United States
Environmental Protection
Agency

Region 6
1445 Ross Avenue
Dallas, TX 75202

EPA/906/05-90-004
May 1990

EPA

ENVIRONMENTAL IMPACT STATEMENT

DRAFT

US Army Corps
of Engineers

Mermentau River Ocean Dredged Material Disposal Site Designation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-2733

MAY 23 1990

TO INTERESTED AGENCIES, OFFICIALS, PUBLIC GROUPS AND INDIVIDUALS:

Enclosed is a copy of the Draft Environmental Impact Statement (EIS) concerning the Environmental Protection Agency's (EPA) designation of the Mermentau River ocean dredged material disposal site. The National Environmental Policy Act does not apply to EPA activities of this type. EPA has voluntarily committed to prepare EISs in connection with its ocean disposal site designation program. EPA and the New Orleans District Corps of Engineers jointly prepared this EIS.

EPA encourages agency and public participation in the decision-making process. Written comments on this Draft EIS will be considered in the preparation of the Final EIS.

The Final EIS will be sent to those making substantive comments on the Draft EIS and to those specifically requesting a copy (subject to EPA supply limits). Written comments or inquiries regarding this Draft EIS should be sent to Norm Thomas, Chief, Federal Activities Branch, at the above address by the date stamped on the cover sheet following this letter.

Sincerely yours,

W. B. Hathaway
for Robert E. Layton Jr., P.E.
Regional Administrator

Enclosure

DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR
THE MERMENTAU RIVER-GULF OF MEXICO NAVIGATION CHANNEL
OCEAN DREDGED MATERIAL DISPOSAL SITE DESIGNATION
CAMERON PARISH, LOUISIANA

Responsible Agencies: U.S. Environmental Protection Agency, Region 6
U.S. Army Corps of Engineers, New Orleans District

Administrative Action: The purpose of this action is to comply with the Marine Protection, Research, and Sanctuaries Act of 1972 by providing an environmentally acceptable ocean dredged material disposal site (ODMDS) for the Mermentau River-Gulf of Mexico Navigation Channel (MRGNC), in compliance with the Ocean Dumping Regulations (40 CFR Parts 220-229).

Contacts: Mr. Norm Thomas (6E-F)
U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

Mr. Robert Martinson
U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

ABSTRACT

The proposed action is the designation of the MRGNC, Louisiana ODMDS. In 1977, the EPA approved the site for interim use, based on historical use of the site since 1971. Alternatives considered were no action, relocation of the ODMDS to alternate ocean areas, land disposal, and beach nourishment. The preferred action is designation of the existing disposal site. Adverse environmental impacts of disposal at the site include: 1) temporary increases in concentrations of suspended sediments and other pollutants such as copper and mercury; 2) short-term changes in grain size of ODMDS surficial sediments; 3) localized burial of benthic organisms; and 4) potential temporary mounding of substrate.

COMMENTS ON DRAFT EIS DUE: JUL 23 1990

RESPONSIBLE OFFICIALS: W. B. Hathaway for Robert E. Layton Jr., P.E.
Regional Administrator

Richard V. Gorski
Colonel, U.S. Army
District Engineer

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SUMMARY

PURPOSE AND NEED - The purpose of this draft Environmental Impact Statement (EIS) is to evaluate the Mermentau River-Gulf of Mexico Navigation Channel (MRGNC) Ocean Dredged Material Disposal Site (ODMDS) as an appropriate EPA designated site. This site, at the gulfward end of the Mermentau River, has been used for disposal of dredged material since 1971. The Corps of Engineers (COE) assumed responsibility for operation and maintenance of the project in 1976. The site received interim designation by EPA in 1977, the same year an Environmental Impact Statement (EIS) was prepared to clear Federal assumption of channel maintenance (COE, 1977). Designation of the MRGNC ODMDS would provide an environmentally acceptable site for future disposal of dredged material that is in compliance with the Ocean Dumping Regulations (ODR) (40 CFR Parts 220-229). The Mermentau River is a link to the Gulf Intracoastal Waterway (GIWW) and the town of Grand Chenier.

ALTERNATIVES - Alternatives considered in this EIS include:

1) No Action.
2) Relocation of the ODMDS to an alternate ocean area: near-shore, mid-shelf, or off-shelf sites.
3) Non-ocean disposal - beach nourishment, marsh creation, and land disposal.
4) Preferred-designation of the interim MRGNC ODMDS.

RATIONALE FOR THE PREFERRED ALTERNATIVE - The preferred alternative is designation of the Mermentau River ODMDS, which has been used for about 20 years. The no action alternative is unacceptable because it leaves the site in an interim status. Relocation would subject other areas to effects of disposal without resulting in environmental advantages. Relocation of the site would also be more costly than use of the existing site because distances to transport the dredged material would be increased; substantially in the case of the mid-shelf or off-shelf sites. The MRGNC ODMDS has been evaluated using the eleven specific and five general criteria listed in the ODR (40 CFR Parts 228.5-228.6) and found to be environmentally acceptable.

ENVIRONMENTAL IMPACTS - Past use of the MRGNC ODMDS has resulted in minimal, short-term adverse impacts. Temporary increases in turbidity occur, but conditions return to ambient soon after cessation of disposal. Temporary increases in other pollutants within the water column at the site may occur, particularly copper, during dredging operations.

The grain size of the substrate east of the channel is similar to that existing in the site (COE, 1981a; COE, 1981b) and no effects of previous disposal on sediment physical characteristics are discernable. Benthic organisms are buried during disposal, but repopulation usually occurs within 2 to 6 months. Temporary mounding of dredged material may occur within the site, but the mounds disperse quickly.

INTRODUCTION

The Mermentau River, Louisiana, project serves as a link to the Gulf of Mexico for the town of Grand Chenier and the GIWW (Figures 1 and 2). The U.S. Army Corps of Engineers (COE), New Orleans District, is responsible for planning and conducting necessary maintenance dredging of the Mermentau River. In 1977, the COE prepared a final EIS on the Federal assumption of this project (COE, 1977) and a final EIS on operation and maintenance of the project was issued in 1981 (COE, 1981a).

The Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 made designation of dredged material disposal sites in the ocean mandatory. The only ocean disposal from the Mermentau River is in a 335-acre site running about 1.0 mi. long and 0.5 mi. wide, parallel to the west side of the channel (Figure 3). Approximately 500,000 cubic yards (cy) of dredged material are disposed in this site during each disposal operation. Disposal generally occurs once every 2-3 years. Two Mermentau River Ocean Dredged Material Disposal Sites received a 3-year interim designation by EPA in 1977. This interim designation was based on historical use of the site since 1971. In January 1980, the interim status of the site was extended indefinitely. The second Mermentau interim site located to the west of the MRGNC at the natural mouth of the Mermentau River (which is now totally silted) is no longer used by the COE and will not be discussed in this document any further.

The proposed action in this EIS is the designation of the MRGNC ODMDS. The EIS presents the information used to evaluate the suitability of the site and is based on environmental studies conducted in the area.

The COE is likely to be the sole user of the MRGNC ODMDS. The COE does not issue itself a permit; however, the requirements that must be met before dredged material from a COE project can be discharged into the ODMDS are the same as when a permit is required. For Federal projects, the COE would notify EPA and other interested agencies of its intent to use the ODMDS for

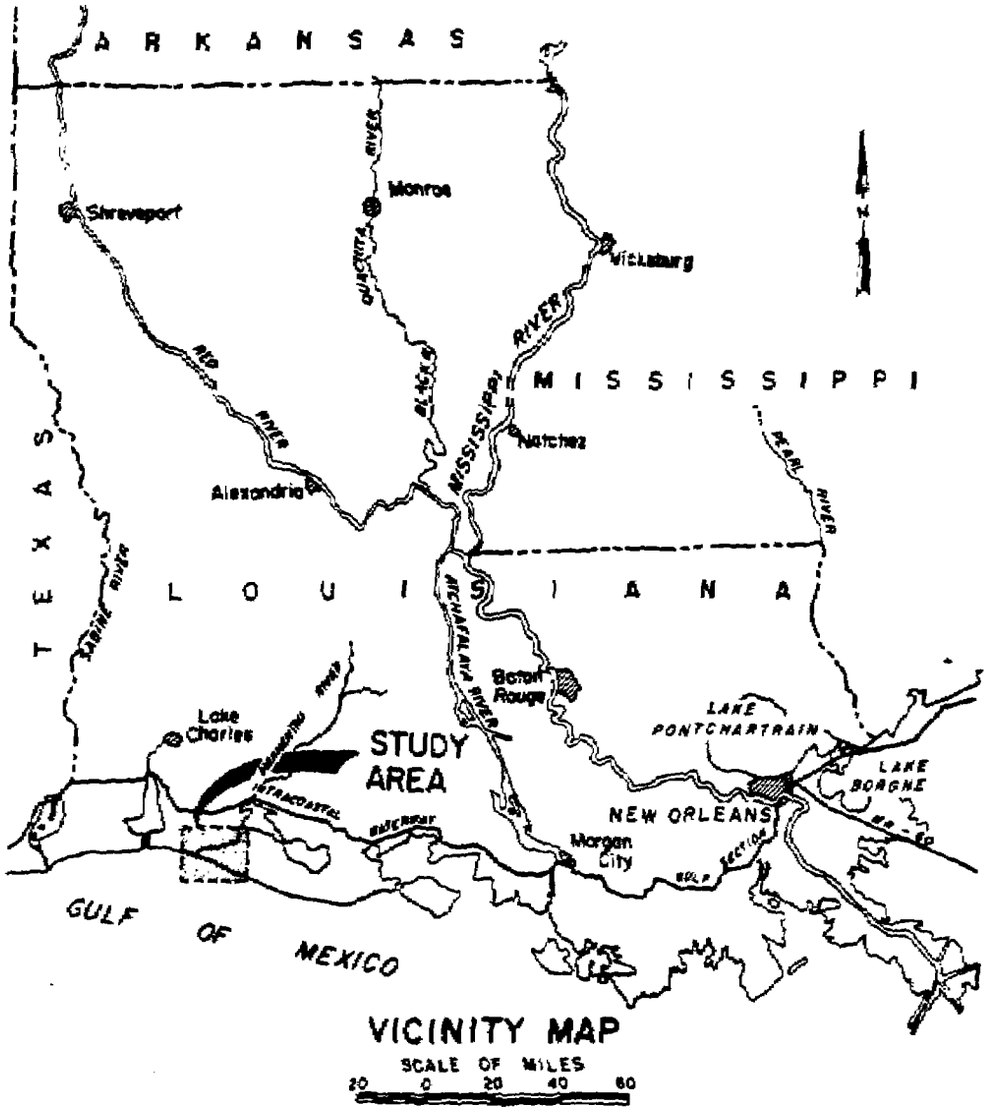

Figure 1. Vicinity map for the Mermentau River ODMDS.

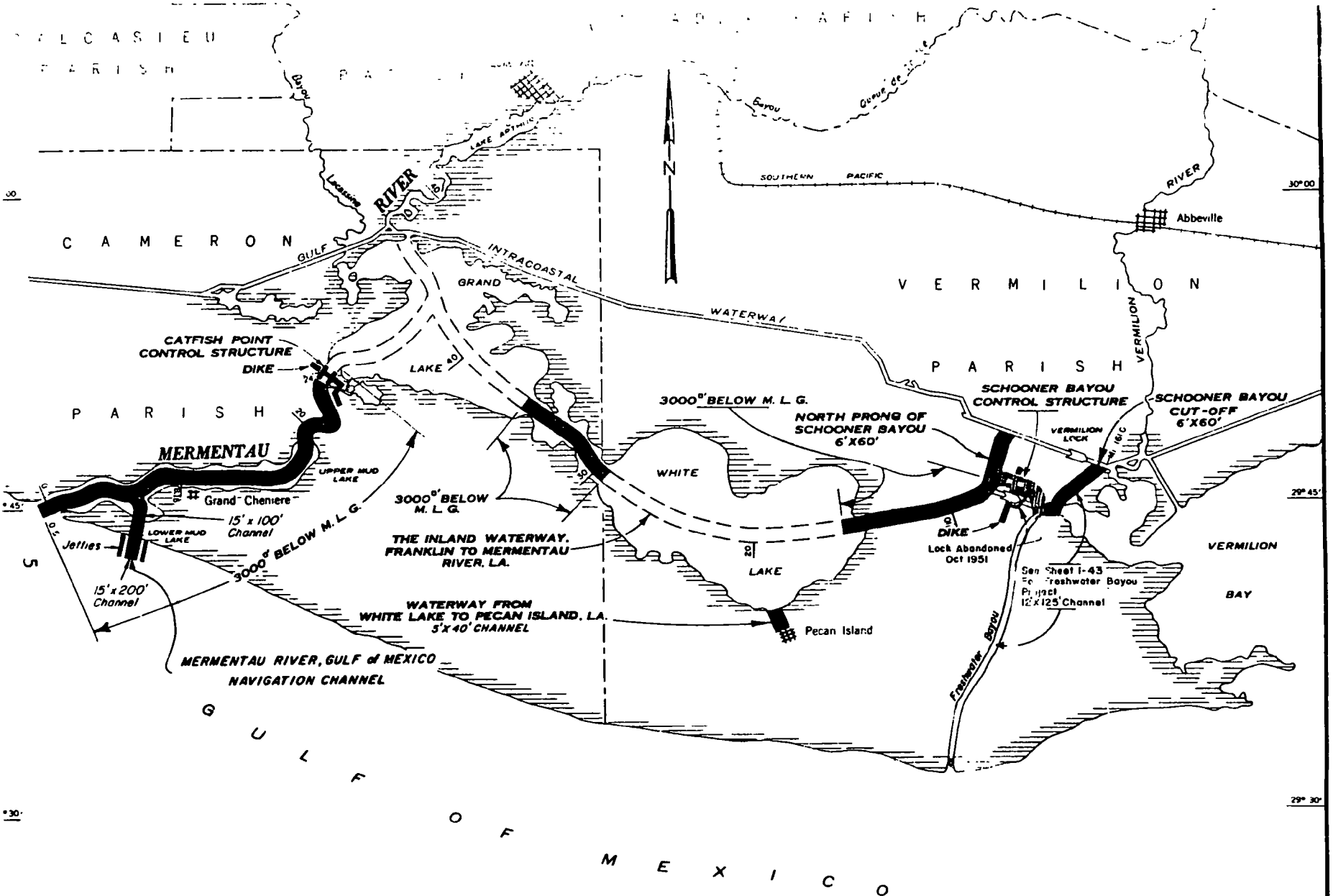

Figure 2. The Mermentau River, Gulf of Mexico Navigation Channel.

PLAN

SCALE OF MILES

KILOMETERS

LEGEND

Improvements completed

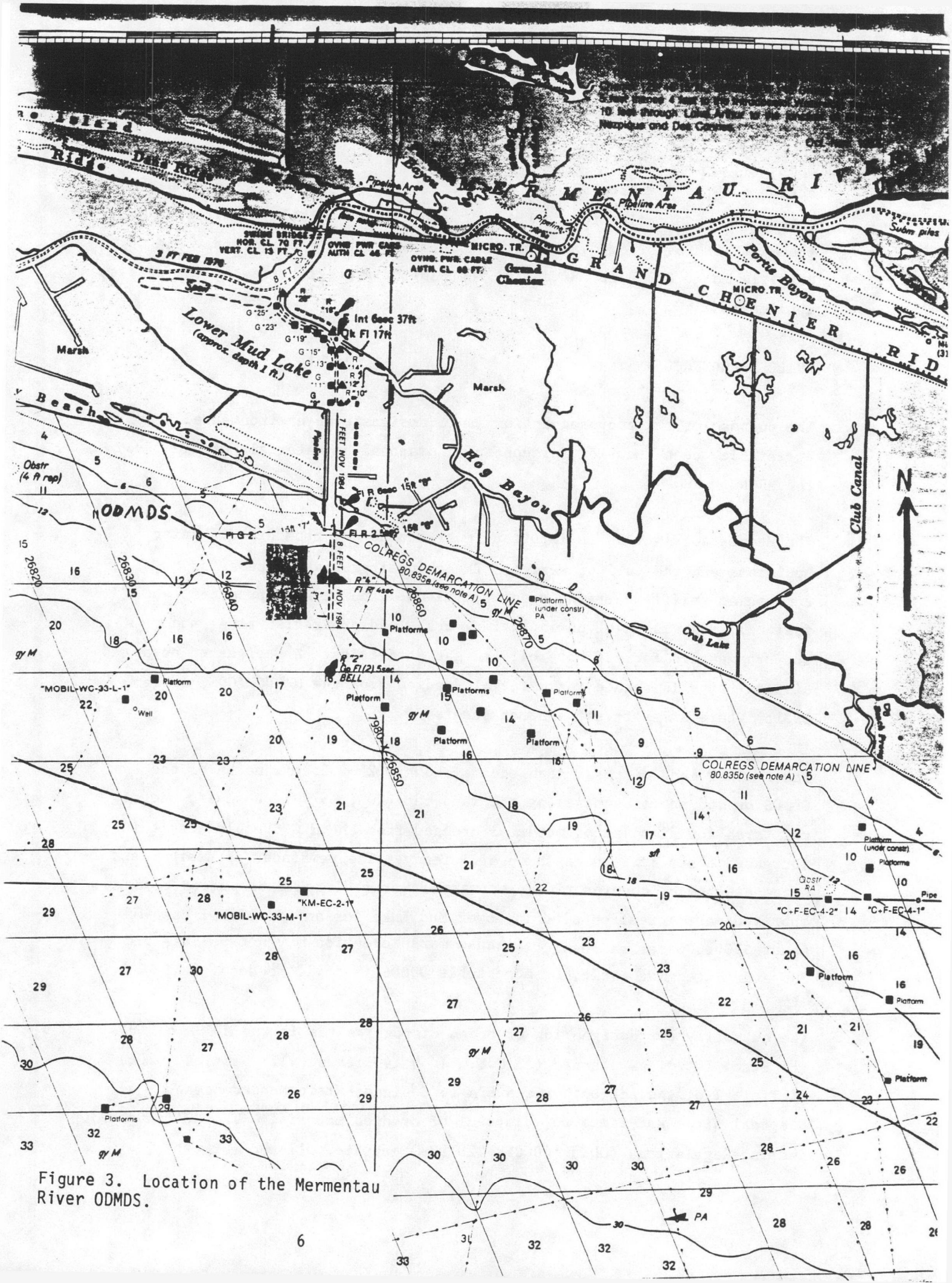

Figure 3. Location of the Mermentau River ODMDS.

disposal. Prior to disposal, the COE would determine compliance of the action with 40 CFR Part 227 and provide substantiation of the rationale used for the determination to EPA. If a non-Federal entity desires to use the MRGNC ODMDS for dredged material disposal, the COE would apply the criteria in 40 CFR Part 227 during its public interest review of the permit application.

PURPOSE AND NEED

The purpose of the proposed action is to designate an environmentally acceptable ocean location for continued disposal of materials dredged from the MRGNC.

The Mermentau River is an important entrance to and from Grand Chenier, Louisiana and the Gulf of Mexico. The channel provides access for commercial traffic carrying crude petroleum, manufactured products, and fuel oil; vessels involved in shrimp, crab, and other fisheries; and support vessels for offshore oil and gas activities. A designated ocean disposal site is needed for material dredged from the MRGNC (COE, 1981a; 1981b) where an east-west sandbar occurs.

The nearest land disposal area occurs about 0.25-1.25 mi. north of the ODMDS on 168 acres paralleling the land cut (COE, 1977). However, use of this area for disposal of material dredged from the MRGNC would result in increased costs by reducing pump efficiency. The remainder of nearby land areas are beach, chenier ridge, or marsh. Material could be pumped to an approved marsh creation site in Lower Mud Lake for an additional cost of about $200,000 per disposal. Because marsh creation may not be feasible for every dredging cycle, an acceptable ODMDS is still needed.

The authority for designation of ocean disposal sites is the MPRSA of 1972 (86 Stat. 1052), as amended (33 U.S.C.A. § 1401 et seq.). Section 102(c) of Title 1 of the Act authorizes EPA to designate recommended ocean disposal sites and times for disposal of dredged material. The EPA's Ocean Dumping Regulations (ODR) (40 CFR 220-229) must be followed for site

evaluation and management. This EIS is being prepared under EPA's voluntary EIS preparation policy.

In accordance with the ODR, site designation will be promulgated by formal rule-making. The proposal by EPA to designate the MRGNC ODMDS will be published in the Federal Register and will be based on appropriate Federal statutes, disposal site evaluation studies, the draft EIS and supporting documentation. The final rule-making package will be prepared and published in the Federal Register after expiration of the review period on the final EIS.

ALTERNATIVES. This section describes the alternatives that were considered and explains the rationale for their elimination.

NO ACTION. The interim designation of the MRGNC ODMDS does not have a specific termination date. If no action is taken, the designation status will remain unsettled. The interim designation was made pending completion of any necessary studies and evaluation of the site's suitability for continued use. The environmental studies and evaluation have been completed, and in accordance with the ODR, a decision regarding designation is required.

RELOCATION OF ODMDS TO ALTERNATE OCEAN AREAS. The location of an alternate shallow-water site (one with comparable depths to the interim site, 5.0-15.0 feet) was determined by avoiding locations of conflicting activities (oil and gas activities, fishing areas, shipwrecks, etc.)(COE, 1984). Alternate shallow-water ODMDS's could be located on the east side of the navigation channel or immediately west of the Mermentau bar channel. These alternate sites would be approximately the same depth and size as the interim site. Environmental effects of dredged material disposal on the physical, chemical, and biological environment of the alternate shallow-water site would be similar to those at the interim ODMDS. Longshore current patterns in the area appear to be generally to the west (MMS 1989, 1987; Federal Energy Administration, 1977), but have

been studied inadequately (Wells et al., 1981; Murray, 1976). Sediments brought to the Chenier Plain are derived from the Atchafalaya River resulting in active progradation in some areas (Wells et al., 1981). No environmental benefits would be gained by moving the disposal site to either shallow-water alternative location and channel maintenance costs could be increased at the east site due to a possible increased frequency of dredging. Costs would be increased in the area further west because of greater pumping distance. There are no other shallow water sites that would be less damaging environmentally and/or less costly.

Selection of an alternate mid-shelf site was based on criteria similar to those for the alternate shallow-water site. An alternate site in approximately 30-40 feet of water, located about 12 miles south of the interim site would be acceptable because there are no active oil and gas leases. Because of its greater depth, the mid-shelf area is less dynamic than the shallow-water area. Bottom organisms would be buried as they would be at the interim site. The mid-shelf site would be further from the dredging site than the interim site; thus transportation costs would be much greater. Safety hazards, resulting from transporting dredged material greater distances through areas of active oil and gas development and shipping, would be increased. Surveillance methods would be similar to those at the interim site, but surveillance would be more expensive because of the additional travel time to the site. Monitoring would also be more expensive due to greater distances and water depths involved. In addition, use of the mid-shelf site would remove sediments from the nearshore environment and make them less available for movement and deposition by longshore currents.

The deep-water region lies off the continental shelf seaward of the 400-foot depth contour. An alternate deep-water ODMDS could be located off the continental shelf about 100 miles south of the interim site near the proposed Flower Garden Bank Marine Sanctuary and other banks. No specific site was selected for evaluation, but the characteristics of a deep-water site were considered. The dredged material would be dispersed

over a larger area because of the dissipation of the descending plume. Sediments reaching the bottom would tend to remain in place because of the slow erosion and transport. Effects on benthic organisms would be less than those at the interim site or mid-shelf alternate sites because it is a natural deposition zone (MMS 1987). Safety hazards would be increased by longer distances required to transport the material. Surveillance and monitoring would be more costly and difficult because of deep water. Annual costs of disposal would be significantly increased over costs at the interim site because special deep-water barges would be required and travel time would be increased. With existing equipment, it is not feasible to dredge and transport the necessary volume of material. Use of the deep-water site would remove sediments from the nearshore environment and make them unavailable for deposition.

BEACH NOURISHMENT AND MARSH CREATION ALTERNATIVES. Beach nourishment and marsh creation with the material dredged from the Mermentau bar channel are options supported by some state and Federal agencies, including the EPA and the COE. Such alternatives are discussed in the following paragraphs. EPA believes that marsh creation and/or beach nourishment should be evaluated each time the COE or other entity plans to use the site. Site designation will not preclude the use of material for marsh creation and/or beach nourishment.

The material is mostly silt and clay (mean of 66 percent) (COE, 1978) and may not be well suited for beach nourishment. Material taken near the jetties could be used, but halfway into the bar channel, silt and clay comprise 76 percent of the material. Toward the southern end of the bar channel, the figure increases to 90 percent. Material within the jetties, which is less than 30 percent silt and clay, is presently placed adjacent to the coast in a 65-acre area outside the ODMDS to help prevent recession of the coastline at the landward end of the west jetty.

Material could also be pumped north of the ODMDS to an approved marsh creation site in Lower Mud Lake, which is only about 1-2 feet deep.

However, this would increase costs by up to about $200,000 for each disposal. Taking into account the benefits from the marsh (COE, 1988), the cost increase would be nominal. Should another entity desire to absorb these costs, the COE would coordinate the effort with them. The COE may be able to fund the increase in costs, depending on budgetary constraints via Section 150 of the Water Resources Development Act (WRDA) of 1976, or it could be cost-shared (75 percent Federal, 25 percent local) under Section 1135 of WRDA 1986. The COE must apply for the extra funds each dredging cycle. An acceptable ODMDS would be necessary if funding is not approved.

PREFERRED ALTERNATIVE

The alternative preferred by the EPA and COE is the designation of the historically-used interim MRGNC ODMDS. The boundary coordinates of the preferred site (Figure 3) are 29° 43' 21" N., 93° 00' 53" W.; 29° 43' 21" N., 93° 01' 23" W.; 29° 42' 27" N., 93° 00' 53" W.; 29° 42' 27" N., 93° 01' 23" W.; thence to the point of beginning. A need exists for locating and designating an acceptable ODMDS in the vicinity of the Mermentau River east Gulf outlet. The need for continued disposal of material from the MRGNC has been demonstrated (COE, 1981b) and the no-action alternative is considered unacceptable. Because creation of marsh with the material may not be feasible for every dredging cycle, an acceptable ODMDS is still needed. Selection of this alternative is based on the following information: 1) the Mermentau site has been in use for some 20 years with minimal adverse environmental effects, 2) no adverse environmental effects were detected outside the site boundaries during environmental surveys, 3) relocation of the site to other ocean areas would subject new areas to adverse effects of dredged material disposal, without resulting in environmental advantages over continued use of the interim site, and 4) the costs of using any other sites would be greater than those associated with the interim site. Utilizing the eleven specific criteria (40 CFR 228.6) and the five general criteria (40 CFR 228.5), EPA has determined that the final designation of the MRGNC ODMDS is environmentally acceptable.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This section summarizes information in 1977 and 1981 COE FEIS's, the 1981 COE Ocean Dumping Assessment, and studies done by others.

The Mermentau River ODMDS is located in southwest Louisiana about four miles southwest of the town of Grand Chenier, in Cameron Parish (Figure 3). The area from Vermilion Bay into Texas is the Chenier Plain, a complex mixture of wetlands, uplands, and open water formed by sea level rise and fall associated with glacial advance and retreat (Gosselink et al., 1979). The continental shelf extends about 200 miles south of the interim ODMDS. Much of the Chenier Plain is currently retreating to the north. Longshore currents are generally to the west (MMS, 1989; Federal Energy Administration, 1977). The mouths of rivers from the Chenier Plain have been shifted progressively toward the west by the dominant currents to the west (Gosselink et al., 1979). This phenomenon is exemplified by the Mermentau River. Beaches in the area are mostly sand with some shell. The area from Calcasieu Pass to the Mermentau River had been accreting, while the area from the Mermentau River 25 miles to the east had been eroding (COE, 1971). Comparison of 1978 and 1988 infrared photographs shows that the area within 5 miles east and west of the ODMDS is eroding.

The climate in the area is subtropical, rainfall averages about 144 cm (57 in) per year, and winds are generally southeasterly, although northerly winds occur more frequently in winter (Murray, 1976). Hurricanes and tropical storms occur in summer and early autumn, with a frequency of about once every three years in or near southwest Louisiana (COE, 1972). These storms have a tremendous influence on sediment movement, erosion, and deposition.

SPECIFIC AND GENERAL CRITERIA

Section 228 of the ODR mandates that 11 specific criteria and five general criteria be utilized to select and to evaluate a potential ODMDS. These criteria are discussed in the following paragraphs; the impacts of site designation and past use of the site on each criteria are analyzed.

Specific Criteria (§ 228.6)

1) "Geographical position, depth of water, bottom topography and distance from coast."

See Figures 1, 2, and 3 for the location of the proposed site. Water depths at the site range from 1.2 to 4.3 m (4.0-14.0 ft). Bottom topography slopes to the south (10.0 ft/mi). The site begins about 0.4 and extends to approximately 1.4 miles offshore.

2) "Location in relation to breeding, spawning, nursery, feeding, or passage areas of living resources in adult or juvenile phases."

Breeding, spawning, nursery, feeding, and passage of shrimp, menhaden, bottom fish, and other organisms occur within the entire northern Gulf of Mexico, and thus, also in the vicinity of the ODMDS. The MRGNC is a pathway for movement of fish and shell fish between the Gulf and the Mermentau River estuary. Migration of fish and shellfish through passes is heaviest during spring and fall (Darnell et al. 1983). Major estuaries including Rockefeller National Wildlife Refuge, the Mermentau River Basin, and Calcasieu Lake are located in the area (Gaidry and White, 1973). The MRGNC ODMDS represents a small area of the total range of fisheries resources. Impacts to endangered or threatened turtles and whales that might utilize the area to be used for disposal are negligible. Least terns have been known to nest on beaches near the ODMDS, but currently do not nest in these locations (Keller et al., 1984).

3) "Location in the relation to beaches and other amenity areas."

The ODMDS is 0.4 miles from the nearest beach. The Hackberry beach is

sparsely used because of shallow turbid water and its distance from population centers. The turbidity plume resulting from disposal would be diluted to ambient levels well before reaching the beach (Stern and Stickle, 1978).

4) "Types and quantities of wastes proposed to be disposed of and proposed methods of release, including methods of packing the waste, if any."
The material to be disposed is from the Mermentau River-Gulf of Mexico Navigation Channel and consists of a mixture of sand, silt, and clay obtained by hydraulic dredge. Sediment grain size decreases in the offshore direction, with silts and clays being predominant (66 percent) in the channel (COE, 1981b). This compares with 80 percent silts and clays in the ODMDS. The difference results from higher water velocities in the channel, especially near land. Approximately 500,000 cubic yards of material are disposed in the site during each use, based on historical use (Table 1). The material is removed with a hydraulic dredge and released in the ODMDS. The material is not packaged in any way. Future disposal is expected to be similar to past actions, in terms of material types, quantities, and method of disposal. The Corps of Engineers would likely be the only user of the site.

TABLE 1

HISTORIC DISPOSAL VOLUMES - MERMENTAU RIVER
ODMDS, 1970-1988

Dredging Period	Volume (yd^3)
1970	493,000
1982	570,000
1985	620,000
1987	384,000

5) "Feasibility of surveillance and monitoring."
Surveillance is possible by shore-based radar, aircraft, or day-use boats. No surveillance is currently performed by the U.S. Coast Guard. Monitoring

would be facilitated by the fact that the ODMDS is nearshore, in fairly shallow waters, and has baseline data available (COE, 1978, 1981b). The primary purpose of monitoring is to determine whether disposal at the site is significantly affecting areas outside the disposal area and to detect any unacceptable adverse effects occurring in or around the site. Based on historic data, an intense monitoring program is not warranted. However, in order to provide adequate warning of environmental harm, the EPA will develop a monitoring plan in cooperation with the COE. The plan would concentrate on periodic depth soundings and sediment and water quality testing. Details of the monitoring plan will be available at a later date.

6) "Dispersal, horizontal transport, and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any."
Mixing processes, current characteristics, and sediment transport in the nearshore region off the Chenier Plain are influenced by tidal currents, winds, and storms. Because of the shallow water, the water column is generally well mixed. Using data from off shore of the Calcasieu River, the area can experience density stratification during periods of great freshwater inflow, mainly May and June (Barret et al., 1978). In the summer, bottom waters on the Louisiana shelf are occasionally oxygen depleted (Rabalais et al., 1985), which can cause mortality of benthic organisms. This phenomenon does occur during the summer near the ODMDS (Gaston et al., 1985). It appears that the predominant current is to the west, but easterly currents occur with storm events (MMS, 1989; Federal Energy Administration, 1977; Murray, 1976); however, data on the specifics of currents in the area are sparse (Murray, 1976).

7) "Existence and effects of current and previous discharges and dumping in the area (including cumulative effects)."
Dredged materials from construction and maintenance of the MRGNC have been disposed at the interim ODMDS since 1971 and no significant adverse impacts have resulted. Previous disposals have caused minor effects, such as temporary increases in suspended sediment concentrations, temporary turbidity, sediment mounding, smothering of benthic organisms, release of

nutrients, possible minor releases of trace metals, and a temporary change in sediment grain size. The material is swept in a westerly direction by prevailing currents. For a more detailed discussion of impacts, see specific criteria 9. Because the effects of disposal are temporary, there are no cumulative effects.

8) "Interference with shipping, fishing, recreation, mineral extraction, desalination, fish and shellfish culture, areas of special scientific importance, and other legitimate use of the ocean."

In the vicinity of the ODMDS the majority of shipping traffic is confined to the MRGNC channel. Dredging the Mermentau facilitates shipping; periodic deposition of material dredged from the Mermentau in the ODMDS has some potential for interfering with ship movement in the area during disposal operations.

Nearshore and estuarine areas of the Chenier Plain also contain a diverse and highly productive fishing ground for a number of commercial and recreational species (Barrett et al., 1978). The MRGNC ODMDS represents a very small proportion of the total nearshore fishing grounds in the Chenier Plain and adverse impacts from its use would be temporary and minor. Interferences with fishing may occur if any shoals are created by dredged material disposal, as this could cause groundings of shrimp boats within disposal site boundaries. If the material is spread evenly, it would raise bottom elevations within the ODMDS by about 0.25 ft, which should present no problems for shipping and other uses. The material would eventually be moved toward the west, which would occur naturally if the dredging and disposal in the ODMDS did not occur.

The nearest oyster leases are just west of Chenier au Tigre near Vermilion Bay (Dunham, 1989; personal communication), some 50 miles to the east of the ODMDS. Designation of the ODMDS would not impact these or any other lease areas. Desalination areas do not occur in the vicinity of the ODMDS. The site is located about 20 miles from the Rockefeller National Wildlife Refuge and Sabine National Wildlife Refuge to the east and west,

respectively. There has been no impact to the refuges from the use of the site and no impact is expected to occur in the future.

Petroleum and mineral-extracting activities occur offshore within 1.0 mile of the ODMDS and are not impacted by use of the site. Also, there are pipelines that occur throughout the area that have not been impacted by the deposition of dredged material. Intermittent dumping does not interfere with the exploration or production phases of resource development, or with other legitimate uses of the ocean.

9. "The existing water quality and ecology of the site as determined by available data or by trend assessment or baseline surveys."

Physical Environment Baseline Conditions - Water and sediment samples were taken in the project area in 1977 (COE, 1981b). These data demonstrated that concentrations of copper, lead, mercury, and nickel in the water (Table 2) were above EPA chronic criteria for saltwater aquatic organisms (EPA, 1986). The source of pollutants is unclear, but appears to be somewhere east of the MRGNC. The pollutants are often at higher concentrations near the shore. Sediment data, however, do not show these trends (COE, 1981b). Elutriate data (COE, 1981b) from the channel sites showed a slight exceedence of the EPA criterion for copper at sites 11 and 14 (see Table 2 for locations). The detection limit for mercury was above the EPA chronic criterion in the elutriate tests. However, all sites had higher concentrations than the criterion (.025 ug/l). Pesticides were not detected at any sample site. Further testing is planned this year to identify any changes in conditions. It should be noted that criteria for metals were developed for the acid-soluable forms and all analyses are for total recoverable forms. Therefore, the criteria are overly protective (EPA, 1986).

Water temperatures parallel air temperatures and range from 31°C in summer to 12°C during winter. Surface salinities vary from 2 to 30 ppt near the Mermentau ODMDS (Barrett et al., 1978). The water is generally well

TABLE 2

POLLUTANTS IN NATIVE WATER AT THE MERMENTAU RIVER-BAR CHANNEL (1977) *

Parameter	Site 10	Site 11	Site 12	Site 13	Site 14	Site 15	Site 16	Site 17	Site 18	EPA Criteria Chronic	EPA Criteria Acute
Arsenic ug/l	4	4	5	1	1	1	2	1	1	36	69
Cadmium ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	9.3	43
Chromium ug/l	10	30	30	40	30	30	10	20	40	50	1100
Copper ug/l	**4 ****	**6**	**7**	**3**	2	**3**	**4**	**6**	**4**	2.9	2.9
Lead ug/l	<0.5	**13**	**16**	**7**	**7**	5	-	-	5	5.6	140
Mercury ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**0.2**	.025	2.1
Nickel ug/l	6	**12**	**14**	8	**9**	8	7	7	7	8.3	75
Zinc ug/l	30	60	60	40	30	30	50	30	50	86	95

* Site 10: West Side - 2,000 feet
Site 11: Channel - 2,000 feet
Site 12: East Side - 2,000 feet
Site 13: West Side - 4,000 feet
Site 14: Channel - 4,000 feet
Site 15: East Side - 4,000 feet
Site 16: West Side - 6,000 feet
Site 17: Channel - 6,000 feet
Site 18: East Side - 6,000 feet

** Boldface values exceed EPA criteria

oxygenated (see Specific Criteria Number 6) and alkaline. Water quality appears to be fair in the area of the ODMDS.

Nutrient concentrations, turbidity, and suspended solids, are influenced to some extent by discharge from the Atchafalaya River. All are fairly high in the area of the ODMDS (Barrett et al., 1978).

Physical Environment Impacts - Temporary mounding can occur within the ODMDS during discharge, which reduces water depths. The disposed sediments are reworked by waves and littoral currents and are moved out of the ODMDS. The direction and speed of currents are variable, but sediments generally drift toward the west under most circumstances. The channel has coarser grained material than surrounding areas leading to a slight, but discernable difference between sediment grain size in the ODMDS and areas east of the channel. Sand comprises about 5 percent more of the sediment composition west of the channel compared to areas east of the channel (COE 1981 b).

Contaminants are generally not released into the water following disposal, but remain associated with the sediments, especially silts and clays (Brannon et al., 1978). Elutriate tests indicated that concentrations of copper and mercury could exceed EPA chronic criteria (COE 1981b) during disposal. Thus, contaminant release due to disposal is unlikely except for copper, which was found in the elutriate tests at concentrations (3.0 ug/l) slightly above EPA chronic and acute criteria, and mercury (0.1 ug/l), which was above the EPA chronic criterion.

Disposal would temporarily increase turbidity at the site. The duration of the plume would depend on particle size, currents, and mixing, but should not extend over an area greater than about 17 acres beyond the ODMDS at any given time. The fine sediments may remain suspended for hours, but would eventually settle and turbidity would return to ambient conditions. The MRGNC ODMDS is actively used for disposal an average of 14 days per

operation. Thus, turbidity would be increased for approximately 2 weeks each year that disposal occurs.

Plankton Baseline Conditions - Plankton communities at the ODMDS fluctuate seasonally and annually as are typical of nearshore waters of the gulf. Phytoplankton consists primarily of marine diatoms and dinoflagellates with populations most closely following seasonal trends in the concentration of nitrate. The amounts of phytoplankton decrease in a Gulfward direction (Barrett et al., 1978). Dominant components of the zooplankton include copepods and ostracods. Numbers of zooplankton lag behind peak concentrations of phytoplankton with a lag period of about two months (Barrett et al., 1978).

Impacts to Plankton - Impacts of disposal on plankton would be temporary. Plankton in the ODMDS during disposal may be entrained in the dredged material, subjected to decreased light transmission, and possibly to minor increased levels of contaminants. Solid phase, and liquid and suspended particulate bioassays (summer and winter series) in 1979 on post larval mysid shrimp and grass shrimp, using sediments collected near the ODMDS, showed no statistically significant mortalities in any test treatment.

Benthos Baseline Conditions - Data on benthos at or near the ODMDS are sparse. However, offshore areas near the Calcasieu River were comprised mainly of polychaete worms and the clam *Abra alqualis* (Gaston et al., 1985). These organisms, are well adapted to the area and are common along the Gulf Coast. They are expected to be common at the ODMDS.

Impacts to Benthos - Benthic organisms in the ODMDS would be buried during disposal. Motile species could burrow upward through the expected 10-15 cm of substrate (Barnes 1968). Recolonization would start at the cessation of dumping and would be essentially complete within a period of 2-3 months (Gaston et al., 1985). Disposal of dredged material in the ODMDS occurs once every three years; therefore, disturbance would occur approximately 10 percent of the time. Solid phase bioassays conducted in 1979 on the

Atlantic quahog, two species of polychaetes, and oysters showed no statistically significant differences in test organism survial between any of the test treatments and controls.

The potential for bioaccumulation of pesticides, polychlorinated biphenyls, heavy metals, and petroleum hydrocarbons in tissues of marine organisms at the MRGNC project area was assessed using Atlantic quahog clams, polychaete worms, and oysters exposed to test and reference sediments during the solid phase bioassay. In many cases, the tissue concentrations of these constituents were below the detection limits of the analytical procedure. For all but two constituents, the concentrations of these materials in animals exposed to test sediments from three stations in the Mermentau bar channel were either less than or statistically no greater than concentrations found in animals exposed to the reference sediments. Heptachlor in the summer series was significantly greater in oysters exposed to sediments from one station than in animals exposed to the reference materials. Mean mercury concentrations were significantly greater in clams and sandworms exposed to material from all three stations than in animals exposed to the reference sediment in the winter series. Therefore, there is the possibility of bioaccumulation occurring in benthos at the ODMDS.

Nekton Baseline Conditions - Numerous recreationally and commercially important fishery species exist in Gulf waters off Louisiana. Abundance and composition vary seasonally as many species spend part of their life cycle in the inshore marsh/estuarine complex. The nearshore waters in western Louisiana are the most productive and contain the greatest diversity of any area along coastal Louisiana (Barrett et al., 1978). Species most common to nearshore waters in the area include seabob, white shrimp, bay anchovy, gafftopsail catfish, Atlantic bumper, sand seatrout, Atlantic croaker, star drum, and Altantic threadfin (Barrett et al., 1978). Table 3 summarizes important data concerning these species.

Impacts to Nekton - Due to the ability of nekton to avoid the disposal activities, effects would be minimal. Burial of benthic prey could have a

TABLE 3

MOST COMMON FISHERIES SPECIES IN NEARSHORE WATERS OF THE MERMENTAU AREA

Common Name	Sci Name	Spawning Area	Major Migratory Time	Source
Seabob	*Xiphopeneus kroyeri*	4-m depth	Uncertain	Juneau (1977)
White Shrimp	*Penaeus setiferus*	7-31m depth	June-Dec	Rounsfell (1975)
				White & Boudreaux (1977)
Bay Anchovy	*Anchoa mitchilli*	<20m depth	April-August	Robinette (1983)
Gafftopsail Catfish	*Bagre marinus*	inshore 1m depth	Nov-Jan: May-June	Muncy & Wingo (1983)
Atlantic Bumper	*Chlorocombrus chrysurus*	uncertain	Jun-Nov	Perret et al. (1971)
Sand Seatrout	*Cynoscion arenarius*	15-80m depths	Feb-Nov	Cowan & Shaw (1988)
				Sheridan et al. (1984)
				Sutter & McIlwain (1987)
Atlantic Croaker	*Micropogonias undulatus*	9-73m depths	Oct-Feb May-July	Sheridan et al. 1984
				Barrett et al. 1978
				Overstreet & Heard 1978
Star Drum	*Stellifer lanceolata*	uncertain	Jul - Oct	Thompson (1986)
Atlantic Threadfin	*Polydactylus octonemus*	uncertain	Apr - Oct	Perret et al. (1971)

slight, temporary adverse impact on bottom feeders. Data in Table 3 show April through November is the major time period for migrations to and from estuarine areas. The Mermentau Pass area is a migration avenue for all estuarine species, especially in the spring and fall (Gosselink et al., 1979). However, the Mermentau was not listed amoung the most significant passes in terms of fishery migration and tidal movements (Burk and Associates, Inc., 1977). Migration in this area may be adversely impacted while disposal is occurring.

Mammals, Turtles, Birds, and Endangered and Threatened Species Baseline - The numbers and diversity of marine mammals and turtles are low in nearshore waters. The Atlantic bottlenosed dolphin is common in tidal passes (DOI, 1979). Five species of endangered or threatened sea turtles [green (threatened), Kemp's ridley (endangered), hawksbill (endangered), leatherback (endangered), and loggerhead (threatened)] occur in the northern Gulf. Several species of endangered whales may occur in the area including finback, humpback, right, sei, and sperm whales (see letters from FWS and NMFS) (Attachment 1). Several species of oceanic birds and waterfowl may occur throughout the year in the nearshore waters of the area. There is a possible seabird nesting colony of least terns on the beach south of Bayou Labouve about 0.5 mi from the ODMDS. (Keller et al., 1984).

Impacts on Mammals, Turtles, Birds, and Endangered and Threatened Species - Effects of disposal should be minimal on these highly mobile animals. The feeding of sea turtles may be disrupted by burial of prey, but disposal is infrequent and effects are temporary and localized, so significant negative impacts should not occur. Disposal would have little effect on migration or breeding of sea turtles or whales. Food sources of endangered whales would not be affected. Bird nesting colonies on the coast would not be adversely affected by disposal at the site. A Biological Assessement of impacts to threatened and endangered species of turtles and whales was prepared by the COE and forwarded to the NMFS. The NMFS concurred with the

COE determination that endangered/threatened species would not be adversely impacted by the proposed action (Attachment 1).

Commercial/Recreation Fisheries Baseline Conditions - Waters off the central Louisiana coast, shoreward of the 20m contour, comprise one of the most heavily fished areas in the world (Kutkuhn, 1966). Fishing occurs throughout the year, but activities are more intense from March through October (Adkins, 1972; Dugas, 1981). The most valuable resources have been penaeid shrimp, menhaden, blue crabs, redfish, tuna, and spotted seatrout (Adkins, 1972; Barrett et al., 1978; Barrett and Gillespie, 1973; O'Bannon, 1988).

The port at Cameron, Louisiana some 20 miles to the west of the ODMDS is the busiest fishery port in the United States, with well over 600 million pounds of fish landed annually in recent years (O'Bannan, 1988). In 1987, the total landings at Cameron were 672 million pounds, valued at $36.6 million.

The commercial redfish fishery in Louisiana has been closed until September 1, 1991. In Federal waters, there is an indefinite ban on the commercial redfish fishery and recreational fishermen can not keep any redfish. A number of management plans for Gulf fishes have been developed by the Gulf of Mexico Fishery Management Council and approved by the National Oceanic and Atmospheric Administration.

Impacts to Commercial/Recreational Fisheries - There would be some physical interference with commercial and recreational fishing during disposal. However, it would be confined to the ODMDS itself and should be minimal. There would be minimal danger of heavy metal or CHC contamination of fish and or shellfish during disposal as shown by elutriate analyses and bioaccumulation studies in 1979 discussed earlier in this report.

Shipping and Navigation Baseline Conditions - Shipping tonnage on the Mermentau River, Bayous Nezpique, and Des Cannes has varied from

1.1 million to 1.8 million tons annually during the period 1978-1987 (COE, 1989). Commodities included mainly crude petroleum, gasoline, liquefied gases, and soybeans. Most of the traffic was outbound.

Impacts To Shipping and Navigation - Temporary shoaling after disposal may reduce water depths within the site. However, the MRGNC ODMDS is located outside the Mermentau fairway and is marked on NOAA navigation charts. The dredges may interfere with shipping by temporarily blocking sections of the channel. This is an unavoidable adverse impact resulting from disposal at the site.

Esthetics Baseline Conditions - Turbidities in the vicinity of the ODMDS are fairly high from October-May, but tend to be lower during June-Sept when wind patterns are more stable from the south. Man-induced noise in the area is from passing vessels and oil and gas activity.

Impacts to Esthetics - Disposal would cause a temporary turbidity plume of about 2,000 feet from the end of the discharge pipe (May 1973; Carstea et al., 1976; Stern and Stickle, 1978; Bokuniewicz and Gordon, 1980) that would disperse soon after disposal ceases. The dredging and disposal activities would temporarily increase noise levels in the vicinity of the ODMDS, but should not disturb wildlife.

Industrial Development Baseline Conditions - The nearest land masses to the ODMDS is the Hackberry Beach area and the Saline marsh behind it. The entire area of beach near the ODMDS is sparsely developed and has no roads connecting it to inland highways. The town of Grand Chenier with a population of about 250 is the nearest community to the ODMDS at a distance of about 4.5 miles. It serves as a base for commercial fishing, oil and gas development, and agriculture. There are numerous active oil and gas wells in the vicinity of the ODMDS.

Industrial Development Impacts - There would be no impact on oil and gas or other industrial activities by use of the ODMDS.

10. "Potential for the development or recruitment of nuisance species in the disposal sites." No nuisance species have developed at the Mermentau ODMDS, and none are expected to develop in the future.

11. "Existing at or in proximity to the site of any significant natural or cultural features of historical importance." Cheniers and beach ridges in the area are ancient Gulf beaches that serve important functions as wildlife habitat, storm barriers, and limiting salt water intrusion into marshes (Burk and Associates, Inc., 1977). A survey to identify archeological and historical resources is not required at this time. However, a Nautical Resources Plan for the COE is being prepared in consultation with the Louisiana State Historic Preservation Officer. Under guidelines established by this plan, studies may be done in the future to evaluate impacts to historic shipwrecks that may result from use of the MRGNC ODMDS.

General Criteria (§228.5)

(a) The dumping of material into the ocean will be permitted only at sites or in areas selected to minimize the interference of disposal activities with other activities in the marine environment, particularly avoiding areas of existing fisheries or shellfisheries, and regions of heavy commercial or recreational navigation.

The interim ODMDS is located adjacent to the Mermentau River bar channel. A hydraulic dredge is used generally for about two weeks every three years and there is limited transport and interference with other activities in the marine environment. There may be some minor interference with fishing and navigation during the dredging and disposal activities. It is expected that there will be no interference with these or other marine activities outside these brief periods. Dredging the channel will facilitate commercial and recreational activity.

(b) Locations and boundaries of the disposal sites will be so chosen that temporary perturbations in water quality or other environmental conditions during initial mixing caused by disposal operations anywhere within the site can be expected to be reduced to normal seawater levels or to undetectable contaminants or effects before reaching any beach, shoreline, marine sanctuary, or known geographical fishery or shellfishery.

There would be a turbidity plume of about 2,000 feet during the actual dredged material disposal operations (May 1973; Carstea et al., 1976; Stern and Stickle, 1978; Bokuniewicz and Gordon, 1980). This plume should be dispersed beyond 2,000 feet to the point where it is undetectable from the turbidity naturally occurring in the area. It would not reach the nearby beaches. Any temporary changes in water quality would also return to ambient concentrations within a short distance and would not impact the beaches. There are no marine sanctuaries in the area. Commercial fisheries exist throughout the region; however, these are not unique to the area of the site, and would be minimally impacted.

(c) If at anytime during or after disposal site evaluation studies, it is determined that existing disposal sites presently approved on an interim basis for ocean dumping do not meet the criteria for site selection set forth in §§228.5 - 228.6, the use of such sites will be terminated as soon as suitable alternative disposal sites can be designated.

The studies to date indicate that the interim ODMDS meets the requirements of both §228.5 and §228.6. Surveys of the site indicated the water quality and sediments were generally similar inside and outside the ODMDS. No permanent adverse environmental effects inside or outside the site boundaries due to dredged material disposal have been noted.

(d) The sizes of ocean disposal sites will be limited in order to localize for identification and control any immediate adverse

impacts and permit the implementation of effective monitoring and surveillance programs to prevent adverse long-range impacts. The size, configuration, and location of any disposal site will be determined as a part of the disposal site evaluation or designation study.

The configuration of the interim ODMDS has resulted from the ease and economics of disposal from maintenance dredging the Mermentau River bar channel. The proximity led to the establishment of a site parallel to the channel in the direction of prevailing current. The site lends itself to surveillance of individual dredged material disposal operations and long-term monitoring because of its distinct location and proximity to inland docking areas.

(e) EPA will, wherever feasible, designate ocean dumping sites beyond the edge of the continental shelf and other such sites that have been historically used.

The interim site has been used historically for disposal of dredged material; there is no environmental advantage to locating the site beyond the shelf without incurring large increases in the cost of disposal. Material would have to be transported some 100 miles south of the bar channel near the proposed Flower Garden Bank Marine Sanctuary and other banks. Environmental impacts could be greater than deposition in the interim ODMDS.

CUMULATIVE IMPACTS

There are active oil and gas platforms located just south of the ODMDS. Also, there are many oil and gas canals in the Lower Mud Lake area. Production and associated impacts of inshore developments probably have been declining since the late 1960's (MMS, 1984). Pipelines from offshore oil and gas rigs traverse the area. The adverse impacts from offshore oil and gas development in the Gulf are generally temporary and localized. The

occasional use of the ODMDS would result in additional temporary, localized impacts to the nearshore area. Use of the ODMDS would not impact Lower Mud Lake, Cheniers, or beaches in the area.

PUBLIC INVOLVEMENT

Coastal Zone Consistency - The EPA is coordinating with the Louisiana Department of Natural Resources (LDNR) concerning the consistency of final designation of the Mermentau ODMDS with the Louisiana Coastal Zone Management Plan. Designation by EPA only makes the site available for disposal of dredged material. Site designation does not preclude consideration of other disposal options. Each time the COE desires to use the site, they would go through the same actions as if they were applying for a permit.

History of Public Involvement - The COE prepared an EIS in 1977 (COE 1977) for the assumption of maintenance for the Mermentau River-Gulf of Mexico navigation channel. The COE published an EIS in 1981 for the Mermentau River Project (COE, 1981a). Also, a Maintenance Dredging Ocean Dumping Assessment was prepared (COE, 1981b). Letters regarding endangered and threatened species were sent to the FWS, the NMFS, and the Louisiana Department of Wildlife and Fisheries; responses are included in this document (Attachment 1). A Biological Assessment was prepared by the COE and sent to the NMFS in January 1990.

Scoping - A Notice of Intent to prepare the EIS for the Mermentau River ODMDS was published in the Federal Register on 8 December 1989. A scoping input request was sent to all interested parties in November 1989. A scoping document was sent on January 10, 1990, to all parties responding to the scoping input request. Comments received from said parties have been incorporated into the EIS.

Coordination of the draft EIS - This EIS will be sent to the following agencies, groups, and individuals:

FEDERAL

Honorable J. Bennett Johnston
Honorable Lindy Boggs
Honorable Robert Livingston
Honorable Jimmy Hayes
Honorable Jim McCrery

Honorable John B. Breaux
Honorable Jerry Huckaby
Honorable Richard Baker
Honorable Billy Tauzin
Honorable Clyde Holloway

Dept. of the Interior
Washington, DC

Mineral Management Service
New Orleans, LA

Advisory Council of Historic Preservation
Washington, DC
Golden, CO

Dept of Agriculture
Alexandria, LA

Forest Service
Atlanta, GA

U.S. Fish and Wildlife Service
Lafayette, LA

U.S. Dept. of Commerce
Washington, DC

U.S. Coast Guard
New Orleans, LA

National Marine Fisheries Service
Baton Rouge, LA
St. Petersburg, FL

Dept. of Health and Human Services
Washington, DC

Centers for Disease Control
Atlanta, GA

STATE OFFICIALS AND AGENCIES

Governor of Louisiana

Honorable Cecil J. Picard
Honorable Jack Doland
Honorable "Randy" Roach
Honorable "Sam" Theriot

La. Dept. of Transportation and Development

La. Natural Heritage Program

La. Dept. of Natural Resources
Office of Environmental Affairs
Division of State Lands
Coastal Resources Program

Attorney General of Louisiana

La. Dept. of Health and Human Resources

La. Dept. of Wildlife and Fisheries

La. Dept. of Environmental Quality
Water Pollution Control Division

La. Dept. of Commerce

La. State Planning Office

STATE OFFICIALS AND AGENCIES (cont'd)

La. Dept. of Culture, Recreation and Tourism
State Historic Preservation Officer
Office of State Parks

LSU
Center for Wetlands Resources
Curator of Anthropology

La. Geological Survey

Governor's Coastal Protection Task Force

Technical Coordinator for Coastal Activities

LOCAL AGENCIES

Cameron Parish Library

Mr. Ernest Trahan, President, Cameron Parish Police Jury
Mr. Harris F. Vallo, President, Vermilion Parish Police Jury

ENVIRONMENTAL GROUPS

Orleans Audubon Society

Gulf Coast Conservation Association

Environmental Defense Fund

Delta Chapter, Sierra Club

Chappepeela Group, Sierra Club

Tulane Law School

National Wildlife Federation

Louisiana Wildlife Federation

National Resources Defense Council

League of Women Voters of LA

South LA. Environmental Council

Fund for Animals

Gulf States Marine Fisheries Comm.

Sea Grant Legal Program

Gulf Coast Conservation Assn.

Gulf of Mexico Fisheries Management Council

Description of EIS and Rule-making Processes - The draft EIS is being distributed to the above entities for a 45-day review and comment period. A final EIS will be prepared taking into account comments on the draft EIS. Site designation also requires publication of proposed and final rule-making packages in the Federal Register by EPA. The proposed rule should be published concurrent with the draft EIS review period. The final rule will be published after expiration of the 30-day comment period on the final EIS.

LIST OF PREPARERS

The draft EIS was prepared by Robert J. Martinson (Environmental Resource Specialist in the New Orleans District, COE) in cooperation with Darlene Coulson (EIS Project Officer of EPA, Region VI).

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ATTACHMENT 1

Letters from U.S. National Marine Fisheries Service,

the U.S. Fish and Wildlife Service,

and the Louisiana Natural Heritage Program

Concerning Threatened and Endangered Species

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

Southeast Regional Office
9450 Koger Boulevard
St. Petersburg, FL 33702

November 13, 1989 F/SER23:TLD

FTS 393-3366

Mr. R. H. Schroeder, Jr.
Chief, Planning Division
U.S. Dept. of the Army
New Orleans District, COE
Post Office Box 60267
New Orleans, LA 70160-0267

Dear Mr. Schroeder:

This responds to your November 3, 1989, letter requesting information on endangered and threatened species under the jurisdiction of the National Marine Fisheries Service (NMFS) which might occur in the vicinity of the proposed project. The enclosed list contains species under NMFS purview that may occur in the marine environment off Louisiana.

If you have any questions, please contact Dr. Terry Henwood, Fishery Biologist, at FTS 826-3366.

Sincerely yours,

Charles A. Oravetz

Charles A. Oravetz, Chief
Protected Species Management Branch

Enclosure

ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITATS
UNDER
NMFS JURISDICTION

Louisiana

Listed Species	Scientific Name	Status	Date Listed
finback whale	*Balaenoptera physalus*	E	12/02/70
humpback whale	*Megaptera novaeangliae*	E	12/02/70
right whale	*Eubaleana glacialis*	E	12/02/70
sei whale	*Balaenoptera borealis*	E	12/02/70
sperm whale	*Physeter catodon*	E	12/02/70
green sea turtle	*Chelonia mydas*	Th	07/28/78
hawksbill sea turtle	*Eretmochelys imbricata*	E	06/02/70
Kemp's (Atlantic) ridley sea turtle	*Lepidochelys kempi*	E	12/02/70
leatherback sea turtle	*Dermochelys coriacea*	E	06/02/70
loggerhead sea turtle	*Caretta caretta*	Th	07/28/78

SPECIES PROPOSED FOR LISTING
None

LISTED CRITICAL HABITAT
None

PROPOSED CRITICAL HABITAT
None

RE

FEB 21 1990

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

Southeast Region
9450 Koger Boulevard
St. Petersburg, FL 33702

February 12, 1990 F/SER23:TLD

Mr. R. H. Schroeder, Jr.
Chief, Planning Division
U.S. Dept. of the Army
Post Office Box 60267
New Orleans, LA 70160-0267

Dear Mr. Schroeder:

This responds to your January 17, 1990, letter regarding the potential impacts of ocean disposal of dredged materials at two sites, offshore Louisiana. A Biological Assessment (BA) was submitted pursuant to Section 7 of the Endangered Species Act of 1973 (ESA).

We have reviewed the BA and concur with your determinations that populations of endangered/threatened species under our purview would not be adversely affected by the proposed action.

This concludes consultation responsibilities under Section 7 of the ESA. However, consultation should be reinitiated if new information reveals impacts of the identified activity that may affect listed species or their critical habitat, a new species is listed, the identified activity is subsequently modified or critical habitat determined that may be affected by the proposed activity.

If you have any questions, please contact Dr. Terry Henwood, Fishery Biologist at 813/893-3366.

Sincerely yours,

Terry Henwood

for Charles A. Oravetz, Chief
Protected Species Management Branch

cc: F/SER1
F/PR2

United States Department of the Interior

825 Kaliste Saloom Rd.
Brandywine Bldg. II, Suite 102
Lafayette, Louisiana 70508

[redacted]

November 21, 1989

Mr. R. H. Schroeder, Jr.
Chief, Planning Division
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160

Dear Mr. Schroeder:

This is in response to your November 3, 1989, letter in which you requested information concerning listed and proposed threatened and endangered species that may be impacted by disposal of dredged material at two ocean dredged material disposal sites in the Gulf of Mexico. One site is near the mouth of Freshwater Bayou Canal in Vermilion Parish and the other is near the mouth of the Mermentau River Channel in Cameron Parish. The following comments are provided in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended: 16 U.S.C. 1531 et seq.).

Our records indicate that no endangered, threatened, or proposed species or their critical habitat occur within the disposal areas. However, the National Marine Fisheries Service is responsible for aquatic marine threatened or endangered species. Contact Terry Henwood (813/893-3366) in St. Petersburg, Florida, for information concerning those species.

If you anticipate any changes in the scope or location of this project, please contact Kim Mitchell of this office for further coordination.

Sincerely yours,

David M. Smith

David M. Smith
Acting Field Supervisor

NOV 1 3 1989

State of Louisiana

DEPARTMENT OF WILDLIFE AND FISHERIES
POST OFFICE BOX 98000
BATON ROUGE, LA. 70898
PHONE (504) 765-2800

VIRGINIA VAN SICKLE
SECRETARY

BUDDY ROEMER
GOVERNOR

November 7, 1989

R. H. Schroeder, Jr.
Chief, Planning Division
Environmental Analysis Branch
Department of the Army
New Orleans District, Corps of Engineers
P.O. Box 60267
New Orleans, LA 70160-0267

RE: Disposal of dredged material in two ocean dredged material sites - Mermentau River and Freshwater Bayou (Letter dated 3 Nov. 89)

Dear Mr. Schroeder,

A review of the Louisiana Natural Heritage Program's data base for significant ecological features revealed no occurrences of endangered or threatened plants or animals within the proposed project boundary.

The Louisiana Natural Heritage Program has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. While this information is available for preparation and review of environmental assessments, it is not a substitute for on-site surveys. The quantity and quality of data collected by this inventory are dependent on the research and observations of many individuals and organizations. In many cases, information on environmental elements is not the result of comprehensive field surveys.