Santobianco@bellsouth.net

Primarily participating as a resident of Mississippi.

Also Barrier Island restoration and high Hazard Risk Reduction (Phase 1).

I attended the March 2009 meeting in Gautier that was held in the Jr. College lunchroom. I believe that the land should be appraised and the owner should be paid fair market value. No previous insurance or grant money should be backed out. This would encourage more people to participate in the program and would save money in the long run because the homeowners would sell their land to the government. If the land is sold to the government, we would not have repeated flood claims.

I would also like to add that the Mississippi BMR and the Army Corps of Engineers have preformed a great service to our community. I support their efforts.

Please let me know if I can be of any additional assistance

Thank you and kindest regards,

John G. Santobianco

4947 East Belle Fontaine Road

Ocean Springs, MS 39564

Response to John Santobianco, e-mail dated 23 March 2009

Response: Thant you for your support of the Mississippi Coastal Improvements Program. We will take your suggestions into consideration should we begin implementation of the High Hazard Risk Reduction plan element.

STONE PIGMAN WALTHER WITTMANN L.L.C.

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OUR FILE NUMBER

60,143

March 30, 2009

VIA E-MAIL and U.S. MAIL

Dr. Susan I. Rees
Program Manager, MsCIP
U.S. Army Corps of Engineers
Mobile District
MsCIP Team
P.O. Box 2288
Mobile, Alabama 36628-0001

RE: Comments to Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement for Mississippi Coastal Improvements Program

Dear Dr. Rees:

This letter is submitted on behalf of members of the Nathan V. Boddie family (the "Boddie Family" or "Family") and provides comments to the Draft Comprehensive Plan and Integrated Programmatic Environmental Impact Statement (the "Draft Plan") for the Mississippi Coastal Improvements Program ("MsCIP"), noticed in the Federal Register, Vol. 74, No. 26, page 6603, February 10, 2009, Notices. The Family appreciates the recent opportunity for George Boddie to meet with you and other representatives of the U.S. Army Corps of Engineers ("USACE") to discuss the Draft Plan. Based on those discussions and your follow-up e-mails, the Family is hopeful that the issues addressed in these comments will be resolved in the USACE's revisions to the Draft Plan. It is requested that the Boddie Family's comments be filed into the official record.

The Boddie Family currently owns approximately one-half (1/2) of Cat Island, Mississippi, including most of the Island's east facing beach, and previously owned the portion of Cat Island that is now included in the Gulf Islands National Seashore ("GINS"). Members of the Boddie Family have lived on the Gulf Coast and have had an ownership interest in Cat Island

for more than 100 years. The three Boddie siblings were born and raised in Gulfport, and George Boddie and his family now live in Pass Christian. The Boddie Family's interest in the Draft Plan stems from both their ownership interest in Cat Island and their desire that the physical integrity of Cat Island be maintained in order to protect the Gulf Coast and its residents from hurricanes and tropical storms.

1. **Overview.**

The Draft Plan recommends that Congress allocate $516,000,000 (Table 6-1) for the restoration of Ship, Horn, and Petit Bois Islands, but does not recommend that Congress allocate any funds for the restoration of Cat Island, instead recommending "further study." This failure to recommend that Congress allocate funds to restore Cat Island is apparently based on the false proposition that Cat Island is not part of the same littoral system as the other Mississippi barrier islands and a National Park Service ("NPS") policy that is irrelevant to Cat Island. The NPS policy, which would generally prohibit the restoration of islands in GINS unless "human activities have altered or interfered with natural conditions or processes of the Mississippi barrier islands, such as the natural sediment supply and transport rate and direction," has no bearing on Cat Island because human activities have dramatically impacted the littoral process at Cat Island. As discussed in detail below:

a. Cat Island is in fact part of the same littoral system as Dauphin, Petit Bois, Horn and Ship Islands;

b. The natural east-to-west littoral flow of sand from Dauphin, Petit Bois, Horn and Ship Islands to Cat Island has been blocked by "human activity," i.e., the Mobile Ship Channel dredging, the Horn Island Pass dredging and, in particular, the continuous dredging of the Gulfport Ship channel for over 100 years; and

c. The Cat Island littoral zone in which restoration materials would be placed is not part of the GINS; at Cat Island, the GINS boundaries stop at the mean high water mark and do not extend for one mile seaward, as they do at Mississippi's other barrier islands.

Cat Island protects a substantial part of the Mississippi Gulf Coast, and it should be treated consistently with Mississippi's other barrier islands in the coastal restoration process. Cat Island should be restored to the same degree and with the same sense of urgency as Mississippi's other barrier islands. Additionally, following initial restoration, materials from future dredging of the Gulfport Ship Channel should, on an ongoing basis, be strategically placed on the western side of the Ship Channel to reintroduce material into the westward littoral flow of sand to provide nourishment to Cat Island.

2. **Premise of Draft Plan is Contrary to Accepted Authority.**

The entire premise of the Draft Plan with regard to Cat Island, as set forth in the Comprehensive Barrier Island Restoration Plan Appendix (Appendix H) to the Draft Plan (the "Island Restoration Appendix"), is apparently based on a single draft modeling report that concludes that Cat Island is not part of the east/west littoral sediment drift of Mississippi's barrier islands. The Island Restoration Appendix's conclusion that Cat Island is not part of the natural east-west littoral system is directly contrary to the widely accepted coastal processes of the Dauphin Island and Mississippi barrier island system. Although numerical models are a tool for prediction, we question the accuracy of this model and the wisdom of completely reversing the Corps' historical approach to Cat Island based on a draft report of a model developed with boundary conditions premised on very limited and possibly erroneous historical bathometric information. The conclusions in the Draft Plan are of particular concern in light of the fact that, as more fully discussed below, the Gulfport Ship Channel/Ship Island Pass system has been continuously deepened, widened and dredged for the last 110 years. The summary conclusions of the Draft Plan are directly contrary to, and rebutted by other studies, including the authoritative 2007 U.S. Geological Service (USGS) Report, "Historical Changes in the Mississippi-Alabama Barrier Island and the Roles of Extreme Storms, Sea Level and Human Activities" (the "USGS Report") authored by Dr. Robert A. Morton and comments to the Draft Plan submitted by Dr. Ervin G. Otvos, a copy of which is attached to this letter. Drs. Morton and Otvos are two of the most well respected authorities on the Mississippi barrier island system and are cited extensively in the Island Restoration Appendix.

a. **Inconsistencies with the USGS Report.**

The Island Restoration Appendix at 6.3.2 correctly quotes Morton from the USGS Report as follows: "The principle causes of Mississippi barrier island erosion and land loss are frequent intense storms, a relative rise in sea level, and a deficit in the sediment budget." Section 6.3.2 continues by paraphrasing Morton as follows: "Of these causes, the one that experienced the greatest change over the last 100+ years is the reduction in sand supply related to dredging of navigation channels through the outer bars of the tidal inlets near islands." (Morton 2007). The Island Restoration Appendix neglects to include Morton's actual conclusion that, of the three factors contributing to island erosion, "the only factor that has a historical trend that coincides with the progressive increase in rates of land loss is the progressive reduction in sand supply associated with nearly simultaneous deepening of channels dredged across the outer bars of the three tidal inlets [Mobile Bay, Horn Island Pass and **Ship Island Pass directly east of Cat Island**] maintained for deep-draft shipping." USGS Report, 1; *see also Id.* at 27.

According to the USGS Report, the cumulative effect of continuous dredging and deepening, from the late 1880s to the present, of the navigation channels through the outer bars

at Mobile Bay, Horn Island Pass, and Ship Island Pass "eventually prevent[ed] the sediment transport system from transferring sand to the downdrift barrier" and "disrupted the littoral system," rendering it "incapable of transferring sand across the ebb tide deltas" and "essentially [trapping in the navigation channels] all of the sand in transport along the Gulf shores of the barriers." USGS Report, 24. During this same period, "each island [Dauphin Island, Petit Bois Island, Horn Island, Ship Island and **Cat Island**] has been reduced in area to the size of the next smallest island." USGS Report, 24.

The direct correlation between dredging of the bar channels to increased depths and rapid increases in the rate of land loss suffered by all of the Mississippi-Alabama barrier islands is shown in the table at Figure 7 of the USGS Report. Interestingly, and directly contrary to the Island Restoration Appendix's assertion that Cat Island is not a part of the Mississippi-Alabama barrier island littoral system, the USGS Report includes Cat Island in the system, and Figure 7 shows the same increased rates of land loss at Cat Island in response to deeper bar channel dredging as at the other barrier islands. The USGS Report notes a "remarkable temporal similarity of generally accelerated rates of land loss for each of the MS-AL barrier islands [Dauphin Island, Petit Bois Island, Horn Island, Ship Island, and **Cat Island**]" and concludes that the documented "historical rates of land loss of the MS-AL barriers greatly exceed the geological rates of land loss." USGS Report, 23-24; *see also Id.* at 26.

With regard to Cat Island in particular, the USGS Report states that the MS-AL "navigation channels [have acted] as sediment sinks, removing sand that otherwise would have been available for beaches immediately downdrift of the channel if the ebb tidal delta had not been modified (east Dauphin Island, east Horn Island, **Cat Island spits**)." USGS Report, 24 (emphasis added). The USGS Report concludes that "**[t]he long-term prediction for Cat Island is uncertain because it is far out of equilibrium with the extant coastal processes and sediment supply. Continued erosion of the island perimeter and severe reduction in sand supply related to disruption of the alongshore transport system at Ship Island Pass could eventually cause Cat Island to be reduced to a shoal.**" USGS Report, 25 (emphasis added).

b. **Inconsistencies with Other Authorities.**

Dr. Otvos also takes exception to the Island Restoration Appendix's conclusion that there is an absence of sand transport from Ship Island to Cat Island. Otvos' comments to the Draft Plan, dated March 25, 2009 (attached). Dr. Otvos states that the east-west littoral drift involves the "entire barrier chain," from Dauphin Island to Cat Island. *Id.* at 2. Cat Island's north-south and east-west oriented spits, and in particular the southern-most spit, are nourished by the westward drift of sand across Ship Island Pass from West Ship Island. *Id.* at 3. The Ship Island channel acts as a "temporary sediment sink" that slows but does not stop the western drift of littoral material; however, "by removing spoil material from shore-parallel downdrift sand

transport, the regular dredging of the Ship Island navigation channel certainly diminishes the volume of sand that traveling along the Ship Island shore, eventually reaches Cat Island in the west." *Id.* at 2.

Dr. Otvos concludes in his comment letter that, while Ship Island will require "massive nourishment efforts" that may ultimately be unsuccessful, Cat Island can be "efficiently and effectively protected by regular nourishment. Repeatedly applied sand stockpiles may significantly lengthen the island's life. Deposition of significant sand volumes at the central sector of the eastern island shore thus could play a crucial role by mitigating the long-term effect of island erosion due to hurricane strikes." *Id.* at 3.

The Abstract of the February 1989 Knowles-Rosati study discusses the alternate alignments for the channel at Ship Island stating: "Alternate channel alignments were studied as potential solutions to the shoaling problems caused by the island migration. An alignment passing 1,900 feet west of the island would allow approximately 50 years before the island tip reaches the channel edge based on the 38-ft./year migration rate." Mississippi's barrier island system, including Cat Island, would be very different than it is today if Ship Island Pass, absent the 110-year old Gulfport Channel, had been allowed to receive the volume of material removed from the passes at Horn and at Ship Islands.

The 1950 Ship Quadrangle map shows a -18-ft. contour, 2400-ft. due west of the original location of the Gulfport Ship Channel at Ship Island. The contour is labeled SE Spit and is just west of the realigned ship channel. According to the migration rates (38-ft./yr) of the Knowles-Rosati study, and absent channel maintenance and dredging activities, Ship Island would be approaching this shoal today. Additionally, the USACE's 1990 General Design Memorandum (Plate 3) shows the northern end of the realigned bar channel reach within one mile of the -12-ft. contour of Cat Island shoals. If the sediment eliminated from the littoral system as a result of the Mobile Bay dredging and Horn Island dredging had been contemporaneously re-introduced into the system to offset these activities of man, it is clear that the migration rate of Ship Island would have been much greater than 38 ft./year during the last century and, absent the Gulfport Ship Channel, Ship Island would currently be located much farther to the west and much closer to Cat Island.

While numerical models are prediction tools, there is no way to know what Cat and Ship Islands would look like today or how far west Ship Island would have migrated were it not for the continuous dredging of the Gulfport Ship Channel and the other channels to the east. The fact that the MS-AL barrier island littoral system has been severely and continually altered for over a century makes definitive conclusions based on a numerical model with very limited historical bathometric information questionable. The continued migration of Ship Island to the

west, even with the diminished supply of littoral flow sand which it receives, is clear evidence that the littoral flow continues to the west of Ship Island.

3. **Gulfport Ship Channel Maintenance Issues.**

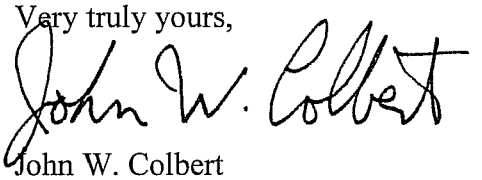
Table A3 of the MsCIP draft report, "Regional Sediment Budget for the Mississippi Mainland and Barrier Island Coast," prepared by the Engineering Research and Development Center, Coastal Hydraulic Lab (the "Draft Sediment Budget Report") shows a total of 13,538,433 cubic yards of new work and 28,683,888 cubic yards of maintenance material that has been dredged from the littoral system in the Ship Island Pass Bar Channel. These quantities of dredged material would certainly be much greater had not an additional 22,000,000 cubic yards been dredged from the updrift littoral system at Horn Island Pass as shown in Table A4 of the Draft Sediment Budget Report. According to the Draft Report, most of the maintenance material and approximately half of the new work material was removed from the bar channel by hopper dredge which when loaded can only dump in deepwater offshore disposal areas, effectively removing it from the littoral system.

The Draft Sediment Budget Report and other records indicate that if dredging activities for the Gulfport Ship Channel had been conducted in accordance with environmental documentation over the past twenty years, channel maintenance material would certainly have reached Cat Island. For example, Table A3 of the Draft Sediment Budget Report omits the fact that, in 1991, 650,000 cubic yards of material designated for the Cat Island littoral zone was dredged from within the limits of the Ship Island Bar channel and diverted to the expansion of the Port of Gulfport where it was placed under what is now the parking lot at the West Pier. (CESAM-PH-EC Public Notice No. FP91-GU05-4, a copy of which is attached). This diversion to the Port of Gulfport expansion was inconsistent with the USACE 1990 General Design Memorandum and Environmental Documentation for the Gulfport Ship Channel, which clearly states that **new work and maintenance material shall be placed in the littoral zone southeast of Cat Island so as to maintain the system**. Information in the description column of Table A3 of the Draft Sediment Budget Report suggests that the dredging methodology used precluded Cat Island littoral zone disposal, and it is undisputed that the Channel and Pass size have increased. The Boddie Family firmly believes that, if the USACE had conducted maintenance activities in strict accordance with its Environmental Impact Statement and associated environmental documentation, the littoral system effecting Cat Island would have been stabilized and would have continued to work as historically outlined in the numerous studies, models, and reports. The Family also questions whether the small amount of material that was designated as littoral zone disposal in Table A3 was actually pumped two miles west to the approved site as designated in the June 1989 Final Environmental Impact Statement (Figure EIS-4), or merely placed 2,000 feet west of the ship channel.

Modification of the Draft Plan is necessary to offset past, and prevent future, starvation of Cat Island resulting from more than 100 years of ever increasing expansion, deepening, and maintenance dredging of the Gulfport Ship Channel and the other Mississippi-Alabama bar channels and the removal to offshore deepwater disposal sites of dredged material that was trapped in the Gulfport Ship Channel during its natural flow westward toward Cat Island.

As was stated in the initial overview of these comments, it is the Boddie Family's desire to see all of Mississippi's islands restored and sustained with an equal sense of urgency and to ensure that all new work and maintenance material from the Gulfport Ship Channel improvement is beneficially placed in a manner that will nourish Cat Island. The Family appreciates the opportunity to comment on the Draft Plan and looks forward to seeing these comments, and necessary changes consistent with these comments, incorporated into the final plan.

Very truly yours,



John W. Colbert

JWC/esb
Enclosures
cc: Mr. George Boddie (w/encls.)
Mrs. Cala B. Colbert (w/encls.)
Mrs. Elizabeth B. Adair (w/encls.)

March 25, 2009

Dr. Susan I. Rees
MsCIP Program Manager
Mobile District,
U. S. Army Corps of Engineers
P. O. Box 2288
Mobile, AL 36628

Re: US Corps of Engineers Coastal Improvement Program (MsCIP, Feb., 2009). Protection issues; vulnerability and restoration needs; The case for Cat Island.

Dr. Dr. Rees:

Please allow me to share my thoughts with you regarding certain important aspects of the program you are presently managing. My comments mainly involve the role of Cat Island in the planned island nourishment projects.

Introduction

A recent Draft Program by the Mobile District, US Corps of Engineers (2009) proposes very substantial nourishment efforts in island restoration to combat erosion problems exacerbated by land loss to catastrophic recent Hurricanes Camille and Katrina. I take exception to some of the statements made regarding the natural littoral/longshore sand supply that reaches Cat Island. This also included the easily challenged claim voiced in the present Corps Draft Program (2009) regarding alleged total absence of sand transport from Ship and Cat as the result of changed positions of the eastern part of the Mississippi River Delta.

Littoral sand transport from Ship Island to Cat Island and points to the west was the process that enabled formation of the western members of the Alabama-Louisiana (New Orleans) islands. There is no reason to doubt that sand transport, driven by the dominantly westward-directed waves from the Gulf does carry sand across the bottom of Ship Island Pass to reach the east shore of Cat Island. This highlights the need for a sediment bypass of the Ship Channel that avoids permanent sediment loss from dredging to its transport to Cat Island . To facilitate the sand reaching Cat Island, as done downdrift from Petit Bois Pass, sediment dredged from the channel should be deposited in a spoil pile on the western (downdrift) side of the channel.

The thrust of the Corps recommendations essentially favors partial restoration of Ship Island only. However, I would argue that a more even-handed restoration strategy may benefit Cat Island's protection and its long term survival chances with well-planned placement of sand resources along its eastern and northern shore sector.

Sand transport issues in island chain; subaqueous sand transport from West Ship to Cat Island

It has been well established that littoral drift along the island beaches and the nearshore littoral current plays an overwhelming role in east-west sand transport along the Alabama-Mississippi barrier island chain. This transport at present involves the entire barrier chain, starting in Dauphin Island, Alabama and continuing along the shores of Petit Bois, Horn, East and West Ship Islands, finally reaching Cat Island. As the sand-transmitting role and capacity of shallow ebb tidal deltas between the islands clerarly indicates, transport processes do not stop, only slow when they encounter passes and man-made, regularly dredged deep ship channels. Examples include the role of the giant Mobile Pass ebb tidal delta and of the smaller ebb-deltas off Horn Island and Dog Island Passes. Ship Island ship channel also acts as a "temporary sediment sink" in slowing but not entirely stopping the westward-directed littoral sand transport. By removing spoil material from shore-parallel downdrift sand transport, the regular dredging of the Ship Island navigation channel certainly diminishes the volume of sand that traveling along the Ship island shore, eventually reaches Cat Island in the west.

In recent geological history (Otvos and Giardino, 2004) Cat Island has been the offshore transmitting point of sand from Ship Island toward the south Hancock County, Mississippi - New Orleans Pine Island barrier chains that existed until growth of Mississippi River's St. Bernard delta lobes surrounded and partially buried these barriers and stopped littoral drift but *only west of Cat Island* more than 2000 years ago. While subsequent further growth and partial blocking Ship Island Pass probably diminished westward transport from Ship to Cat, the subsequent disintegration of easternmost St. Bernard Delta that previously has partially obstructed Ship Island Pass, now allowed the resumption of sand transport to Cat Island. The claim (USCE Draft Program, 2009, p.74) of "termination of littoral current transport due to the southward extension of the Mississippi Delta" is, as the Program Statement itself admits in a separate passage, not very well substantiated and therefore rather questionable. According to another far less than accurate statement, "portions of the barriers rolled over towards the Sound"; p.27).

Causes for land losses in Cat and Ship islands. Contrast between island elevation and morphology and its impact on island reduction and area reduction

Between 1848 and 2005, the total area of the two Ship islands has been reduced from ~600 ha to 204 ha, while Cat Island shrunk from ~1200 to 743 ha (Otvos and Carter, 2008; with similar values in Morton, 2007). A major reason for the historically steadily increasing, by now catastrophic shrinkage of Ship island may be its generally low surface elevation and exposed position. Most of Ship, especially its former central and eastern sectors consist of low sand flats that are reduced quickly to underwater shoals during major storms only to recover relatively slowly thereafter. In contrast, only very

minor areas in Cat Island (located exclusively in the SE spit area) are represented by shallow subtidal and low supratidal sand flats.

As historical data shows, recovery of the sand flat sectors remains incomplete even after several years of relative calm following a storm. It is reversed suddenly by the passage of a new hurricane. The much higher ground in West Ship proved to be more resistant to storm effects but even the relatively high relict beach ridges of East Ship, due to their unprotected setting were almost completely wiped out by Hurricane Katrina. Restoration of the low Ship island sectors by sand nourishment may bring only a very temporary respite at an unreasonably high cost.

Cat Island has been much better protected in the past. It is shielded from the Gulf by a pair of north-south-oriented wide, although steadily narrowing sand spits. Surface elevations especially in the higher dunes- covered northern spit and the E-W trending central strandplain-"shank" of the island are relatively high. Slow subsidence effects mostly a small NE sector of the island west of and in the protection of the northern spit. Most of the island's area loss took place by recession of the southern spit that recovers quickly each time after hurricane passage. The new shoreline usually forms somewhat west of the pre-storm shoreline. It is these spit areas that receive the westward transported sand that crosses Ship Island Pass from West Ship Island. Without the protection of the still relatively wide eastern spit belt the central and western areas of Cat Island would relatively quickly waste away under the recurring major hurricanes that regularly strike it from the Gulf.

Littoral drift, aided by wave refraction at this critical site constantly moves sand from this location both toward the northern and southern spit areas. Stockpiling would augment sand supplies that reach the island from West Ship via westward wave transport over the bottom of shallow Ship Island Pass. This natural transport process probably plays a significant role in keeping the spits relatively well supplied with sand and thus bolsters the island's defenses.

The spit zone is a major protection for the rest of the island that, because sheltered by the eastern spit belt suffered remarkably little overall erosion during the past 160 years. While central and eastern Ship Island, with or without massive nourishment efforts will inevitably waste away, *Cat Island would be more efficiently and effectively protected by regular nourishment, Repeatedly applied sand stockpiles may significantly lengthen the island's life. Deposition of significant sand volumes at the central sector of the eastern island shore thus could play a crucial role by mitigating the long-term effect of island erosion due to hurricane strikes.*

Recommendations

I recommend the regular placement of dredged and other sand resources along the central sector of Cat Island eastern shore to augment the northeastern and southeastern island spit. The two wide spit sectors undoubtedly play a crucial role in slowing the slow westward retreat of the eastern island shoreline, thereby diminishing and delaying steady destruction of the entire island. In view of the contrast between the two islands' geological framework and development history, sand nourishment at critical Cat island sites appear to be incomparably more cost-effective, of more enduring impact, and therefore more rewarding than sand placement on Ship Island sites would be. Therefore, at least some of the sand resources intended for Ship should be diverted to protect Cat Island. The transport scheme should also include sand bypassing around the Ship Island (Gulfport) Ship Channel. The establishment of a dredge spoil pile west (downdrift) of the ship channel, as engineered also at the west tip of Petit Bois Island. This would increase sand volumes that reach Cat Island by natural wave transport across Ship Island Pass.

Key References

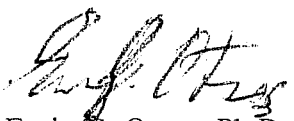
Morton, R. A., 2007, Historical changes in the Mississippi-Alabama barrier islands and the roles of extreme storms, sea level, and human activities. US Geological Survey Open-File Report No. 2007-1161.

Otvos, E. G. and Carter, G. A., 2008, Hurricane degradation- barrier development cycles, NE Gulf of Mexico: Landform evolution ands island chain history. Journal of Coastal Research, v. 24, p. 463-478.

Otvos, E. G. and Giardino, M. J., 2005, Interlinked barrier chain and delta lobe development, northern Gulf of Mexico. Sedimentary Geology, v. 169, p. 47-73.

US Corps of Engineers Mobile District, 2009, Mississippi Coastal Improvement Program (MsCIP), Hancock, Harrison and Jackson Counties, Mississippi. Appendix H. Barrier Islands, 80 p.

Respectfully submitted:



Ervin G. Otvos, Ph.D.
Professor Emeritus, USM
336 Oakridge Circle
Biloxi, MS 39531-2027

cc. Dr. William Walker, Mississippi Department of Marine Resources
Mr. George Boddie, Pass Christian, MS

DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

CESAM-PD-EC
PUBLIC NOTICE NO. FP91-GU05-4 ADDENDUM September 13, 1991

JOINT PUBLIC NOTICE
U. S. ARMY CORPS OF ENGINEERS
AND
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
FOR THE
PROPOSED DREDGING AND PLACEMENT OF DREDGED MATERIAL
IN THE
ENVIRONMENTAL PROTECTION AGENCY (EPA) APPROVED
OCEAN DREDGED MATERIAL DISPOSAL SITES
ASSOCIATED WITH THE CONSTRUCTION AND MAINTENANCE
AND THIN LAYER NATIONAL DEMONSTRATION
OF THE
GULFPORT HARBOR PROJECT
HARRISON COUNTY, MISSISSIPPI

A FEDERALLY AUTHORIZED PROJECT

Interested persons are hereby notified that the U. S. Army Corps of Engineers, Mobile District, proposes to conduct construction and maintenance dredging activities in the Gulfport Harbor located in Gulfport, Mississippi as authorized and directed by the United States Congress.

This Public Notice is issued in accordance with the rules and regulations published in the Federal Register on April 26, 1988. These regulations provide for the review of dredging programs for Federally authorized projects under the Clean Water Act (33 U.S.C. 1344); the Marine Protection Research and Sanctuaries Act (33 U.S.C. 1413); and consistency with the requirements of the following related Federal laws and Executive Orders: Section 306 and 307(c) of the Coastal Zone Management Act of 1976 (16 U.S.C. 1456(c)); the National Environmental Policy Act (42 U.S.C. 4341 et seq.) as amended; the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) as amended; the Endangered Species Act (16 U.S.C. 1531 et seq.); the National Historic Preservation Act of 1966 (16 U.S.C. 407a et seq.), as amended; the Estuary Protection Act (16 U.S.C. 1221); the Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.), as amended; the Water Resources Development Act of 1976 (16 U.S.C. 1456(c)), as amended; Executive Order 11593, Protection and Enhancement of the Cultural Environment, May 13, 1971 (36 FR 8921, May 15, 1971); Executive Order 11988, Floodplain Management, May 24, 1977 (42 FR 26951, May 25, 1977); Executive

Order 11990, Protection of Wetlands, May 24, 1977 (42 FR 26961, May 25, 1977); Executive Order 12372, Intergovernmental Review of Federal Programs, July 14, 1982, (47 FR 3959, July 16, 1982); and Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, January 4, 1979.

These laws are applied whenever dredge or fill materials may enter navigable waters. We also request the recipient of this notice to review the proposed action as it may impact on water quality, relative to the requirements of Section 404(b)(1) of the Clean Water Act and Section 103 of the Marine Protection, Research and Sanctuaries Act. We also ask your comment on any other potential impact.

WATERWAY AND LOCATION: Gulfport Harbor, Mississippi Sound, and the Gulf of Mexico.

DESCRIPTION OF ENTIRE AUTHORIZED PROJECT: The Water Resources Development Act (WRDA) of 1986 authorized improvements to the Federal navigational project at Gulfport. The proposed improvements are as follows: (a) Deepen the entrance and southern portion of the anchorage basin to 36 feet, (b) Deepen the northern portion of the anchorage basin to 32 feet, (c) Deepen the Mississippi Sound channel to 36 feet at the existing width of 220 feet, (d) Deepen the Ship Island Pass and Gulf channels to 38 feet at the existing width of 300 feet, (e) Realign the channel across the bar in Ship Island Pass approximately 1900 feet to the west to eliminate the existing doglegs and (f) Widen the channel at bends in the existing and new alignment. The Water Resources Development Act of 1988 authorized the Thin-Layer Disposal National Demonstration project (see Figure 1).

DESCRIPTION OF THE PROPOSED ACTION: The proposed action involves modifying the placement plan as described in Public Notice No. FP91-GU05-4 circulated on February 21, 1991 for the Gulfport Harbor Project. This modification, which is the result of changes in an ancillary activity by the State of Mississippi Port Authority located in Gulfport, consists of additional dredging and subsequent placement of 1.5 million cubic yards from the anchorage basin into EPA-designated Ocean Dredge Material Disposal Sites (ODMDS)(see Figure 2). Initially, this dredged material would have been used for the 29 acre Port Expansion Project (see Figure 3). However, supplementary geotechnical analysis by the Port Authority indicated that the material was marginally suitable for construction fill and maintenance of water quality standards during the filling operation would be difficult. Suitable material is located in the realignment channel and use of this material would not result in adverse impacts. As a result of these changes the 1.5 million cubic yards of predominately firm clays, clay-sands and sands dredged material will be dredged from the anchorage entrance of the channel and placed within the EPA-designated ODMDS at Gulfport, Mississippi. As an ancillary activity the State Port Authority at Gulfport proposes to excavate approximately 650,000 cubic yards of predominately sandy dredged material from the limits of the Ship Island Bar Channel and use the material for the construction of the 29 acre Port Expansion project (Note: This activity has been advertised by Joint Public Notice No. MS88-00954-O released 30 August 1991). This dredged material is part of the approximately 3 million cubic yards that was originally scheduled to be placed in the littoral zone from construction of the Federal project.

WATER QUALITY CERTIFICATION: Pursuant to the Clean Water Act, state water quality certification is required for the proposed action described above. Water quality certification was obtained from the Mississippi Department of Environmental Quality, Office of Pollution Control on May 8, 1991 for the Gulfport project. This action has been coordinated with the Office of Pollution Control and a modification to the Water Quality Certification has been requested from the Office of Pollution Control.

COASTAL ZONE CONSISTENCY: The State of Mississippi Bureau of Marine Resources (BMR), Department of Wildlife Fisheries and Parks agreed with our findings of March 7, 1991 that the Gulfport Harbor Project was consistent with the Mississippi Coastal Program, pursuant to the Coastal Zone Management Act. Preliminary coordination with BMR indicates that the proposed action is consistent with the program to the maximum extent practicable. A final determination of consistency will be made after coordination of the public notice.

USE BY OTHERS: The proposed action for the Gulfport Harbor project will facilitate orderly completion of both the deepening of the project and the ancillary activities of the State Port Authority and is not expected to cause any significant land use changes in the adjacent areas.

NATIONAL ENVIRONMENTAL POLICY ACT CONSIDERATION: In accordance with the requirements of the National Environmental Policy Act, the entire Gulfport Harbor project was addressed in the Final Environmental Impact Statement (FEIS), which was filed with the Environmental Protection Agency in June 1989. A Record of Decision for the proposed Gulfport Harbor Project was signed 31 December 1990. An environmental assessment (EA) has been prepared to address the additional material to be placed in the EPA-designated ODMDS. It has been determined that a revised or supplemental environmental impact statement (EIS) is not required. These documents are on file at the Mobile District Office of the Corps of Engineers.

SECTION 404(b)(1) EVALUATION REPORT: An evaluation of water quality impacts associated with the proposed action has been prepared in accordance with guidelines promulgated by the Environmental Protection Agency (EPA) under Section 404(b)(1) of the Clean Water Act and is on file at the Mobile District Office for review. The report was signed by the District Engineer on 5 July 1989. Revision of the 404(b)(1) Evaluation is not required.

Should information be received during the coordination of this notice that would dictate the need to revise the Section 404(b)(1) evaluation, appropriate changes will be incorporated.

SECTION 103 OCEAN DISPOSAL EVALUATION REPORT: In accordance with Section 103 of the Marine Protection, Research and Sanctuaries Act (MPRSA), a Revised Section 103 Evaluation Report addressing the transportation of the additional dredged material to be placed within the ocean sites has been prepared. This document is on file at the Mobile District Office of the Corps of Engineers

for review. The resource issues discussed in the referenced Section 103 Evaluation Report include aesthetics, recreation resources, commercial marine resources, navigation, mineral resources and water quality. In accordance with the criteria contained in Section 227 of the EPA Ocean Dumping Regulations (40 CFR 227), the additional material from the project area has been determined to be environmentally acceptable for ocean disposal.

The proposed transportation of this dredged material for disposal in ocean waters has been evaluated to determine that the proposed disposal would not unreasonably degrade or endanger human health, welfare, or amenities or the marine environment, ecological systems, or economic potentialities. In making this determination, the criteria established by the Administrator, EPA pursuant to section 102(a) of the MPRSA were applied. In addition, based upon an evaluation of the potential effect which the failure to utilize this ocean disposal site would have on navigation, economic and industrial development, and foreign and domestic commerce of the United States, an independent determination was made of the need to dispose of the dredged material in ocean waters, other possible methods of disposal and other appropriate locations.

ENDANGERED/THREATENED SPECIES: On May 26, 1989, the National Marine Fisheries Service concurred that no species under their purview would be impacted by the proposed Gulfport deepening and approved ocean disposal project. The U.S. Department of Interior Fish and Wildlife Service, in the Final Fish and Wildlife Coordination Act Report dated November 1988 for the Gulfport project, indicated that no adverse effects on endangered species were expected. No endangered/threatened species should be affected from the additional dredged material placed within the approved ocean disposal sites.

CULTURAL RESOURCES CONSIDERATION: Coordination with the Mississippi State Historic Preservation Officer in May 1989 indicated that the proposed Gulfport Harbor Deepening Project would not affect any historical or cultural resources.

EVALUATION: The decision whether to proceed with the proposed action will be based on evaluating the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits which may be reasonably expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. The proposed action will proceed unless it is found to be contrary to the overall public interest.

Inasmuch as the proposed action involves the discharge of materials into navigable waters, designation of the proposed placement sites associated with this Federal project is being made under guidelines promulgated by the Administrator of the Environmental Protection Agency (EPA) in conjunction with the Secretary of the Army. If these guidelines alone prohibit designating these proposed placement sites, any potential impairment of the maintenance of navigation, including any economic impact on navigation and anchorage which results from the failure to use this site will also be considered.

COORDINATION: Among the agencies receiving copies of this public notice are:

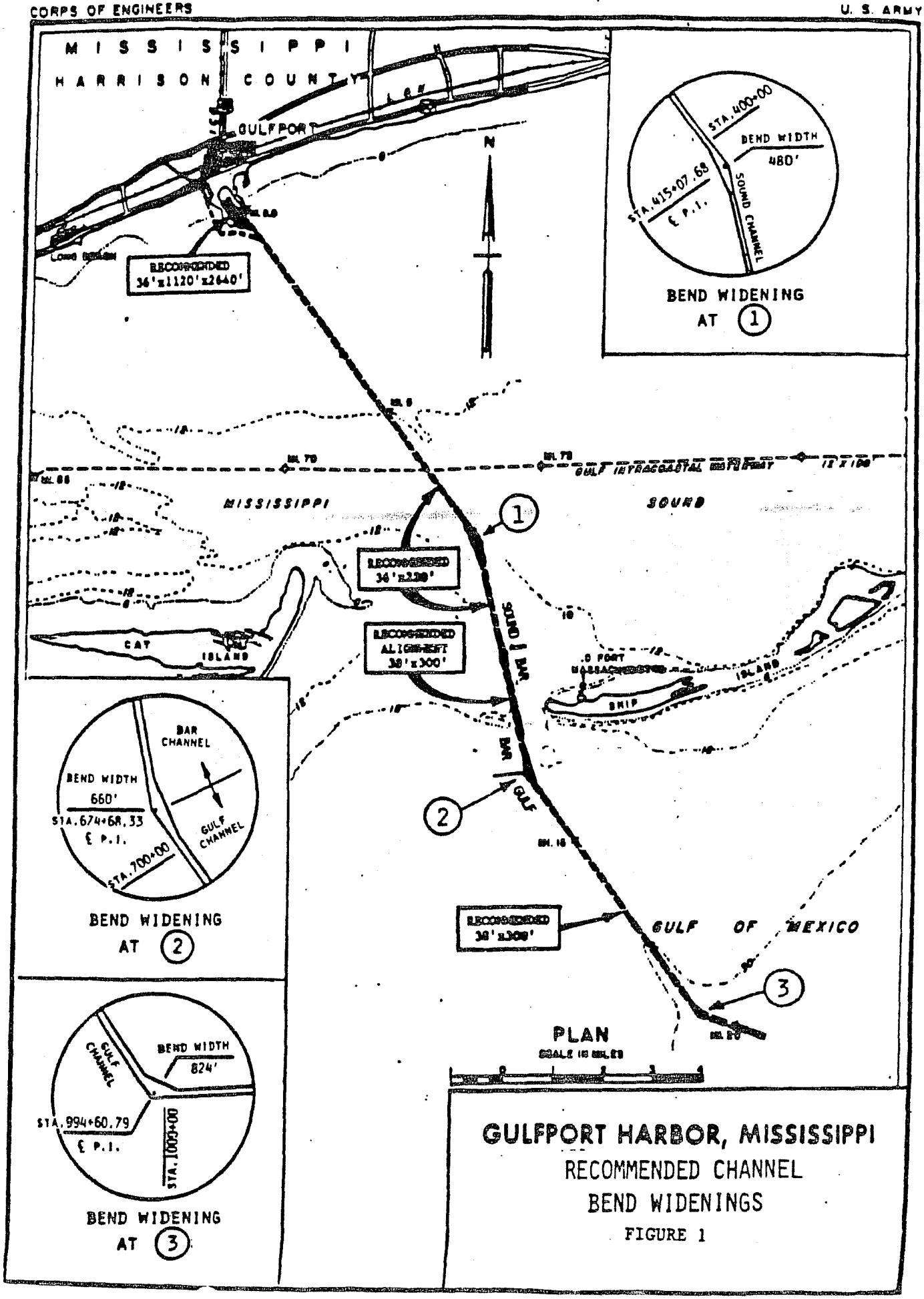
Region IV, Environmental Protection Agency
Field Representative of the Fish and Wildlife Service
Regional Director, National Park Service
Regional Director, National Marine Fisheries Service
Commander, Eighth Coast Guard District
Mississippi Department of Environmental Quality
Mississippi Bureau of Marine Resources
Mississippi State Historic Preservation Officer

Other Federal, State, and local organizations, and United States Senators and Representatives of Alabama are being sent copies of this notice and are asked to participate in coordinating this proposed action.

You are requested to communicate the information contained in this notice to any other parties who may have an interest in the proposed action.

CORRESPONDENCE: Any person who has an interest which may be affected by this proposed activity may request a public hearing. Any comments or request for hearing must clearly set forth the interests which may be affected and the manner in which the interest may be affected. Correspondence concerning this Public Notice should refer to Public Notice No. FP91-GU05-4 ADDENDUM and should be directed to the District Engineer, U.S. Army Engineer District, Mobile, P.O. Box 2288, Mobile, Alabama 36628-0001, ATTN: CESAM-PD-EC in time to be received prior to October 13, 1991. Ms. Alfedo Acoff, telephone number 205/694-3886, may be contacted for additional information.

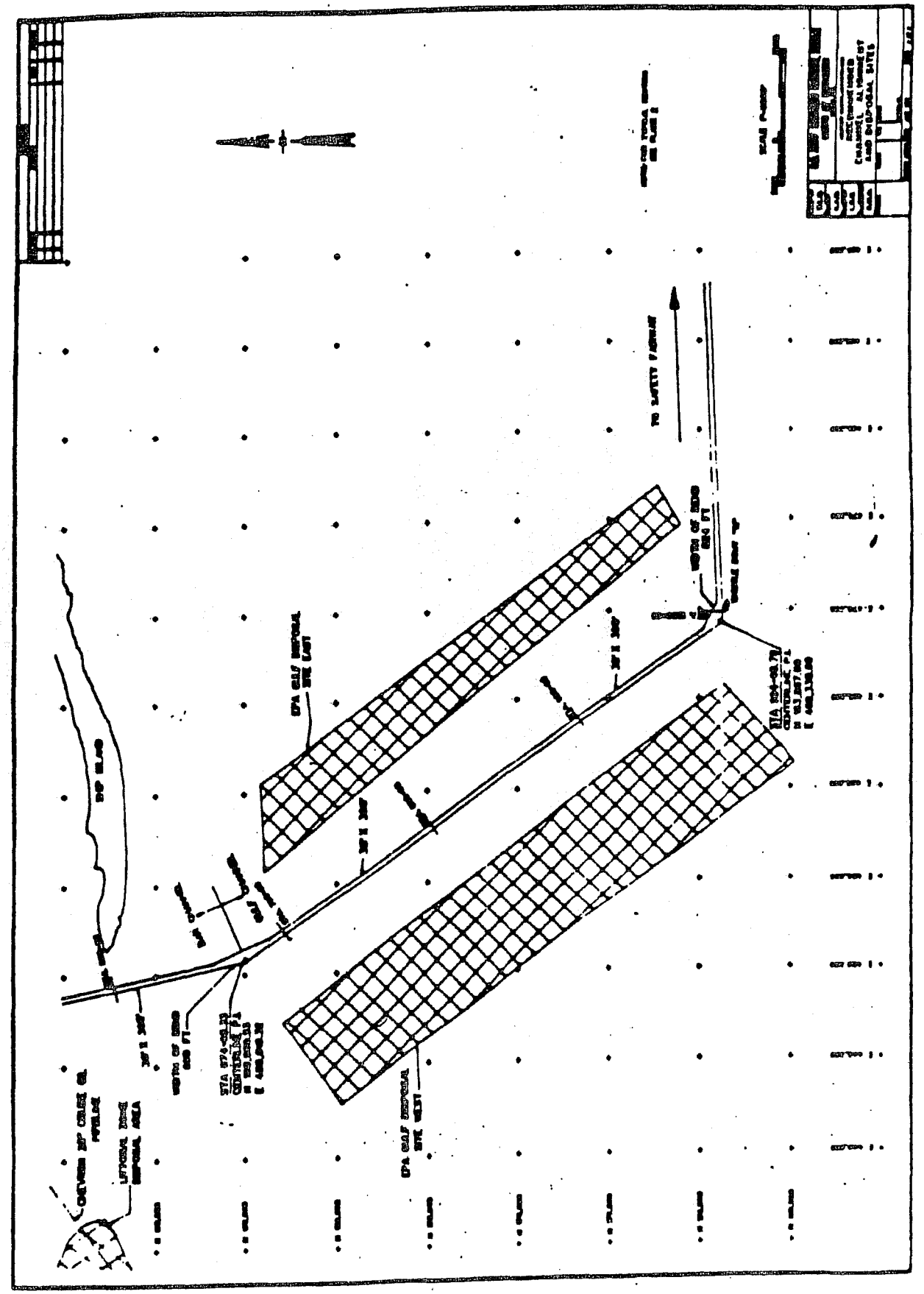
N. D. McCLURE IV
MOBILE DISTRICT
U.S. ARMY CORPS OF ENGINEERS



GULFPORT HARBOR, MISSISSIPPI

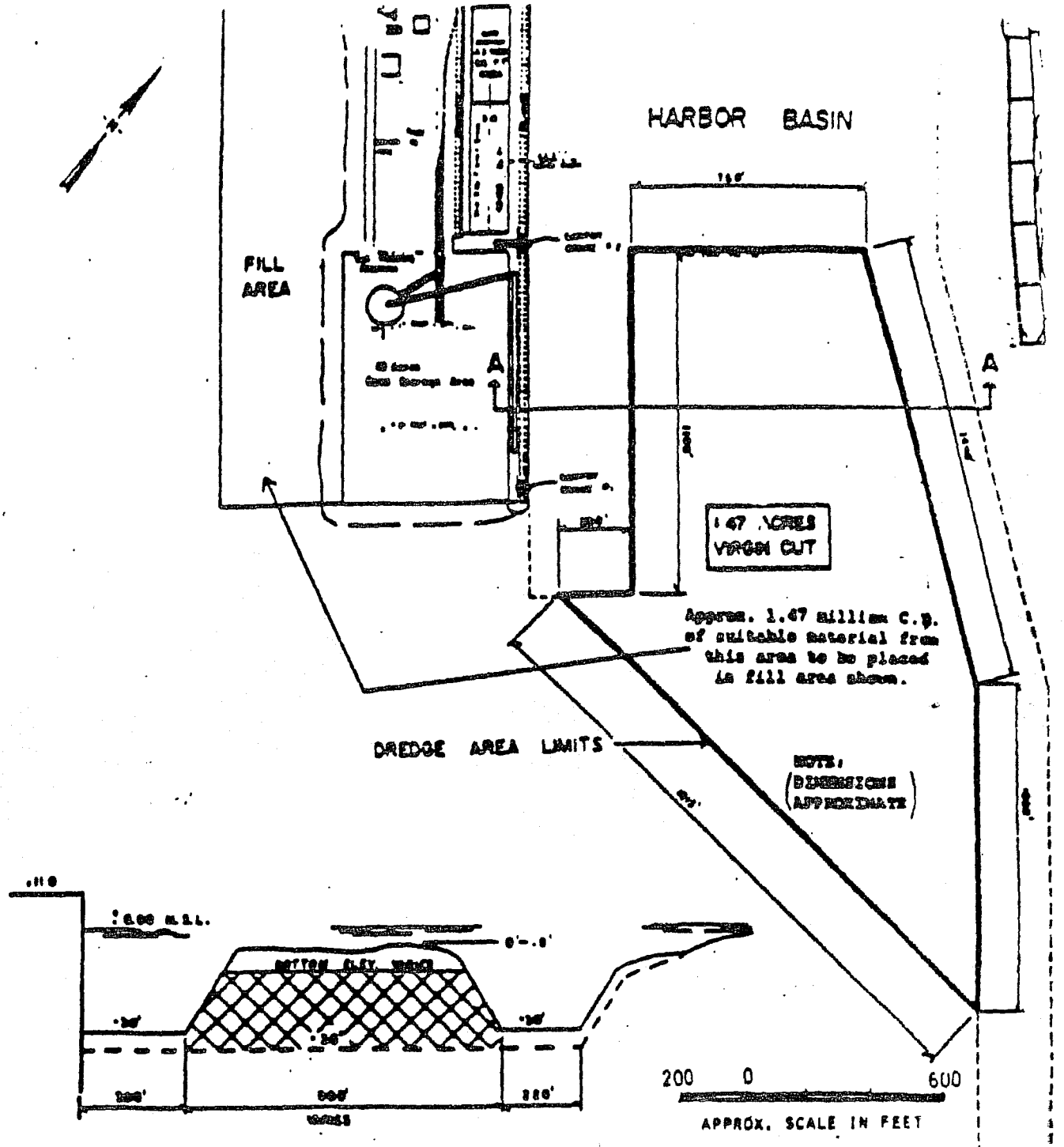
RECOMMENDED CHANNEL BEND WIDENINGS

FIGURE 1



ENVIRONMENTAL PROTECTION AGENCY ODMDS

FIGURE 2



SECT. "A-A"
(NOT TO SCALE)

SOURCE:
PERMIT APPLICATION BY
MISSISSIPPI STATE PORT AUTHORITY.

GULFPORT HARBOR, MISSISSIPPI

PORT AUTHORITY'S PLAN
FOR PORT EXPANSION

FIGURE 3

Response to John W. Colbert, dated March 30, 2009

Response: Comment 1. As described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies based on data from 1917/20 to 1960/71 indicated that littoral zone sediments do not cross the area known as Ship Island Pass. Additional studies will evaluate recent (2008) bathymetric data and will provide a present-day assessment of sand transport patterns in the Alabama-Mississippi barrier island chain. This assessment will be completed prior to any sand placement. The intent of the littoral zone sand additions is to provide a sediment source for the currents to migrate the sand to nourish the existing islands. The protection afforded by the existing islands is critical to sustaining the Mississippi Sound Estuary and the Corps had no pre-conceived ideas to where to place sediments. The additional studies will provide the optimum location for these additions. The author of the Corps sediment budget report was among the previous authors that made the assumption that sediment was migrating to Cat Island.

Cat Island was indeed formed from the same littoral system as the other Mississippi barrier islands, but recent sediment budget studies do not indicate any sediment transport was occurring between Ship and Cat Islands, based on data from 1917/20 to 1960/71. As described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands.

Current dredging practices mandate that all sandy material dredged from the Ship Island Pass be placed in the Littoral Zone Disposal Area on the western side of the Pass.

Response: Comment 2. The sediment budget that was completed for the Mississippi Barrier Islands was the first detailed sediment budget of present-day coastal processes. While much has been written about the barrier islands, the work presented in this report is the only existing representation of sediment transport pathways and magnitudes for the present-day condition.

The available data at the time of the sediment budget report (1917/20 to 1960/71) did not show any patterns of morphologic change that indicated there was net sediment transport between Cat and Ship Islands.

The additional detailed work slated for Cat Island should this project be funded will determine if the littoral current system does indeed move westward to Cat Island or is forced southward at Ship Island Pass by the presence of the Mississippi River Delta.

Sand dredged from each channel has been placed in downdrift placement sites as frequently as possible. Any sand placed downdrift of the navigation channels was

effectively bypassed, and available for natural coastal processes to transport the sand to the next island.

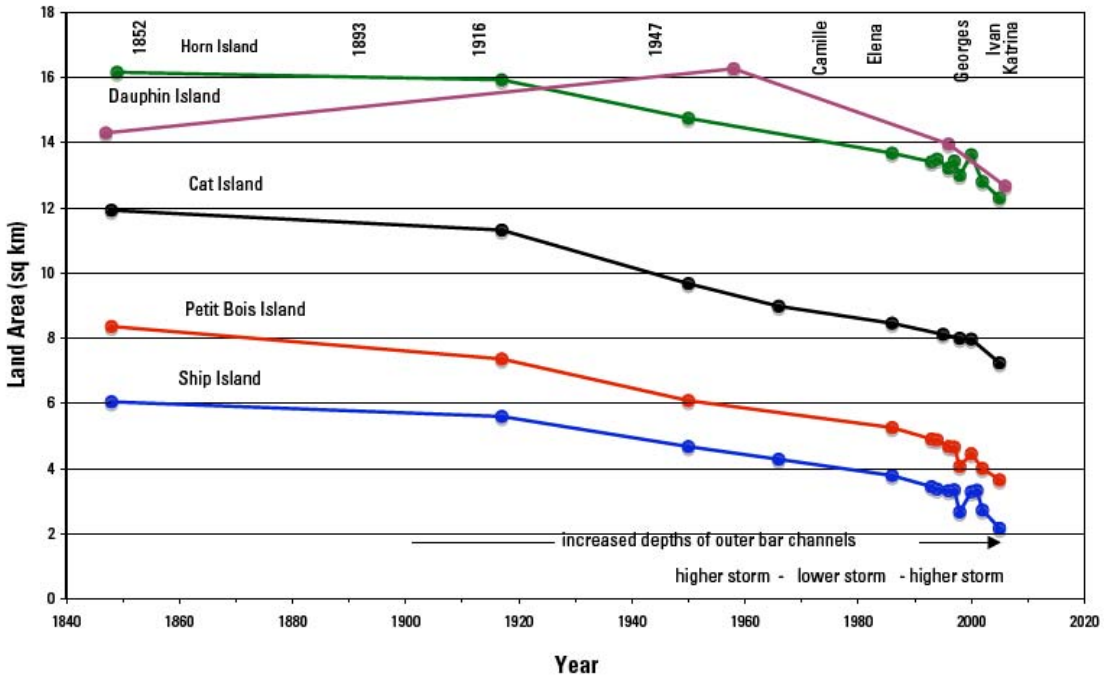
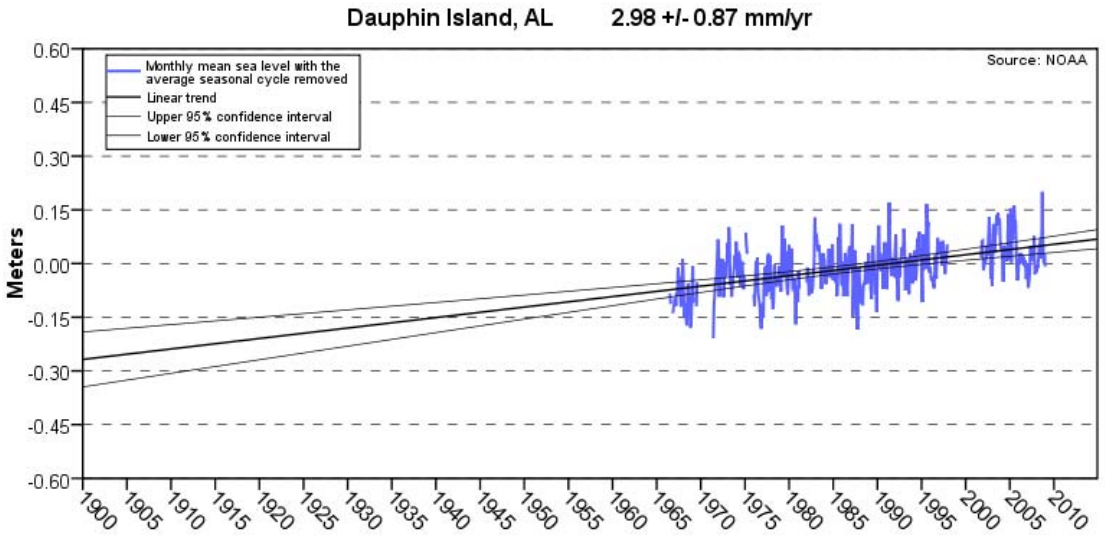


Figure 7. Historical land loss trends for the Mississippi-Alabama barrier islands relative to the timing of major hurricanes and human activities that impacted the islands.

Figure 7 from Morton's report is reproduced above. (Note that the line labeled "increased depths of outer bar channels" is misleading. Channel depths were 25 and 26 ft for Horn and Ship Island Passes, respectively, from 1900s to 1945. After 1945, these channels were deepened to between 32 and 44 ft.)

If the first data point taken in the 1840s (potentially questionable because of mapping and surveying capabilities in the mid-1800s) is not considered, the trend of change for the islands has been relatively constant since 1915 or so. Dredging of the channels between the 1900s and 1945 was only to a depth commensurate with the natural channel depths (25 and 26 ft for Horn and Ship Island Passes, respectively) and maintenance dredging rates were minimal up until 1945 (34,000 and 43,000 cu yd/year for Horn and Ship, respectively). Other changes to the regional system have occurred during this time represented by Morton's Figure 7, including relative sea level rise as shown below.



If we assume that relative sea level rise for the Mississippi Sound area has been approximately 3 mm/year since the 1900s, over the period 1900-2005, sea level has risen 105 years x 3 mm/yr = 1.1 ft. Morton's Figure 7 includes effects of 1 foot of sea level rise, storms, as well as operation & maintenance of the navigation channels. It is misleading to infer, based on a data point in the 1840s, that all of the islands have lost sediment because of dredging and placement practices. Certainly relative sea level rise and storm impacts have contributed to erosion of the Mississippi Barrier Island system.

Response: Comment 3. The additional studies should identify the presence or absence of the present day littoral system between Ship and Cat Island. Dr. Otvos himself states in a 2008 publication (Otvos and Carter, 2008) that "Intrusion of a major Mississippi River delta lobe had greatly reduced wave power in the western sound" and "this process diminished littoral sand transport and eventually terminated barrier island growth west of Ship Island".

The plan to place externally borrowed sand in Camille Cut and other littoral zones areas is only to add sand into the system and no additional placements are contemplated. The current practices of by-passing sand from dredging activities will continue.

While your postulation that had the ship channel not been maintained that Cat Island would have received all the volume removed from the channel could be true, no one can actually predict what could have occurred assuming that the additional studies will show the ship to Cat Island littoral connection. The presence of a southward flow to the littoral system along ship Island Pass could have altered the conceptual model. The presence of Ship Island Pass could be playing a role in how and where the migration is occurring. The additional studies will identify current conditions along the littoral system.

Response: Comment 4. Your concerns are so noted and as stated before, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies have indicated that littoral zone sediments do not cross this area known as Ship Island Pass, but the studies detailed below in the General Response should provide information on some of the additional work that will be accomplished prior to any sand placement.

General Response:
As described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies have indicated that littoral zone sediments do not cross this area known as Ship Island Pass, but the studies detailed below should provide information on some of the additional work that will be accomplished prior to any sand placement.

The second sentence in Section 7.3 will be amended to read that "*Initial studies have indicated that* the littoral zones currents that help replenish…….

The Barrier Island Appendix will be amended to provide more detail for proposed studies at and immediately around Cat Island. The following details will be amended into the Barrier Island Appendix at appropriate sections in Chapters 3 and 7. The Summary of Costs, Table 8-1, will be amended to detail the $1 million dedicated for additional studies at Cat Island and a figure will be inserted in Section 7.3 that's shows a potential location for littoral zone placement east of Cat Island.

Overview of Additional Studies for Cat Island

Additional studies are recommended to evaluate the possible influence the Operation & Maintenance practices for the navigation channels in Mississippi Sound, particularly Ship Island Pass, have had on Cat Island.

As discussed in the MsCIP sediment budget report, analysis of bathymetric and shoreline position data from 1917/20 to 1960/71 indicated an absence of morphologic change west of Ship Island Pass over to Cat Island (see Figure 16, reproduced below). This absence of any morphologic signature indicates that there was not a pathway of sediment transport from Ship Island to Cat Island, nor from the Ship Island disposal sites to Cat Island during this time period.

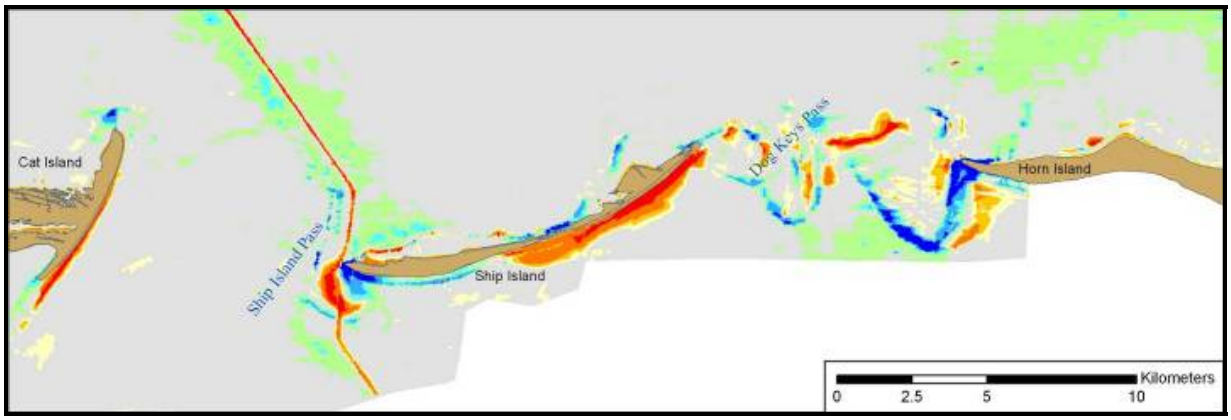


Figure 1. Bathymetric change (1917/20 to 1960/71) for the Mississippi Sound study area - Cat Island to Horn Island (from Byrnes and Griffee 2007)

Recommended Studies

1. Recent bathymetric data (~ 2008) are available and analysis of these data will help to determine if any morphologic connection has been established between Ship Island or dredged material placement sites and Cat Island since 1970. A comparison of the 1960/71 to 2008 data will also indicate whether the dredged material placement sites are stable or dispersive, and if dispersive, where the sediment is transported.

2. It is possible that the O&M dredging and placement practices at Ship Island Pass have reduced the amount of wave protection that Ship Island would have provided to Cat Island, if Ship Island were allowed to migrate to the west. An analysis is recommended with a hypothetical present-day position of Ship Island as if it had been allowed to migrate to the west, to evaluate the wave sheltering that Ship Island might have provided to Cat Island. Historical migration rates can be used to position Ship Island further west, and numerical models applied with wave forcing to calculate the existing and hypothetical wave forcing at Cat Island. A comparison of calculations will indicate the possible increase, decrease, or reversal in transport patterns because of a reduction in Ship Island's migration rate.

3. It is possible that, if Ship Island had been allowed to migrate west, it would have eventually provided sediment that would nourish Cat Island. This process would be much the same as is evident in the 1917/20 to 1960/71 bathymetric change for the passes between Dauphin, Petit Bois, Horn, and Ship Islands. Recommend a numerical study be conducted to evaluate whether the wave, tide, and circulation potential exists to transport sediment from a hypothetical future position of Ship Island to Cat Island. This exercise would be conducted with a coupled wave, current, and sediment transport model to evaluate whether the potential for sand transport exists in this region, given a hypothetical position of Ship Island (as if O&M and channel maintenance hadn't occurred) along with present-day sheltering provided by the Chandeleur Islands. It may be that wave, current, and tide conditions are not sufficient to transport sediment from east to west, given the sheltering and forcing in this area. On the other hand, it may be that a hypothetical future position of Ship Island, together with tide and wave forcing in that area, would be sufficient to create an ebb shoal that would bypass sand to Cat Island.

****

The following figure will be inserted into Section 7.3 and Cat Island will be included in the appropriate paragraphs.

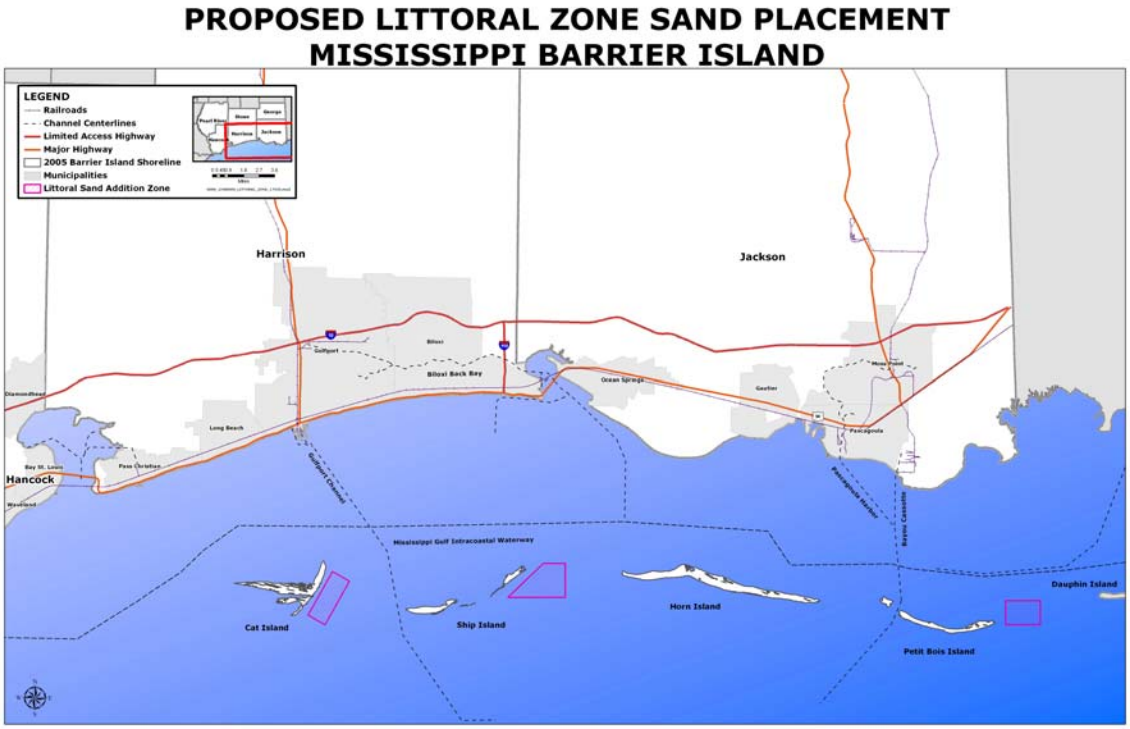


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Table 8-1.
Summary of Costs for the Comprehensive Barrier Island Restoration Plan

Project Sub-item	Costs
Sand Placement, Ship Island Breach and Littoral Zones	$516,000,000
Long Term Monitoring	$4,950,000
Cat Island Cat Coastal and Ecological Processes and Optimal Littoral Zone Placement	$1,000,000 (see note)
Regional Sediment Management Practice Revision	(see note)
Emergency Sand Placement, Fort Mass and French Warehouse	$3,000,000

Note 1: As described in Section 8.1 and shown in Table 8-2, this cost are included in the Engineering and Design costs ($17 million) for the “Sand Placement, Ship Island Breach and Littoral Zones”

March 25, 2009

Dr. Susan I. Rees
MsCIP Program Manager
Mobile District,
U. S. Army Corps of Engineers
P. O. Box 2288
Mobile, AL 36628

Re: US Corps of Engineers Coastal Improvement Program (MsCIP, Feb., 2009). Protection issues; vulnerability and restoration needs; The case for Cat Island.

Dr. Dr. Rees:

Please allow me to share my thoughts with you regarding certain important aspects of the program you are presently managing. My comment mainly involve the role of Cat Island in the planned island nourishment projects.

Introduction

A recent Draft Program by the Mobile District, US Corps of Engineers (2009) proposes very substantial nourishment efforts in island restoration to combat erosion problems exacerbated by land loss to catastrophic recent Hurricanes Camille and Katrina. I take exception to some of the statements made regarding the natural littoral/longshore sand supply that reaches Cat Island. This also included the easily challenged claim voiced in the present Corps Draft Program (2009) regarding alleged total absence of sand transport from Ship and Cat as the result of changed positions of the eastern part of the Mississippi River Delta.

Littoral sand transport from Ship Island to Cat Island and points to the west was the process that enabled formation of the western members of the Alabama-Louisiana (New Orleans) islands. There is no reason to doubt that sand transport, driven by the dominantly westward-directed waves from the Gulf does carry sand across the bottom of Ship Island Pass to reach the east shore of Cat Island. This highlights the need for a sediment bypass of the Ship Channel that avoids permanent sediment loss from dredging to its transport to Cat Island . To facilitate the sand reaching Cat Island, as done downdrift from Petit Bois Pass, sediment dredged from the channel should be deposited in a spoil pile on the western (downdrift) side of the channel.

The thrust of the Corps recommendations essentially favors partial restoration of Ship Island only. However, I would argue that a more even-handed restoration strategy may benefit Cat Island's protection and its long term survival chances with well-planned placement of sand resources along its eastern and northern shore sector.

Sand transport issues in island chain; subaqueous sand transport from West Ship to Cat Island

It has been well established that littoral drift along the island beaches and the nearshore littoral current plays an overwhelming role in east-west sand transport along the Alabama-Mississippi barrier island chain. This transport at present involves the entire barrier chain, starting in Dauphin Island, Alabama and continuing along the shores of Petit Bois, Horn, East and West Ship Islands, finally reaching Cat Island. As the sand-transmitting role and capacity of shallow ebb tidal deltas between the islands clerarly indicates, transport processes do not stop, only slow when they encounter passes and man-made, regularly dredged deep ship channels. Examples include the role of the giant Mobile Pass ebb tidal delta and of the smaller ebb-deltas off Horn Island and Dog Island Passes. Ship Island ship channel also acts as a "temporary sediment sink" in slowing but not entirely stopping the westward-directed littoral sand transport. By removing spoil material from shore-parallel downdrift sand transport, the regular dredging of the Ship Island navigation channel certainly diminishes the volume of sand that traveling along the Ship island shore, eventually reaches Cat Island in the west.

In recent geological history (Otvos and Giardino, 2004) Cat Island has been the offshore transmitting point of sand from Ship Island toward the south Hancock County, Mississippi - New Orleans Pine Island barrier chains that existed until growth of Mississippi River's St. Bernard delta lobes surrounded and partially buried these barriers and stopped littoral drift but *only west of Cat Island* more than 2000 years ago. While subsequent further growth and partial blocking Ship Island Pass probably diminished westward transport from Ship to Cat, the subsequent disintegration of easternmost St. Bernard Delta that previously has partially obstructed Ship Island Pass, now allowed the resumption of sand transport to Cat Island. The claim (USCE Draft Program, 2009, p.74) of "termination of littoral current transport due to the southward extension of the Mississippi Delta" is, as the Program Statement itself admits in a separate passage, not very well substantiated and therefore rather questionable. According to another far less than accurate statement, "portions of the barriers rolled over towards the Sound"; p.27).

Causes for land losses in Cat and Ship islands. Contrast between island elevation and morphology and its impact on island reduction and area reduction

Between 1848 and 2005, the total area of the two Ship islands has been reduced from ~600 ha to 204 ha, while Cat Island shrunk from ~1200 to 743 ha (Otvos and Carter, 2008; with similar values in Morton, 2007). A major reason for the historically steadily increasing, by now catastrophic shrinkage of Ship island may be its generally low surface elevation and exposed position. Most of Ship, especially its former central and eastern sectors consist of low sand flats that are reduced quickly to underwater shoals during major storms only to recover relatively slowly thereafter. In contrast, only very

minor areas in Cat Island (located exclusively in the SE spit area) are represented by shallow subtidal and low supratidal sand flats.

As historical data shows, recovery of the sand flat sectors remains incomplete even after several years of relative calm following a storm. It is reversed suddenly by the passage of a new hurricane. The much higher ground in West Ship proved to be more resistant to storm effects but even the relatively high relict beach ridges of East Ship, due to their unprotected setting were almost completely wiped out by Hurricane Katrina. Restoration of the low Ship island sectors by sand nourishment may bring only a very temporary respite at an unreasonably high cost.

Cat Island has been much better protected in the past. It is shielded from the Gulf by a pair of north-south-oriented wide, although steadily narrowing sand spits. Surface elevations especially in the higher dunes- covered northern spit and the E-W trending central strandplain-"shank" of the island are relatively high. Slow subsidence effects mostly a small NE sector of the island west of and in the protection of the northern spit. Most of the island's area loss took place by recession of the southern spit that recovers quickly each time after hurricane passage. The new shoreline usually forms somewhat west of the pre-storm shoreline. It is these spit areas that receive the westward transported sand that crosses Ship Island Pass from West Ship Island. Without the protection of the still relatively wide eastern spit belt the central and western areas of Cat Island would relatively quickly waste away under the recurring major hurricanes that regularly strike it from the Gulf.

Littoral drift, aided by wave refraction at this critical site constantly moves sand from this location both toward the northern and southern spit areas. Stockpiling would augment sand supplies that reach the island from West Ship via westward wave transport over the bottom of shallow Ship Island Pass. This natural transport process probably plays a significant role in keeping the spits relatively well supplied with sand and thus bolsters the island's defenses.

The spit zone is a major protection for the rest of the island that, because sheltered by the eastern spit belt suffered remarkably little overall erosion during the past 160 years. While central and eastern Ship Island, with or without massive nourishment efforts will inevitably waste away, *Cat Island would be more efficiently and effectively protected by regular nourishment, Repeatedly applied sand stockpiles may significantly lengthen the island's life. Deposition of significant sand volumes at the central sector of the eastern island shore thus could play a crucial role by mitigating the long-term effect of island erosion due to hurricane strikes.*

Recommendations

I recommend the regular placement of dredged and other sand resources along the central sector of Cat Island eastern shore to augment the northeastern and southeastern island spit. The two wide spit sectors undoubtedly play a crucial role in slowing the slow westward retreat of the eastern island shoreline, thereby diminishing and delaying steady destruction of the entire island. In view of the contrast between the two islands' geological framework and development history, sand nourishment at critical Cat island sites appear to be incomparably more cost-effective, of more enduring impact, and therefore more rewarding than sand placement on Ship Island sites would be. Therefore, at least some of the sand resources intended for Ship should be diverted to protect Cat Island. The transport scheme should also include sand bypassing around the Ship Island (Gulfport) Ship Channel. The establishment of a dredge spoil pile west (downdrift) of the ship channel. as engineered also at the west tip of Petit Bois Island. This would increase sand volumes that reach Cat Island by natural wave transport across Ship Island Pass.

Key References

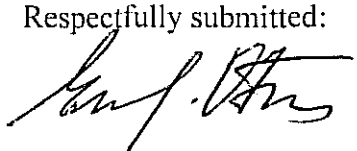
Morton, R. A., 2007, Historical changes in the Mississippi-Alabama barrier islands and the roles of extreme storms, sea level, and human activities. US Geological Survey Open-File Report No. 2007-1161.

Otvos, E. G. and Carter, G. A., 2008, Hurricane degradation- barrier development cycles, NE Gulf of Mexico: Landform evolution ands island chain history. Journal of Coastal Research, v. 24, p. 463-478.

Otvos, E. G. and Giardino, M. J., 2005, Interlinked barrier chain and delta lobe development, northern Gulf of Mexico. Sedimentary Geology, v. 169, p. 47-73.

US Corps of Engineers Mobile District, 2009, Mississippi Coastal Improvement Program (MsCIP), Hancock, Harrison and Jackson Counties, Mississippi. Appendix H. Barrier Islands, 80 p.

Respectfully submitted:



Ervin G. Otvos, Ph.D.
Professor Emeritus, USM
336 Oakridge Circle
Biloxi, MS 39531-2027

cc. Dr. William Walker, Mississippi Department of Marine Resources
Mr. George Boddie, Pass Christian, MS

Response:
Thank you for your letter dated March 25, 2009 in which you identified concerns with the Draft Mississippi Coastal Improvement Project report. We have listed each of your concerns, below, and explain how each of these was addressed in the report.

Response to comment 1.

As discussed in the MsCIP sediment budget report, analysis of bathymetric and shoreline position data from 1917/20 to 1960/71 indicated an absence of morphologic change west of Ship Island Pass over to Cat Island (see Figure 16, reproduced below). Note that the red and blue bathymetric change (indicated erosion and accretion, respectively) occurring at Dog Keys Pass, between Horn and Ship Islands, is absent west of Ship Island Pass over to Cat Island. This absence of any morphologic signature indicates that there was not a pathway of sediment transport from Ship Island to Cat Island, nor from the Ship Island disposal sites (shown as light green areas to the west of the Ship Channel) to Cat Island during this time period. It may be that this pathway would be evident in the recent 2008 data set. Before beach nourishment is designed for the Mississippi barrier islands, we will analyze the most recent data and conduct numerical modeling studies to determine the best areas for placement of sand. The report has been modified to more completely detail these plans.

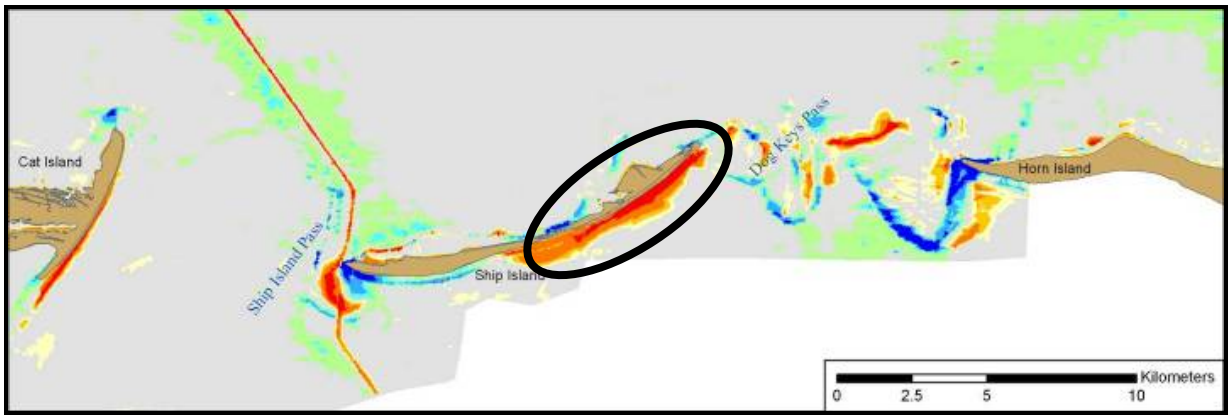


Figure 16. Bathymetric change (1917/20 to 1960/71) for the Mississippi Sound study area - Cat Island to Horn Island (from Byrnes and Griffee 2007)

Response to comment 2.

Your suggestion will be evaluated when we conduct the numerical modeling simulations that will evaluate various placement locations east of Cat Island. The report discusses these future plans.

Response to comment 3.

Please refer to the discussion pertaining to 1, above. These data indicate that there was not significant westward-directed littoral sand transport west of Ship Island from 1917/20 to 1960/71. More recent data will be analyzed to determine if westward transport between the Ship Channel and Cat Island is occurring now.

Response to comment 4.

The report says: "Formation of the St. Bernard deltaic complex and reworking of this delta to form the Chandeleur Islands reduced wave energy and transport of littoral sediments reaching Cat Island." The word "reduced" is used in the report, not "termination." We believe this is a reasonable statement.

Response to comment 5.

This statement refers to Figures 15 (reproduced below) and 16 (shown previously). Notice the circled areas on the figures, which show how the islands eroded (red areas) and reformed further into the Sound. This morphologic change is the "rollover" process.

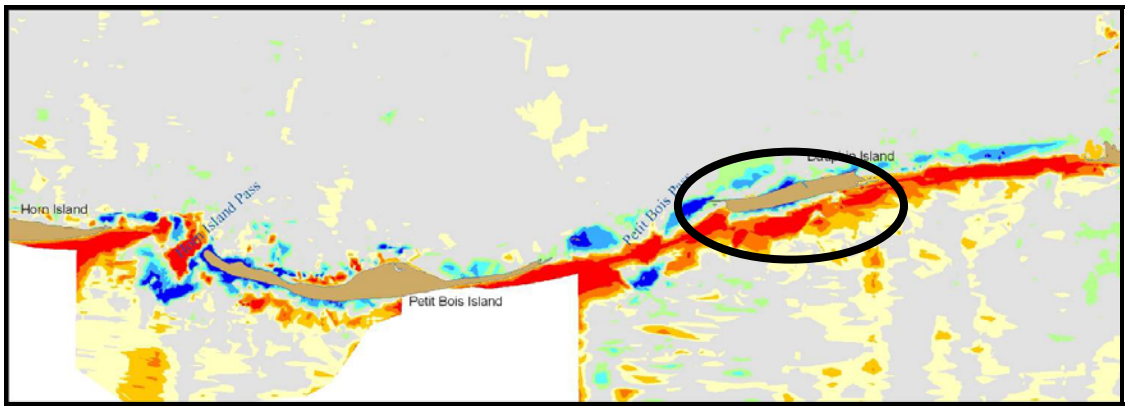


Figure 15. *Bathymetric change (1847/52 to 1917/20) for the Mississippi Sound study area - Horn Island to Dauphin Island (from Byrnes and Griffee 2007)*

Response to comment 6.

The primary benefits provided by closure of Camille Cut and the addition of sand into the littoral system that feeds sand to Ship Island are mostly environmental in nature. The additional salinity levels in Mississippi Sound that are occurring due to the presence of Camille Cut and the gradual loss of the islands are having an effect on the local

ecosystem. While our modeling has indicated that the restoration at Ship Island will only provide limited storm surge benefits, the presence of the island chain will provide sea-wave protection for the mainland coast. Also, the National Park Service has a vested interest and mission in preserving cultural artifacts on Ship Island (Fort Massachusetts and the French Warehouse). The NPS has deemed that restoration of Ship Island is necessary for maintaining these cultural resources.

Response to comment 7.

This may be a very good location for dredged material placement, one we will evaluate with numerical modeling as we design alternatives for the barrier islands.

Response to comment 8.

Once again, we will evaluate this placement option with numerical modeling in the next phase of the study.

Response to comment 9.

All viable placement locations, including those on Cat Island, will be evaluated with the most recent bathymetric and shoreline data with a system of numerical models. These models will evaluate episodic and long-term evolution of the islands and dredged material placement sites. The sites most critical to maintaining integrity of the islands will be selected for full design.

January 18, 2009

Mr. Bill Walker
Executive Director
Department of Marine Resources
1141 Bayview Avenue Suite 101
Biloxi, MS 39530

Ms. Susan Rees
U. S. Army Corps of Engineers
Mobile District, CESAM-PD
P. O. Box 2288
Mobile, AL 36628-0001

Ms. Liz Smith-Incer
National Park Service
River and Trails
3500 Park Road
Ocean Springs, MS

Ladies and Gentlemen:

By way of introduction, I am Judy J. Burnett formerly of DeLisle, Mississippi. My sister Kay J. Allen and I own 7.6 acres of waterfront property in the northeast corner of the Bay of St. Louis, Mississippi. This piece of property has been in our family for well over 100 years. It is located along the west side of Wittman Road and north shore of Bayou DeLisle in DeLisle, Mississippi.

The property is readily identified by a standard historical marker describing the founding of DeLisle and is surrounded by huge oak trees. The property is pristine with over 800 feet of waterfront and with several oak trees that an arborist has determined to be between 500 and 800 years old. These oaks are registered with the Garden Clubs of Mississippi, Inc. and have been declared to be a living natural asset of the state of Mississippi. It is a truly picturesque setting and would make a beautiful entrance to DeLisle and the surrounding areas and a wonderful park!

We are very interested in selling this property and hope that a federal or state agency would purchase the property as a park for all to use or for something that would benefit everyone. The citizens of DeLisle value the property as an historical site and would be in favor of this, I am sure, as they value the beauty and openness of the setting.

During Hurricane Camille, in August 1969, our parents' home on this property was completely destroyed. That home was rebuilt, and with the passing of my parents became the home of my sister and me. However, Hurricane Katrina in September 2005 completely destroyed this home again. The large oak trees, for the most part, remain and are now coming out. The entire southern part of the town of DeLisle flooded during Camille and Katrina and during another storm that hit in 1947.

We have been in discussions with Judy Steckler on this property and have hoped that she would be able to acquire the property for the Land Trust. Please feel free to contact Ms. Steckler to confirm the beauty and desirability of this property for some historical site, open green space or landmark. Representative Diane Peranich also values this property for its historical entrance to the town of DeLisle and its potential to serve the citizens as a park. We have also been in contact with her seeking funding to secure this property for DeLisle.

My sister and I are not planning to rebuild on this property; we have it for sale. We have read many articles in the Sun Herald outlining your visionary initiatives to acquire flood prone properties that could be used for purposes that would benefit the community other than for housing. That's why we decided to write each of you and your agencies and also the Honorable Delbert Hosemann asking you to fund the purchase of the property. Please, please visit DeLisle and visit this property. The actual address is 5607 W. Wittman Road.

One must actually see this property with its majestic oaks to appreciate its natural beauty and genteel setting overlooking the bayou, marshes, and Bay of St. Louis.

Should you be interested in discussing possible acquisition of this property, please contact me Judy at (904) 655-1322 or my sister Kay at (850) 939-9743.

Respectfully,

Judy J. Burnett

Copies:
The Honorable Delbert Hosemann
Representative Diane Peranich
Ms. Judy Steckler, Director
Mr. Marlin Ladner, Supervisor

Response to Judith Burnett, dated 18 January 2009

Response: Thank you for your support of the Mississippi Coastal Improvements Program. We will keep you informed of the program progress.

Rees, Susan I SAM

From: ed.cake@yahoo.com
Sent: Thursday, March 19, 2009 11:31 AM
To: Rees, Susan I SAM
Cc: Jacobson, Jennifer L SAM
Subject: MsCIP document improvements

Dr. Susan Rees
Mobile District
US Army Corps of Engineers
Post Office Box 2288
Mobile, AL 36628-0001
E-mail: susan.i.rees@usace.army.mil <http://us.mc1110.mail.yahoo.com/mc/compose?to=susan.i.rees@usace.army.mil>

Dear Susan,

Reference is made to the following document:

Mississippi Coastal Improvement Program (MsCIP) [for] Hancock, Harrison, and Jackson Coundies, Mississippi, Appendix G Risk Appendix

located at the following URL:

http://69.33.187.224/webcatalog/StoreBuilder/GroupSolutions/docfile/MSCIP%20Appendix%20G%20-%20Risk.pdf

In a cursory review of this document I noted the "common" misuse of the plural noun form "data" with the singular verb form "was" on lines 9 and 10 on page 13 of Part 3 - Education of Stakeholders. The collective noun "data" requires the use of the plural verb form "were." In addition, line 12 on that same page includes the phrase " . . . much of the data . . ." The correct phrase should be ". . . many of those data . . ."

I must conclude that many other examples of these misuses of the term "data" probably appear in the MsCIP documents. As an interested scientist, former scienrtific journal editor, and citizen of Coastal Mississippi, I respectfully request that all MsCIP documents be as technically correct as possible. If the staff has gramatical writing problems, what other conceptual problems might they also have. Please examine all draft MsCIP documents using the word-search feature on the word-processing software for the term "data" to ensure subject-verb agreement in all cases. Thank you.

Please provide me with a list of the Independent Technical Review participants as well as a list of the External Peer Review participants. I am particularly interested in the name or names of those individuals with expertise in coastal barriers and coastal barrier processes. It appears that the Coastal Barrier Resources System was inadequately considered in the review process and that the Coastal Barrier Improvement Act of 1990 which replaced and reauthorized the Coastal Barrier Resources Act of 1982 was not considered in the MsCIP documents that I reviewed. Thank you.

Please consider these comments as attemps on my part to improve the MsCIP documents being prepared under your guidance. They are not intended as criticisms at this stage in the review process.

Respectfully submitted,

Ed

Dr. Ed Cake
Gulf Environmental Associates
2510 Ridgewood Road
Ocean Springs, MS 39564

E-mail: ed.cake@yahoo.com <http://us.mc1110.mail.yahoo.com/mc/compose?
to=ed.cake@yahoo.com>
Cell: 228-324-9292

Rees, Susan I SAM

From: ed.cake@yahoo.com
Sent: Wednesday, March 18, 2009 2:02 PM
To: Jacobson, Jennifer L SAM
Cc: Rees, Susan I SAM
Subject: Deer Island & the MsCIP documents

Jenny Jacobson, Coastal Team Leader
U.S. Army Corps of Engineers, Mobile District Planning and Environmental Division, Coastal Environment Team
109 St. Joseph Street
Mobile, Alabama 36602
Phone: (251) 690-2724
E-mail: jennifer.l.jacobson@sam.usace.army.mil
<http://us.mc1110.mail.yahoo.com/mc/compose?to=jennifer.l.jacobson@sam.usace.army.mil>

RE: Deer Island plans & MsCIP documents

Dear Jenny,

Thank you for your telephone and e-mail responses this morning regarding Deer Island and the MsCIP documents.

I had found the 2-page "Functional Habitat Index" table earlier yesterday and copied same without really noting the "1.4..6" reference thereon. When scanning through a large *.pdf document, it is difficult to find items when the "contents" pages are unclear and/or out of place. Thank you for pointing out its location and for attempting to remedy these "content" page problems in the final MsCIP documents.

With regard to the statement in section 4.12 Deer Island Restoration, parts of lines 31 and 32 are inaccurate: "Deer island is considered a mainland remnant and is not a part of the coastal barrier system of islands along the Mississippi coast."

Please be advised that Deer Island was designated by Congress as Unit R02 of the Coastal Barrier Resources System in the Coastal Barrier Resources Act of 1982 and the Coastal Barrier Improvement Act of 1990. Please visit the following URL to authenticate this statement and denote that unit's designation under Harrison County as Unit R02:

http://www.fws.gov/habitatconservation/cbunits.pdf

Many coastal barriers were formed when shorelines were inundated by rising sea level. As in the case of Deer Island, they consist of consolidated, sandy sediments washed into the coastal zone by land runoff for nearby rivers and streams. Once those shoreline barriers come under the influence of littoral drift currents and other current and wave phenomena, they behave in much the same way as offshore coastal barriers: long-shore migration via littoral drift currents and landward migration via "rollover" following storm events and sea-level rise.

In the case of Deer Island sandy sediments were historically deposited on the eastern end of the island from the Belle Fountaine Beach area, but the presence of the federally-maintained East Biloxi Access Channel has interrupted and diverted those sandy sediments via maintenance dredging and other current phenomena. The effect of that sediment starvation and sea-level rise has been the loss of approximately one mile from the eastern tip of the island over the last 125+ years.

Deer Island continues to migrate down-drift, adding sandy sediments from the eroding eastern end to the southern shoreline and eventually to the western end where they wash into the West Biloxi Access Channel and are removed during maintenance dredging. Since little or no new sediments are deposited on to the eastern end of the island, its existence as a migrating coastal barrier is compromised. Until and unless a continuous supply of sandy sediments is used to repair and/or "feed" the eastern end of Deer Island,

any thought of preserving and/or enhancing that island will eventually fail as it continues to erode into Mississippi Sound and Biloxi Bay with rising sea level and Katrina-category hurricanes.

On the matter of the Coastal Barrier Resources System (CBRS) that was established by Congress in the two acts mentioned above, the final MsCIP documents should contain text and references regarding these to acts, to the CBRS itself, and to the types of projects that can be authorized under the public laws that arose from those acts. My initial review of the *.pdf documents (Appendix A Environmental) shows a dearth of material on the protections provided to Mississippi's coastal barrier resources by those acts.

In addition, the Jackson, MS, office of the US Fish and Wildlife Service cited only the Coastal Barrier Resources Act of 1982 in its MsCIP documentation. Apparently, Sabrina Chandler is unaware that the CBRA was replaced and reauthorized by the Coastal Barrier Improvement Act of 1992. Please communicate that fact to Ms. Chandler for me. Thank you.

I look forward to discussing Deer Island and other barrier-island issues with you on Thursday evening in Biloxi. In the meantime, these comments are,

Respectfully submitted,

Ed

Dr. Ed Cake, Biological Oceanographer
And Oyster Biologist
Gulf Environmental Associates
2510 Ridgewood Road
Ocean Springs, MS 39564
Cell Phone: 228-324-9292
E-mail: ed.cake@yahoo.com <http://us.mc1110.mail.yahoo.com/mc/compose?to=ed.cake@yahoo.com>

Response to Gulf Environmental Associates, Emails dated March 18 and 19, 2009

Comment Response 1: Comment noted and a search of the document will be conducted.

Comment Response 2: Comment noted and additional text will be added in the Deer Island section in the Environmental Appendix.

Comment Response 3: Comment noted.

Comment Response 4: The statement as noted in the report, "Deer Island is considered a mainland remnant and is not a part of the coastal barrier system of islands along the Mississippi coast" was intended from a geological and a scientific standpoint. The report will be updated to include the designation as Unit R02 of the Coastal Barrier Resources System in the Coastal Barrier Resources Act of 1982 and the Coastal Barrier Improvement Act of 1990.

Smith, Thomas E SAM

From: Smith, Thomas E SAM
Sent: Tuesday, March 24, 2009 1:06 PM
To: Rees, Susan I SAM
Subject: FW: Escatawpa River reroute- Jackson County, Mississippi

FYI

TOm Smith
Project Manager, Mississippi Coastal Team Corps of Engineers, Mobile District
251.690.3270 (Cell)251.605.0637

-----Original Message-----
From: Smith, Thomas E SAM
Sent: Monday, March 23, 2009 11:43 AM
To: Mark Cumbest
Subject: RE: Escatawpa River reroute- Jackson County, Mississippi

Mark,
Good to see you as well.

Our proposal for the Grand Bay NERR area restoration recommends detailed study only (no implementation) of the impacts of diverting some flows from the Escatawpa. The MsCIP proposal does not involve implementing or constructing any plans that would reroute the Escatawpa river. Because we are presently at the pre study phase, there are not a lot of details regarding flow volumes or real estate impacts. These are things that would be determined during the study effort if congressional funding is provided.

TOm Smith
Project Manager, Mississippi Coastal Team Corps of Engineers, Mobile District
251.690.3270 (Cell)251.605.0637

-----Original Message-----
From: Mark Cumbest [mailto:mcumbest@cumbestrealty.com]
Sent: Sunday, March 22, 2009 12:46 AM
To: Smith, Thomas E SAM
Cc: Grove, Michael A SAM; Patterson, Willie L SAM; Dawn Long
Subject: Escatawpa River reroute- Jackson County, Mississippi

Mr. Smith-

It was good to see you again at the public meeting in Biloxi this past Thursday.

I was quite surprised to hear of the proposed reroute of the Escatawpa River in Jackson County. As a co-owner of approximately 460 acres on the river in southern Jackson County, I would appreciate any further information, maps, etc., that you could send me that would illustrate the proposed changes under consideration. It is my understanding that maps were not available at the meeting. I would appreciate getting this information to me as soon as possible for me to prepare a comment before the deadline to do so.

I also enjoyed meeting Mr. Grove and Mr. Patterson at the meeting, and I am copying them

with this email.

Mark Cumbest

Broker-Owner

Cumbest Realty

17725 Highway 63

Moss Point, MS 39562

228-219-2376

HOUSE OF REPRESENTATIVES

RICHARD BENNETT
District 120
Harrison County
20108 Daugherty Road
Long Bech,MS 39560

Res (228) 863-6463
rbennett@house.ms.gov

STATE OF MISSISSIPPI

COMMITTEE ASSIGNMENTS:
Conservation and Water Resources
Ports, Harbors and Airports
Public Utilities
Tourism

March 25, 2009

Dr. Susan I Rees
MsCIP Program Manager
Mobile District, U.S.
Army Corps of Engineers
P.O. Box 2288
Mobile, Al 36628

Re: Draft Comprehensive Plan and for the Mississippi Coastal Improvements Program Appendix H (MsCIP)

Dear Dr. Rees:

On behalf of my constituents in District 120 of Harrison County, Mississippi, I request that the referenced draft plan be revised to include the restoration of Cat Island with the same urgency as Mississippi's other Barrier Islands. My district includes the City of Long Beach and the coastal areas of both Pass Christian and western Gulfport, which were all devastated by Hurricane Katrina in 2005. Cat Island lies approximately 7 miles south of my district and it is the only barrier between the Gulf of Mexico and my constituent's homes and businesses.

Although table 8-1 of the report budgets $516,000,000 to restore the islands east of the Gulfport Ship Channel, Appendix H of the report merely calls for additional study for Cat Island. The Corps has budgeted no money for Cat Island which protects the coastal communities west of the Gulfport Ship Channel. In light of the fact that additional restoration funds may not be forthcoming due to current strains on the federal budget, it is imperative that the Corps pursue the restoration of Cat Island with the same sense of urgency and to the same degree as Mississippi's other barrier islands. Please revise the draft report and give the restoration of Cat Island the same priority as our other islands to the east.

I urge the Corps of Engineers and the State of Mississippi to revise the current draft plan and to prioritize the restoration of Cat Island by including it in the initial funding request along with Mississippi's other barrier islands.

Thank your for considering my comments.

Sincerely,

Richard

cc: Dr. Bill Walker
George Boddie

Response to Richard Bennett, dated 25 March 2009

1. Thank you for your interest in the Mississippi Coastal Improvements Program and specifically the barrier island comprehensive restoration feature of the Comprehensive Plan.

2. Cat Island was never intended to be excluded from the barrier island comprehensive plan however, as described in Section 7.2 of the Barrier Island Appendix, additional studies are needed to better understand the coastal processes that occur between West Ship and Cat Islands. Initial sediment budget studies seem to indicate that littoral currents do not move sediments across the area known as Ship Island Pass. . Nourishment of Cat Island is not dependent upon a direct link with the other barrier islands, as it by itself if a critical component of the entire Mississippi Sound ecosystem. These and other issues, notably the private ownership of much of the island, will be addressed during the first year following authorization and funding and would be concurrent with other required studies for the remainder of the islands. We have indicated a requirement to perform additional studies to finalize the sediment budget and sediment transport processes and gain a full understanding of the nourishment needs of Cat Island.

In response to your and other concerns, we have revised the Barrier Island Appendix, specifically Chapters 3 and 7, to provide more detail for proposed studies at and immediately around Cat Island. In addition, the Summary of Costs, Table 8-1, will be amended to detail the $1 million dedicated for additional studies at Cat Island and a figure will be inserted in Section 7.3 that's shows a potential location for littoral zone placement east of Cat Island. The estimated cost of implementation of the comprehensive restoration plan feature contains funding for placement at Cat Island once the specific plan is designed.

From: Joanna W. Lobree [swlobree@msn.com]
Sent: Tuesday, March 31, 2009 4:38 PM
To: mscip@groupsolutions.us
Cc: Russ Barnett; Joanna Lobree
Subject: LOBREE - Draft MSCIP Comprehensive Report/Integrated EIS Comment
Importance: High
Attachments: MsCIP letter page 1.jpg; MsCIP letter page 2.jpg; MsCIP letter page 3.jpg; MsCIP letter page 4.jpg; MsCIP letter page 5.jpg

CAPT and Mrs. Shawn W. Lobree, USN
4325 Thoroughgood Drive
Virginia Beach, VA 23455
(757) 416-7887 (home)
(757) 672-0438/0439 (cell)
swlobree@msn.com

March 31, 2009

Dr. Susan Ivester Rees, Program Manager, MsCIP
US Army Corps of Engineers, Mobile District

Dear Dr. Rees,

We are writing about the MsCIP draft proposal. My wife, Joanna, along with many of our neighbors, was in attendance at the Jackson County MsCIP briefing two weeks ago. We are currently stationed in Norfolk, VA, and are nearly finished rebuilding our home on Belle Fontaine Drive in Ocean Springs. As you might imagine, we are rather disturbed about this proposal, and its impact on our property and our neighborhood.

Attached is a copy of a letter that was signed by twenty-five other residents on our street, after hearing rumor of the proposal in October, 2007. While we can't speak for every single signature on this letter or that they still feel the same way today, knowing them we are rather confident their views, like ours, haven't changed. The proposal in our letter is very reasonable, and it will eventually achieve your purpose without pushing anyone off of their property - especially after the hard work, emotional toil, and expense of rebuilding after Katrina.

We trust you will take our concerns into thoughtful consideration.

Respectfully,

Shawn W. Lobree
CAPT, USN

Joanna W. Lobree

Attachment: Five page letter dated October 25, 2007

October 25, 2007

Dear Senators Lott and Cochran,

As a neighborhood in recovery we are writing to express our grave concerns about the Mississippi Coastal Improvement Program (MsCIP). All of the parties to this letter lost their homes in Katrina.

We understand the proposed MsCIP program is well-intentioned and has been directed by Congress, but there are some serious conflicts and flaws in what has not been revealed about this proposed program.

As you are well aware many coastal property owners have worked tirelessly over the last 24 months planning and rebuilding their properties. These personal efforts have been generously supported and encouraged by numerous governmental agencies. Coastal Mississippi has received generous tax incentives, temporary housing assistance, SBA loans, Increased Cost of Compliance funding to raise our foundations and Mississippi Development Authority grants to offset escalating reconstruction costs. While building has been slower than expected-primarily due to insurance settlements and reinsurance issues- much progress has been made. Now with the proposed MsCIP program homeowners and businesses located in coastal areas have become paralyzed by rumor.

As we are all aware property ownership and land use issues are emotionally charged subjects, both because of their financial impact and the emotional ties we have with our homes and neighborhoods. While we understand the long term goals of moving families away from coastal areas we believe these policies must be consistent with the programs and commitments made in the two years following Katrina as well as what is fair and equitable. With these goals in mind and the need to assure hundreds of families that are in various stages of rebuilding that they will be able to obtain insurance at competitive rates we respectfully propose the following guidelines:

1. The McCIP would be a strictly voluntary program.

2. In the event a property owner did not wish to "sell out," their property would continue to be eligible for Federal Flood insurance and Wind pool coverage, at prevailing market rates. Prevailing market rates would be defined as the same rates available to property owners that have not been reclassified into an MsCIP zone.

3. Implement the "buy out" program as an ongoing long term program. This feature would allow families to remain in their properties until they elected to sell and would assure that eventually coastal insurance exposures would be significantly reduced.

While the voluntary aspect of the proposed MsCIP has been articulated, no one in the Corp of Engineers or the Mississippi Department of Marine Resources (the two agencies overseeing the program) has been willing to assure coastal property owners that their insurance status will not be affected by the creation of Ms CIP zones. Now, two years after Katrina struck, to be proposing that we give-up and sell-out our properties without equitable options is unconscionable and not the way we do things in this country. I am a dedicated member of the United States Navy and have served my country faithfully in six armed conflicts in the past two decades. I cannot help but feel somewhat betrayed by our government for the secrecy which has so far veiled the Army Corps MsCIP plan. I pride myself on being exceedingly well informed about local, state and national events, but did not learn of the McCIP initiative until last month when it became well publicized for the first time. Had we known about this plan in 2006, my wife Joanna and I would have probably thrown in the towel and elected not to rebuild our coastal home.

The guidelines I am proposing for the MsCIP program would achieve the goals of drastically reducing the occupation of flood-prone lands, both in the near-term and the long-term. It would be a WIN-WIN-WIN: A win for government, a win for those who are happy to sell and a win for those who wish to remain.

We sincerely believe that these guidelines would satisfy all parties and provide families that have undertaken the incredible effort to recover from Katrina the freedom to continue to enjoy the properties they have worked so hard to rebuild.

Most Sincerely,

Shawn W. Lobree

Shawn W. Lobree
CDR,USN

Copy to:
Governor Barbour
Representative Taylor
Lieutenant General Van Antwerp, USACE
Supervisor McKay

As neighbors of Mr. Lobree we share the concerns identified in the attached letter and fully support the adoption of the guidelines suggested.

NAME Richard + Cari Dickson

ADDRESS 7405 Belle Fontaine Dr.
PHONE 875-4392

NAME

ADDRESS
PHONE

NAME

ADDRESS
PHONE

NAME Harold P. Lum

ADDRESS 7021 W. Belle Fontaine Dr
PHONE 324 0184

NAME Lee Lum

ADDRESS 7021 W. Belle Fontaine Dr.
PHONE 32[illegible]

NAME Diane Beebe Bill King
Diane Beebe and Bill King

ADDRESS 7813 Belle Fontaine Drive Ocean Springs MS
PHONE 401-331-0568

As neighbors of Mr. Lobree we share the concerns identified in the attached letter and fully support the adoption of the guidelines suggested.

NAME Michael Schnitt

ADDRESS 7109 Belle Fontaine Dr., OS. MS. 39564
PHONE

NAME Marsha Schnitt

ADDRESS 7109 Belle Fontaine Dr, Ocean Springs, Ms. 39564
PHONE

NAME Ben F. Pritchard Sr.

ADDRESS 7319 Belle Fontaine Dr.
Ocean Springs MS
PHONE 985-285-6051

NAME John & Tytti Kooienga

ADDRESS Lot 111, Belle Fontaine DR
Ocean Springs, MS
PHONE 228-872-9097

NAME ALICE & RANDEL JAMES

ADDRESS 7117 Belle Fontaine DR
OCEAN SPRINGS MS
PHONE 228-860-2926

NAME Alicia McBlair

ADDRESS 6902 Belle Fontaine Dr
PHONE 228 809 3329

As neighbors of Mr. Lobree we share the concerns identified in the attached letter and fully support the adoption of the guidelines suggested.

NAME Elsie D. Goff
Bob m Barnett
ADDRESS 7825 Belle Fountain Dr. O.S. MS 39564
PHONE 383-5070

NAME Russell Barnett
ADDRESS 7707 Belle Fontaine Drive, OS, MS 39564
PHONE 228-818-9935

NAME Shaw Langs
ADDRESS 7709 Belle Fontaine Dr. Ocean Springs MS 39564
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NAME Charles P. Richardson
ADDRESS 8309 Belle Fontaine Dr Ocean Springs MS 39564
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NAME Audrey Richardson
8309 Belle Fontaine Dr
ADDRESS Ocean Springs, MS 39564
PHONE 239 463-1875

NAME Tom and Edna Jones
ADDRESS 5719 Belle Fontaine Drive
PHONE Ocean Springs, MS 39564

Responses to Shawn and Joanna LoBree, e-mail dated 31 March 2009

1. Thank you for your interest in the Mississippi Coastal Improvements Program.

2. The following addresses the proposal contained in the letter dated 25 October 2007 to Senators Lott and Cochran.

The High Hazard Area Risk Reduction Program (HARP) is a nonstructural acquisition program aimed at reducing future risk to life and property within the highest hazard zones of coastal Mississippi. These zone encompass the FEMA defined 100-year floodplain which consists of approximately 59,000 parcels coastwide. The HARP phase one is aimed at acquiring properties within what FEMA designates the VE zone in which floodproofing (elevation) of properties is not recommended due to the additional damages caused by waves and surge velocity. This zone contains an estimated 15,000 parcels. As formulated acquisition of property in the HARP would be offered to eligible landowners as a opportunity to sell their property for the fair market value with relocations assistance depending upon their individual ownership and current occupancy situation. Any application of mandatory purchases would only come later in the acquisition program should there be remnant parcels that are determined by a joint agreement between the County/Municipality/Corps to be inefficient to service with public utilities and services.

The Corps of Engineers is not responsible for the availability or cost of flood insurance through the National Flood Insurance Program administered by FEMA. Any classification of the coastal areas affected by hurricane Katrina or other hurricanes being considered by the Corps in plan formulation of the MsCIP would not have any affect on the Flood Insurance Rate Maps being generated by FEMA for use by the local jurisdictions in floodplain management ordinances or insurance agents offering flood insurance.

The Corps of Engineers is recommending several short-term projects for authorization and funding that would affect properties in the 100-year floodplain delineated by FEMA. Those projects include the High Hazard Area Flood Risk Reduction Program (known as the HARP) that would include purchasing (willing seller basis) approximately 2,000 parcels within the Corps designated high-hazard area (approximately the new FEMA V-zone) across the entire MS coastline. In addition, the Corps is recommending a structure elevation project in Waveland, MS that would raise the first floors of 25 residences above the new FEMA base flood elevation (100-year flood elevation) and the floodproofing or relocation of the municipal buildings in Moss Point, MS to reduce future damages to those critical structures. Also the Corps is recommending approval of detailed planning studies to be conducted with the three counties affected by Katrina (Jackson, Harrison, and Hancock) and several municipalities as well as FEMA, HUD, and other Federal and State agencies that would look ay more long-term projects that would include additional land acquisition in the 100-year floodplain, additional structure elevation and floodproofing and possibly more relocations of public structures not already addressed by FEMA.

Steve Landry

From: King, Ruda L SAM
Sent: Monday, March 23, 2009 8:31 AM
To: Rees, Susan I SAM; Smith, Thomas E SAM
Subject: FW: MSCIP Comment

Forward from MsCIP, I have printed and put in the folder. Will also add his name to willing to sell list.

-----Original Message-----
From: swl323@mchsi.com [mailto:swl323@mchsi.com]
Sent: Thursday, March 19, 2009 6:56 AM
To: MsCIP
Subject: MSCIP Comment

Stephen Landry

2025 Hollywood Dr.

Bay St. Louis, MS 39520

I went to the meeting last night and reviewed the available information along with talking to some of the people there and had to leave before I could comment. For the most part I agree with the program and feel at this point it appears to be the best thing to do. If asked to sell my property I would at this time. I was building prior to the storm but not living in the house when the storm hit; we were renting. Not having flood insurance on the property I received nothing but a little wind money, so I completed the house because like most we didn't have anything, no place to go and had to do something. We did not get state or FEMA money. Knowing what I know now I think I would have done things difference, if I could have. Last year, I had 18" on water under the house/in the shed and the second time I was surrounded by water. Both times my wife and I had to leave. Like most, I think we feel it is time to give the property back to nature. I'm ready when you are. Thanks for the good job, I know it has not been easy.

Steve

Response to Stephen Landry, e-mail dated 23 March 2009

Response: Thank you for your support of the Mississippi Coastal Improvements Program. We will keep you informed of the program progress.

Thank you very much for this presentation! I think I already asked you this, but will any of these plans affect East Biloxi residents? I looked through the presentation and I hardly saw any mention of East Biloxi, or Biloxi for that matter.

Trinh Le
Community Empowerment Coordinator
Hope CDA: Hope Community Development Agency formerly the East Biloxi Hope Coordination Center
email: tle@hopecda.org
phone: 228-383-0910

Response to Trinh Le, undated e-mail

Response: Thank you for your interest. Projects that will benefit the east Biloxi area include: Restoration of the Gulf barrier islands, restoration of Deer Island, diversion of freshwater, improvements to the beach-dune system of Harrison County and the High Hazard Area Risk Reduction Program (HARP).

Restoration of the barrier islands and Deer Island will offer some relief from the lower energy tropical storms that frequent the area. In addition restoration of the barrier islands will enhance the sustainability of the Mississippi Sound estuary through the reduction of salt water intrusion. Diversion of freshwater into the estuary will also restore the conditions necessary for the production of fish and shellfish.

Although not located within Biloxi, all residents of flood prone areas of the coast will benefit from the floodproofing demonstration project proposed for the Waveland area. This project will illustrate the requirements necessary to floodproof properties following the appropriate Federal guidelines and building codes.

The HARP is applicable to anyone within the three coastal counties living within the high hazard zone. We are not familiar with the specific location of the Hope Community but know that there are areas in east Biloxi that are located in this zone. Under the HARP we will work with willing sellers to purchase their property and relocate them as necessary to properties outside the flood zone.