

**DRAFT**  
**SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT**  
**MISSISSIPPI COASTAL IMPROVEMENTS PROGRAM**  
**LONG BEACH CANALS INTERIM PROJECT**  
**HARRISON COUNTY, MISSISSIPPI**

**TABLE OF CONTENTS**

<b>1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION</b> .....	3
<b>2.0 NATIONAL ENVIRONMENTAL POLICY ACT CONSIDERATION</b> .....	4
<b>3.0 DESCRIPTION OF THE PROPOSED PROJECT</b> .....	4
<b>4.0 ALTERNATIVES TO THE PROPOSED PROJECT</b> .....	5
4.1 No Action Alternative.....	5
4.2 Channel Modification Alternative.....	6
4.2 <b>Proposed Action</b> - Debris Removal and Disposal Alternative.....	5
<b>5.0 AFFECTED ENVIRONMENT</b> .....	6
5.1 Physiography.....	6
5.2 Soils.....	6
5.3 Biological Resources .....	6
5.3.1 Coastal Flora.....	7
5.3.2 Coastal Fauna.....	7
5.4 Essential Fish Habitat .....	8
5.4.1 Gulf of Mexico Fishery Management Plans .....	8
5.4.2 Habitats .....	8
5.5 Cultural Resources .....	9
5.6 Aesthetics.....	9
5.7 Noise .....	9
5.8 Air Quality .....	9
5.9 Threatened and Endangered Species .....	9
<b>6.0 EFFECTED ENVIRONMENTAL</b> .....	10
6.1 General.....	10
6.2 Soils.....	11
6.3 Biological Resources .....	11
6.3.1 Coastal Flora.....	11
6.3.2 Coastal Fauna.....	11
6.4 Essential Fish Habitat Assessment.....	11
6.5 Cultural Resources .....	12
6.6 Aesthetics.....	12
6.7 Noise .....	12

6.8 Air Quality .....	12
6.9 Threatened and Endangered Species .....	12
<b>7.0 COASTAL ZONE CONSISTENCY .....</b>	<b>12</b>
<b>8.0 WATER QUALITY CERTIFICATION .....</b>	<b>13</b>
<b>9.0 PROTECTION OF CHILDREN.....</b>	<b>13</b>
<b>10.0 ENVIRONMENTAL JUSTICE .....</b>	<b>13</b>
<b>11.0 CUMULATIVE EFFECTS SUMMARY .....</b>	<b>13</b>
<b>12.0 CONCLUSION .....</b>	<b>14</b>
<b>13.0 LIST OF PREPARERS .....</b>	<b>14</b>
<b>14.0 LIST OF AGENCIES, INTERESTED GROUPS &amp; PUBLIC CONSULTED .....</b>	<b>14</b>
<b>15.0 REFERENCES.....</b>	<b>14</b>

List of Figures

Figure 1 – Project Vicinity Map

Figure 2 – Project Plan View

List of Tables

Table 1 – Fishery Management Plans and Managed Species for the Gulf of Mexico.  
(NMFS 1999)

Table 2 – Federally Listed Endangered and Threatened Species in Harrison County,  
Mississippi (USFWS 2008)

List of Enclosures

Enclosure 1 - Public Notice Number FP08-MS01-02

Enclosure 2 - Mississippi Department of Environmental Quality Corps Correspondence

Enclosure 3 - Mississippi Department of Marine Resources Corps Correspondence

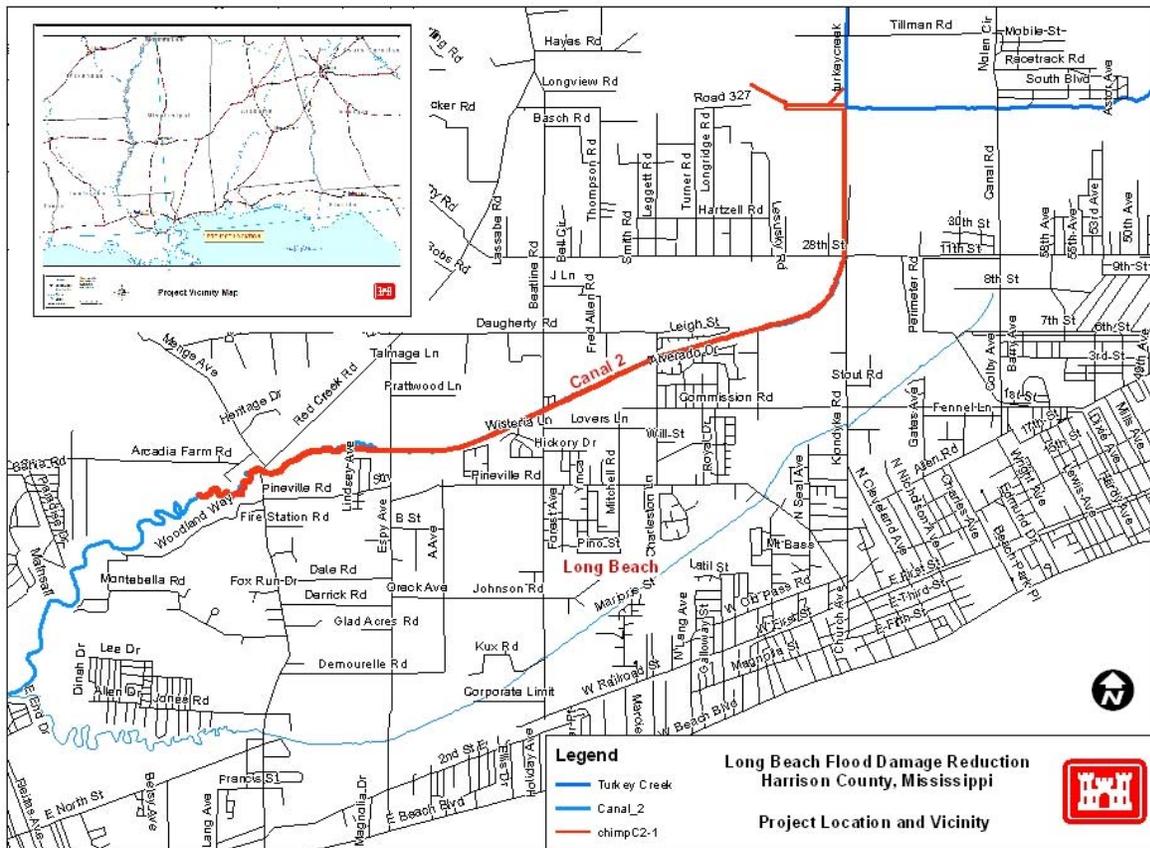
Enclosure 4 – U.S. Fish and Wildlife Service Corps Correspondence

Enclosure 5 – National Marine Fisheries Service Corps Correspondence

# DRAFT

## SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT MISSISSIPPI COASTAL IMPROVEMENTS PROGRAM LONG BEACH CANALS INTERIM PROJECT HARRISON COUNTY, MISSISSIPPI

**1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION.** The Long Beach Canal Flood Damage Reduction Project was authorized by Public Law 110-28, *Supplemental Appropriations Bill - Public Law 110-28, U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq Accountability Appropriations Act, 2007*, as part of the Mississippi Coastal Improvements Program (MsCIP) for Hancock, Harrison, and Jackson Counties, Mississippi. The current project consists of removing sediment, woody debris, clearing and snagging from Long Beach canals 2 and 3 from a point approximately one mile north of 28<sup>th</sup> Street extending southwest to approximately one mile downstream of Menge Avenue, totaling approximately 6.4 miles, as shown on Figure 1. Impacts associated with this project were discussed in the MsCIP Environmental Assessment (EA) and the Finding of No Significant Impact (FONSI), dated June 28, 2006. Findings of this EA and FONSI determined no significant impacts would occur as a result of this Long Beach Drainage MsCIP Interim Project.



**Figure 1: Vicinity Map of Long Beach Canals Project Area**

During development of project plans, detailed engineering and analysis revealed the existing project could induce flooding downstream of the project limit. Project engineers determined additional improvements downstream of the original project within the natural stream section of Long Beach canal 2 to the mouth of Bayou Portage were warranted to reduce flooding associated with the original project. The natural stream section of Long Beach canal 2 is located outside of the MsCIP EA and FONSI; therefore the proposed project impacts are discussed in this Supplemental EA and Section 404(b)(1) Evaluation Report.

The proposed project discussed in this Supplemental EA consists of removing sediment and woody debris from the natural stream portion of Long Beach Canal 2 from the terminus of the original project to the mouth of Bayou Portage, approximately 2.6 miles. The purpose of the additional project segment, addressed in this Supplemental EA, is to provide improvements in floodwater conveyance and circulation for improved drainage, water quality and fish habitat. Currently, sedimentation and woody debris in the channel prohibits the system from functioning at its full capacity; therefore, if this portion of the canal is not restored, the benefits provided by improvements from the original MsCIP Long Beach Canal Interim Project on the upper portion of the canal will be reduced due to the lack of adequate downstream channel capacity and increased flooding immediately downstream of Menge Avenue.

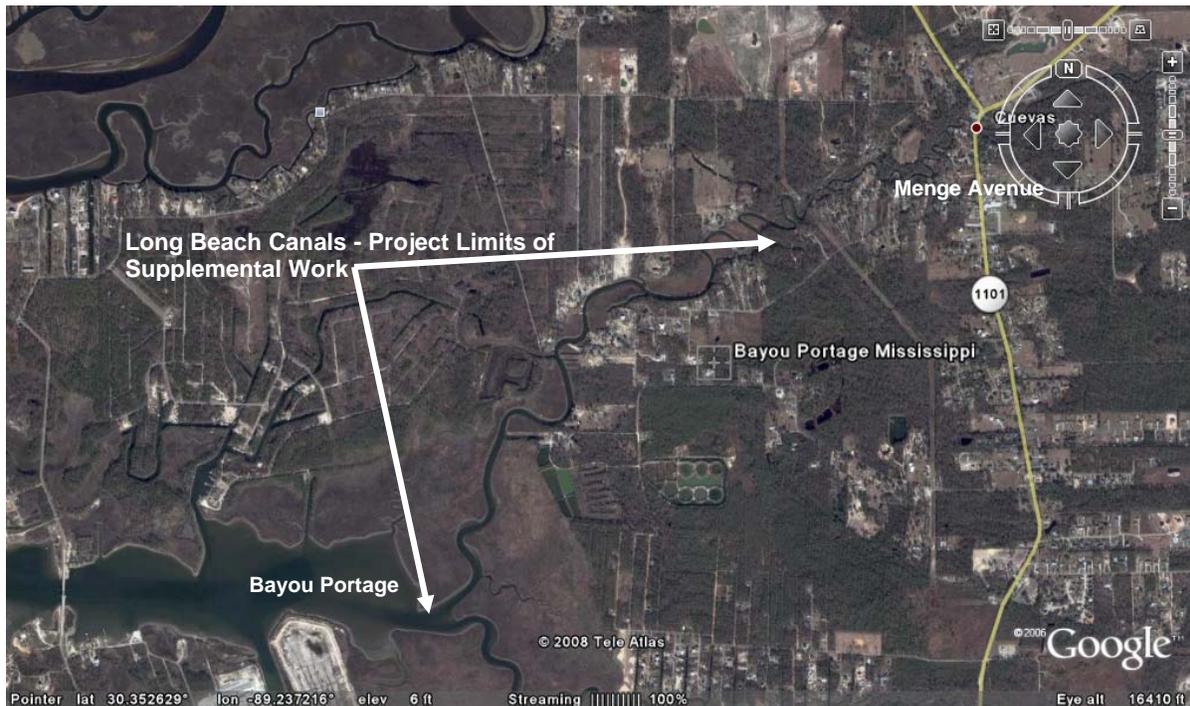
The proposed action described fully in this Supplemental EA will not result in induced flooding but in fact, will improve downstream channel capacity and functionality of Long Beach Canals. This additional portion of the project is critical in the success of the overall drainage project as it is needed to restore the capacity of the channel and improve the drainage of the overall system. The purpose of this Supplemental EA is to determine if the proposed action has the potential for creating significant impacts to the environment and would thereby warrant a more detailed study on possible impacts, mitigation, and alternative courses of action.

**2.0. NATIONAL ENVIRONMENTAL POLICY ACT CONSIDERATION.** The MsCIP EA and the FONSI, dated June 28, 2006, evaluated impacts for 15 Interim Projects, including the Long Beach Canal Drainage project. Findings of this EA and FONSI determined no significant impacts would occur as a result of this Long Beach Drainage MsCIP Interim Project. This Supplemental EA, prepared by the U.S. Army Corps of Engineers (Corps), Mobile District, addresses potential impacts associated with removing sediment and woody debris, left by the hurricanes of 2005, from within the channel located from the terminus of the original project to the mouth of Bayou Portage, approximately 2.6 miles.

The National Environmental Policy Act (NEPA) and Title 40 of the Code of Federal Regulations (CFR), CFR Parts 1500-1508 (40 CFR 1500-1508) require Federal agencies to consider the potential environmental consequences of proposed actions and alternatives. Executive Order (EO) 11514, Protection and Enhancement of Environmental Quality (amended by EO 11991), provides policy directing the Federal government to take leadership in protecting and enhancing the environment.

**3.0 DESCRIPTION OF THE PROPOSED ACTION.** The proposed project consists of removing sediment and woody debris from the natural section of Long Beach Canals from a point approximately one-mile downstream of Menge Avenue extending southwest approximately 2.6 miles to the mouth of Bayou Portage; thus, totaling approximately 9 miles (Figure 2).

Approximately 12,500 cubic yards of sediment and woody debris will be removed and disposed in an offsite approved upland disposal area to be obtained by the contractor. All work will be performed within the limits of the existing natural stream channel consisting of varying widths from 20 to 30 feet wide and varying depths from 1 to 2 feet deep depending upon existing conditions. Due to the work area constraints of the confined channel, it would be necessary in some places to relocate material within the channel to create a smooth bottom. Mechanical dredging will be accomplished by using a trackhoe mounted on a small shallow draft barge. A separate small shallow draft barge will be used to stockpile material removed from the channel. Small push boats will be used to transport barges to and from an offload site and dump trucks will haul sediment and woody debris to the approved upland disposal site. Some debris may require cutting and sawing before placed into the dump trucks.



**Figure 2. Additional Natural Stream Portion – Bayou Portage to Menge Avenue**

#### **4.0. ALTERNATIVES TO THE PROPOSED PROJECT.**

**4.1. No Action.** The No Action alternative involves the continuation of existing conditions and no new solutions for existing problems within the lower portion of the canal extending from a point approximately one-mile downstream of Menge Avenue southwestward approximately 2.6 miles to the mouth of Bayou Portage. This alternative avoids both the monetary investment and potential adverse impacts associated with improvements. Without corrective action, it is anticipated that greater negative environmental impacts, such as flooding, would result from leaving sedimentation and woody debris. The No Action alternative would not restore the capacity of the lower portion of the stream, which is needed to improve drainage of the overall system. The original Long Beach Canal Drainage MsCIP Interim Project described in Section 1.0 would be constructed; however, if the lower portion of the canal is not restored, the benefits provided by the improvements on the upper portion of the canal will be reduced due to the lack

of adequate downstream channel capacity. Currently, sedimentation in the channel prohibits the system from functioning at its full capacity. The No-Action alternative was not considered a viable alternative for the proposed action; therefore, it was not selected as the preferred alternative.

**4.2. Channel Modification Alternative.** This alternative would consist of channelization of the natural stream portion of Long Beach Canal. The natural stream would be modified by constructing a channel with a 60-foot bottom width and 3:1 side slopes from a point approximately one mile downstream of Menge Avenue for approximately 2.6 miles to the mouth of Bayou Portage. This alternative would adversely impact essential fish habitat found within the natural stream bed that is unique in an urbanized setting while also impacting adjacent tidal wetlands. This alternative was not considered a viable alternative for the proposed action; therefore, it was not selected as the preferred alternative.

**4.2. Proposed Action - Sedimentation and Debris Removal and Disposal Alternative.** The recommended alternative is to remove the sedimentation along with woody debris from the natural section of the canal by the use of small shallow draft barges, and a barge mounted trackhoe. The removed sediment and debris would be placed on trucks for disposal in an offsite approved upland disposal site. A detailed description of this proposed action is located in Section 3.0 of this Supplemental EA.

## **5.0. AFFECTED ENVIRONMENT.**

**5.1 Physiography.** The geologic formations exposed on the surface of the Mississippi Gulf coast were deposited, beginning approximately 1.6 million years ago, atop the Pliocene and Miocene deposits. The deposits are up to 100 feet thick and consist of alluvium and terrace deposits (Otvos, 1998). The Biloxi Formation, the Prairie Formation, and the Gulfport Formation were all deposited during this time. The Biloxi Formation was deposited during a period of rising sea level in marine and brackish water both nearshore and offshore. This formation is not exposed at the surface and is approximately 15 feet thick in Harrison County and consists of clay, fine sand, and sandy clay with abundant fossils. The Gulfport Formation is a sand unit that was deposited during a time of sea level decline, following the highest sea level stage of the Pleistocene epoch. It forms the high ridge upon which the coastal cities of Pass Christian, Gulfport, and Biloxi are built.

**5.2 Soils.** Harrison County is in the extreme southern part of Mississippi. The total area of the county is 374,528 acres, or about 585 square miles, including Ship, Deer, and Cat Islands. The Pass Christian area is dominated by the following soils:

- Handsboro, mucky silt loam
- Poarch fine sandy loam, 2 to 5 percent slope;
- Atmore silt loam;
- Latonia loamy sand; and
- Harleson fine sandy loam, 0 to 2 percent slopes.

**5.3 Biological Resources.** Coastal Mississippi consists of several habitats including beaches, sand dunes, coastal maritime forests, emergent wetlands, submerged aquatic vegetation, rivers, tidal creeks, tidal flats, scrub/shrub wetlands, forested wetlands, and open-water benthic habitats. These areas are home to an immensely diverse, resilient, and environmentally significant group of species, including some threatened and endangered fauna. Ecological habitats within the project site include estuarine subtidal and intertidal waterbottoms populated with diverse benthic communities. Benthic communities vary depending on the substrate bottom types present in the area. Intertidal and subtidal water bottoms vary from sand to muddy sand to mud. Subtidal bottoms consist primarily of soft mud sediments (Christmas, 1973). There are no submerged aquatic beds in the vicinity of the project area. Generally, the submerged aquatic grasses are restricted to the northern shores of the barrier islands south of the mainland shoreline.

**5.3.1 Coastal Flora.** The vegetative communities in Coastal Mississippi are diverse; however, existing land use patterns have resulted in a great deal of modification of the natural plant associations. Terrestrial uplands dominate higher ground areas that are not normally subject to riverine flooding or tidal inundation. Natural upland vegetation complexes found in the area include longleaf pine oaks, moist pinelands, bay forests, monoculture pine, maritime strand, and beach dune associations. The most dominant upland association, longleaf pine oaks, is well adapted to the dry, sandy sites in the coastal plain region. This association is usually found above the 10-foot contour but sometimes integrates into the moist pinelands along streams and rivers. Other dominant species occurring in the community include: southern red oak (*Quercus falcata*), laurel oak (*Q. laurifolia*), live oak (*Q. virginiana*), southern magnolia (*Magnolia grandiflora*), flowering dogwood (*Cornus florida*), persimmon (*Diospyros virginiana*), winged sumac (*Rhus copallina*), sparkleberry (*Vaccinium arboreum*), and broomsedge (*Andropogon* spp.).

Forest coverage opens up when entering sandy areas near the coast. Vegetation consists largely of slash pine (*Pinus elliottii*) with an understory of saw palmetto (*Serenoa repens*) and wax myrtle (*Myrica cerifera*). This area, known as moist pinelands, differs from longleaf pine-oaks due to its higher water table. A thin strip of moist pinelands usually divides the floodplain swamps and longleaf pine-oak forests. Sedges, grasses, and other herbaceous plants grow in the understory area. Pitcher plant bogs are very noticeable with thousands of plants occupying a relatively small area. Depression in the land combined with the high water table produce standing water, which supports dense growths of freshwater, floating and submerged, aquatic plants.

The vegetative community in brackish to saline marshes consists of plants that have adapted physiologically to higher levels of salinity. Brackish marshes are more diverse than saline marshes and are characterized by black needle rush and saltmeadow cordgrass (*Spartina patens*). *S. Patens* is characteristic of the saline environment. A distinct zonation exists within brackish and saline marshes. Proceeding seaward from the upland, the number of species composing the community decreases until in the most saline conditions only smooth cordgrass (*S. alterniflora*) or black needle rush composed the marsh.

**5.3.2. Coastal Fauna.** Mammals found within the area include marsupials, moles and shrews, bats, armadillos, rabbits, rodents, carnivores, even-toed hoofed mammals, and dolphins.

Mammals occur within all habitats of the system, using underground burrows, the soil surface, vegetative strata, the air, and the water for feeding, resting, breeding, and bearing and rearing young. Mammals, such as the bottle-nosed dolphin, marsh rabbit, cotton rat, swamp rabbit, river otter, and raccoon, are prevalent in the area. A number of whales are known to occur offshore Mississippi and Alabama.

**5.4 Essential Fish Habitat.** Essential Fish Habitat (EFH) is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. The National Marine Fisheries Service (NMFS) has identified EFH for the Gulf of Mexico in its Fishery Management Plan Amendments. These habitats include estuarine areas, such as estuarine emergent wetlands, seagrass beds, algal flats, mud, sand, shell, and rock substrates, and the estuarine water column. Table 1 provides a list of the species that NMFS manages under the federally implemented Fishery Management Plans in the vicinity of the proposed action.

**Table 1**

<b>Fishery Management Plans and Managed Species for the Gulf of Mexico. (NMFS 1999)</b>	
<b>Shrimp Fishery Management Plan</b>	<b>Red Drum Fishery Management Plan</b>
Brown shrimp ( <i>Penaeus aztecus</i> )	Red drum ( <i>Sciaenops ocellatus</i> )
Pink shrimp ( <i>P. duorarum</i> )	
Rock shrimp ( <i>Sicyonia brevirostris</i> )	<b>Golden Crab Fishery Management Plan</b>
Royal Red Shrimp ( <i>Pleoticus robustus</i> )	Golden crab ( <i>Chaceon fenneri</i> )
White Shrimp ( <i>P. setiferus</i> )	
<b>Snapper Grouper Fishery Management Plan</b>	
Blackfin snapper ( <i>Lutjanus buccanella</i> )	Silk snapper ( <i>L. vivanus</i> )
Blueline tilefish ( <i>Caulolatilus microps</i> )	Snowy grouper ( <i>E. niveatus</i> )
Gray snapper ( <i>L. griseus</i> )	Speckled hind ( <i>E. drummondhayi</i> )
Greater amberjack ( <i>Seriola dumerili</i> )	Yellowedge grouper ( <i>E. flavolimbatus</i> )
Jewfish ( <i>Epinephelus itajara</i> )	Warsaw grouper ( <i>E. nigrinus</i> )
Mutton snapper ( <i>L. analis</i> )	White grunt ( <i>Haemulon plumieri</i> )
Red porgy ( <i>Pargrus pargrus</i> )	Wreckfish ( <i>Polyprion americanus</i> )
Red snapper ( <i>L. campechanus</i> )	Scamp ( <i>Mycteroperca phenax</i> )
Vermillion snapper ( <i>Rhomboplites aurorubens</i> )	
<b>Coastal Migratory Pelagics Fishery Management Plan</b>	
Dolphin ( <i>Coryphaena hippurus</i> )	
Cobia ( <i>Rachycentron canadum</i> )	
King mackerel ( <i>Scomberomorus cavalla</i> )	
Spanish mackerel ( <i>S. maculatus</i> )	
<b>Spiny Lobster Fishery Management Plan</b>	
Spiny lobster ( <i>Panulirus argus</i> )	
<b>Calico Scallop Fishery Management Plan</b>	
Calico scallop ( <i>Argopecten gibbus</i> )	
<b>Coral and Coral Reef Fishery Management Plan</b>	
Varied coral species and coral reef communities	
Comprised of several hundred species	

**Sargassum Habitat Fishery Management Plan**  
*Sargassum* (and associated fauna) where it  
occur in the EEZ and state waters

**5.5 Cultural Resources.** In accordance with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulations at 36 CFR 800, the U.S. Army Corps of Engineers (Corps) must consider the potential effects of this project on *historic properties* (cultural resource sites potentially eligible for or listed on the National Register of Historic Places). In addition, the Corps must afford the State Historic Preservation Officer (SHPO) and interested parties including but not limited to Native American Tribes (Tribes), the opportunity to comment on its determination of effects to *historic properties*. In order to assess the effects of the project, the Corps will conduct a records and literature search of the state wide survey and site files at the Mississippi Department of Archives and History, as well as other data as available, in order to identify existing resources. The search will include all areas of potential effect (APE) of the proposed project including the canal area, access roads, staging areas, and disposal areas. Previously identified *historic properties* will be avoided by the project. In addition, should areas of high archaeological potential be located within the project APE, intensive archaeological survey will be conducted. In areas of low potential, to include the existing channelized creek and physically altered landscapes (crowned roads, land leveled areas, existing disposal areas) no intensive survey is proposed.

The results of the background research and any intensive survey will be coordinated with the SHPO, Tribes, and interested parties. Should *historic properties* be identified, avoidance will be the preferred resolution of effect method. Based on the proposed studies and *historic property* avoidance, the Corps has determined that the action should have no effect on historic properties in accordance with 36 CFR 800.4(d)(1). Therefore, the project is expected to have no significant impact to cultural resources.

Should unavoidable *historic properties* be found within the project APE, or previously undiscovered sites be located, or consultation with the SHPO or Tribe reveal unknown resources or Traditional Cultural Properties, further consultation and evaluation may become necessary. Should potential adverse effects be found, a Memorandum of Agreement may be necessary in order to resolve those effects to *historic properties*. In addition, the Advisory Council on Historic Preservation shall be notified and invited to participate as per 36 CFR 800.6(a)(1).

**5.6 Aesthetics.** The project area is aesthetically pleasing outside of the developed areas. The developed industrialized areas offer little in the way of aesthetics. Many of the remaining natural communities now have non-recoverable debris and non-recoverable, salvageable debris located in them.

**5.7 Noise.** The predominant ambient sounds in the vicinity of the project are those expected with metropolitan areas, including those associated with industry, ports, and local traffic (automobiles, boats, and planes).

**5.8 Air Quality.** Harrison County is in attainment with the National Ambient Air Quality Standards (NAAQS) of the Clean Air Act.

**5.9 Threatened and/or Endangered Species.** Table 2 provides a list of endangered and threatened species identified by the U.S. Fish and Wildlife Service (USFWS) in Harrison County, Mississippi.

**Table 2**

<b>Federally Listed Endangered and Threatened Species in Harrison County, Mississippi (USFWS 2008)</b>
E – Red-cockaded woodpecker ( <i>Picoides borealis</i> )
E – Alabama Red Bellied Turtle ( <i>Psuedemys alabamensis</i> )
TCH – Piping plover ( <i>Charadrius melodus</i> )
E – West Indian Manatee ( <i>Trichechus manatus</i> )
E – Brown pelican ( <i>Pelecanus occidentalis</i> )
T – Gopher tortoise ( <i>Gopherus polyphemus</i> )
T – Louisiana black bear ( <i>Ursus a. luteolus</i> )
E – Mississippi gopher frog (proposal under review)
T – Loggerhead sea turtle ( <i>Caretta caretta</i> )
E – Kemp's ridley sea turtle ( <i>Lepidochelys kempii</i> )
T – Green sea turtle ( <i>Chelonia mydas</i> ) (P)
TCH – Gulf sturgeon ( <i>Acipenser oxyrinchus desotoi</i> )
E – Louisiana quillwort ( <i>Isoetes louisianensis</i> )
C – Black pine snake ( <i>Pituophis melanoleucus lodingi</i> )
E – Leatherback Sea Turtle ( <i>Dermochelys coriacea</i> )
 Note: Bald Eagle Protected by the Bald and Golden Eagle Act
 <u>Key to codes on list:</u>
E – Endangered
T – Threatened
C – Candidate Species
TCH – Threatened with Critical Habitat

Of these species listed, most are not likely to be found within the project area; however, the potential exists for the occurrence of the Alabama red-bellied turtle. The Alabama red-bellied turtle is known to occur in the lower Pascagoula River and its tributaries: Bluff Creek and the Escatawpa River. It is also known to occur in Old Fort Bayou, the Tchoutacabouffa River, the Biloxi River, and the Back Bay of Biloxi. Destruction of nesting areas along river banks and feeding areas of submerged aquatic vegetation, and reduced water quality has impacted the species.

**6.0 ENVIRONMENTAL IMPACTS.**

**6.1 General.** The impacts resulting from removal of the woody debris and sedimentation would be short-term and localized, including temporary benthic impacts in the shallow water areas around barge operations, increased turbidity, suspension of bottom sediments, and minor aesthetic degradation. All reasonable efforts would be made to avoid, minimize, and restore affected natural resources to the extent practicable. It is anticipated implementation of this project would result in improved interior drainage, improvements in floodwater conveyance and

circulation for improved drainage, water quality and fish habitat.

**6.2 Soils.** The proposed action may result in minor soil disturbances due to sedimentation and debris removal. No significant impacts are anticipated.

**6.3 Biological Resources.** Benthos within the immediate area may be destroyed. However, it is believed that affected areas are small and would rapidly recover within a couple of months back to pre-project conditions. No seagrasses or oyster beds would be disturbed. Turbidity levels would increase during some of the removal operations; however, the levels of turbidity would subside shortly after the operation is complete. No impacts are anticipated to occur to benthos during the disposal of sediment and debris as these will be located in approved upland disposal sites. No long-term adverse impacts are anticipated.

**6.3.1 Coastal Flora.** No flora would be disturbed other than that floating in the stream channel as the project is located within a submerged area that has no vegetation. The upland disposal area would be an approved site that is routinely utilized for disposal of material; thus, no coastal flora is anticipated to be adversely impacted with that associated operation.

**6.3.2 Coastal Fauna.** The most vulnerable organisms during this action would be benthic animals, such as polychaete worms, shrimp, and crabs. These animals may be subject to localized impacts through any debris removal procedures, especially the less motile worms. The more motile species, such as fish, would not be significantly affected as they have the ability to avoid disturbances caused by the operations.

Mammals and birds that inhabit the coastal marshes and wetlands would not likely be impacted because the activity would be confined to the existing stream channel. In addition, this is a highly urbanized site upon which these species thrive; thus, it is anticipated these animals would recolonize the site following disturbance completion or would continue to coexist with the operation. Removal of sedimentation and woody debris would likely disturb submerged sediments within the natural stream channel. Benthos within the immediate area may be destroyed. However, it is believed that affected areas are small and would rapidly recover within a few months. No seagrasses or oyster beds would be disturbed because they are not found in the project footprint. Turbidity levels would increase during some of the removal operations; however, the levels of turbidity would subside shortly after the operation is complete. No long-term adverse impacts are anticipated.

**6.4 Essential Fish Habitat (EFH) Assessment.** The Gulf of Mexico Fishery Management Council in accordance with the Magnuson-Stevens Fishery Conservation and Management Act (PL 94-265) has developed management plans for the following fisheries in the vicinity of the proposed action: shrimp, red drum, and coastal migratory pelagic. The Gulf of Mexico Fishery Management Plans (1999) identifies EFH in the project area to be intertidal wetlands, submerged aquatic vegetation, non-vegetated bottoms, shell reefs, and the estuarine water column. The proposed activities would not adversely impact intertidal wetlands and non-vegetated bottoms. Impacts would be temporal in nature associated with the construction of the Long Beach Canal Drainage Improvements MsCIP Interim Project. The improvements to this area would in fact enhance EFH by promoting tidal circulation and flushing of the area. The proposed activities

would not significantly affect coastal habitat identified as EFH in the project area. Based on the extent of this habitat in the general vicinity of the project and the temporal nature of the impact, the overall impact to fisheries resources is considered negligible. The Corps, Mobile District anticipates concurrence from the NMFS with our above determination.

**6.5 Cultural Resources.** The National Register of Historic Places has been consulted to determine if there are properties listed on, being nominated to, or that have been determined eligible for the National Register known to exist in the vicinity of the proposed work. Preliminary investigations have shown that no effects are anticipated to known cultural resources as a result of sedimentation and woody debris removal operations. Additionally, if human remains and funerary objects are inadvertently discovered, work in the immediate area would cease and the discovery would be protected. The Corps, Mobile District, the Mississippi State Archaeologist or Mississippi State Historic Preservation Office (SHPO) would be notified immediately by the Corps, Mobile District.

**6.6 Aesthetics.** The proposed action would result in no changes to existing conditions as the proposed project would remove sediment and debris. There would be no impacts to the surrounding natural stream corridor and fringe marsh.

**6.7 Noise.** Construction equipment and vehicles in the area would temporarily increase noise levels in the vicinity. No long-term adverse effects are anticipated.

**6.8 Air Quality.** The proposed project is expected to add exhaust emissions to the immediate area during construction, but this would not result in any permanent changes to the air quality of the area.

**6.9 Threatened and Endangered Species.** The proposed project is being coordinated with the USFWS to determine if any endangered or threatened plant or animal species would be adversely affected by the proposed project. Based on preliminary review, it is believed that no endangered or threatened plant or animal species would be adversely affected by the proposed action. Should the Alabama red-bellied turtle presence exist within the project area, the USFWS would be contacted to re-initiate consultation in accordance with the Endangered Species Act. The Corps, Mobile District anticipates concurrence from the USFWS with our determination of may affect, but not likely to adversely effected any listed threatened and/or endangered species and their associated critical habitat.

## **7.0 COASTAL ZONE CONSISTENCY.**

The State of Mississippi, Department of Marine Resources (MDMR) has been notified of this proposed action. The original portion of the project was reviewed by MDMR under the MsCIP Interim Report and after their review they concurred all the projects are consistent with the approved Mississippi Coastal Program (MCP) in the letter dated June 28, 2006. Based on conversations, it is expected the MDMR relative to the MCP would issue a consistency determination.

## **8.0 WATER QUALITY CERTIFICATION.**

The State of Mississippi, Department of Environmental Quality, Office of Pollution Control (MDEQ-OPC) has been notified of this proposed action. The original portion of the project was reviewed by MDEQ-OPC under the MsCIP Interim Report and after their review, 401 Water Quality Certification was issued for all the projects in the letter dated August 23, 2007. Further coordination with the MDEQ-OPC will occur in the immediate future. Based on conversations, it is expected the MDEQ-OPC would issue a water quality certification for the proposed action.

## **9.0 PROTECTION OF CHILDREN.**

The EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks* (April 21, 1997), recognizes a growing body of scientific knowledge demonstrates that children may suffer disproportionately from environmental health risks and safety risks. These risks arise because children's bodily systems are not fully developed; because children eat, drink, and breathe more in proportion to their body weight; because their behavior patterns may make them more susceptible to accidents. Based on these factors, the President directed each Federal agency to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The President also directed each Federal agency to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. The project area is not a site frequented by children; there are no schools, parks, or playgrounds in the general project vicinity. There are no likely environmental health risks anticipated to children as a result of this project.

## **10.0 ENVIRONMENTAL JUSTICE.**

On February 11, 1994, the President issued EO 12898, Federal actions to address *Environmental Justice in Minority Populations and Low Income Populations*. The EO focuses Federal attention on the environmental and human health conditions of minority and low-income populations with the goal of achieving environmental protection for all communities. The EO directs the Federal agencies to develop Environmental Justice strategies to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority and low-income populations. The proposed action poses no disproportionately high and/or adverse environmental and human health conditions on minority and low-income populations in the vicinity of the project.

## **11.0 CUMULATIVE EFFECTS SUMMARY.**

Cumulative impacts are those impacts on the environment that result from the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions. This section analyzes the proposed actions as well as any connected, cumulative, and similar existing and potential actions occurring in the area surrounding the site. The potential adverse direct environmental and socioeconomic impacts associated with the proposed action are

insignificant. In general, the proposed sedimentation and woody debris removal operations would have no significant adverse cumulative effects.

Based on the above discussion of the minor impacts, which would result from the implementation of the proposed project and due to the lack of long term adverse impacts, it is our belief that no significant cumulative impacts as a result of the woody and sediment debris removal activities would occur.

## **12.0 CONCLUSION.**

The proposed action would have no significant environmental impacts on the existing environment. No mitigation actions are required for the proposed project. Best Management Practices would be employed during the proposed actions to minimize any identified adverse impacts. The implementation of the proposed action would not have a significant adverse impact on the quality of the environment and an environmental impact statement is not required.

## **13.0. LIST OF PREPARERS.**

Linda Brown  
Landscape Architect  
Department of the Army  
Mobile District, Corps of Engineers  
P.O. Box 2288  
Mobile, Alabama 36628-0001  
(251) 694-3786

## **14.0. LIST OF AGENCIES AND OTHERS CONTACTED REGARDING THE ACTION.**

U.S. Environmental Protection Agency, Region 4  
U.S. Department of the Interior, Fish and Wildlife Service  
U.S. Department of Commerce, National Marine Fisheries Service  
Gulf of Mexico Fishery Management Council  
Regional Director, National Parks Service  
Commander, Eighth Coast Guard District  
Mississippi Department of Environmental Quality  
Mississippi Department of Marine Resources  
Mississippi State Historic Preservation Officer  
Mississippi Secretary of State

## **15.0. REFERENCES.**

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