

Project Report
ENDANGERED SPECIES MONITORING
Mississippi River-Gulf Outlet
Bar Channel
Maintenance Dredging
99-1-MRGO

Operations Technical Support Branch
US Army Corps of Engineers
New Orleans District
504-862-2504

ENCLOSURE

Introduction

This report is submitted to fulfill requirements of the Endangered Species Act and the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The New Orleans District submits this preliminary report summarizing the results of Fiscal Year 1999 maintenance dredging of the Mississippi River-Gulf Outlet (MR-GO), Louisiana, bar channel by the Government Dredge WHEELER.

Scope of Work

The passage of Hurricane Georges across Breton Sound caused major shoaling in the Mississippi River-Gulf Outlet bar channel on September 29, 1998. Detailed surveys of the bar channel indicated that project depths in the vicinity of sea buoys 6 and 7 were -25 feet. The Mississippi River-Gulf Outlet bar channel project depth is -36 ft and the channel is maintained to a depth of -38 ft (project depth plus two feet advanced maintenance). The shoaling caused by Hurricane Georges necessitated emergency dredging in the bar channel. The Government dredge WHEELER was mobilized to the MR-GO on October 2, 1998. The WHEELER worked for a short time while awaiting the arrival of contract dredges and the Government dredge MCFARLAND to the channel. Maintenance dredging was conducted by the Government dredge WHEELER between October 3, 1998, and October 8, 1998. Dredging was conducted between approximate channel miles -4.5 and -7.0.

Maintenance dredging activities were conducted during the time period when sea turtle monitoring was required as described in the ITS. The results of monitoring are summarized in Table 1.

In 1995 and previous years, the National Marine Fisheries Service determined that listed whales are unlikely to be adversely affected by hopper dredging in the Gulf of Mexico. As a result, endangered species monitors for whales, bridge observers, were not required for this contract. Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4. and 6. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

Methodology

The dredge worked in dredge and haul mode. Material was deposited in the Ocean Dredged Material Disposal Site located south of and parallel to the navigation channel (Figure 1). The WHEELER was equipped with 4"x 4" inflow screens and sea turtle observers were on board monitoring for sea turtle takes throughout the dredging operations. The screens were inspected for sea turtles and sea turtle parts and cleared by hand of debris. Draghead deflectors were in use throughout dredging operations.

RESULTS

The WHEELER worked from October 3, 1998, to October 8, 1998. Approximately of 190,000 cubic yards of shoal material was removed by dredge and haul operations.

During this maintenance event there was one documented incidental sea turtle take. On October 7 and 8, 1998, portions of a Kemp's Ridley sea turtle, were recovered from the port discharge. The WHEELER was equipped with rigid deflector dragheads at the time of the incidental take.

Throughout the dredging work both biological and non-biological debris was recovered from the screens. Debris retained in the screens included unspecified trash, and wood. The biological material collected included: unspecified grasses, sea grasses, starfish, shrimp, flounder and shells. The results of the screen monitoring are summarized in table 1.

Water temperatures ranged from a maximum surface water temperature of 88 degrees F (31.1 degrees C) to a minimum surface water temperature of 82 degrees F (27.7 degrees C). Below mid-depth water temperatures were not sampled. On the day of the sea turtle take, the surface water temperature was 86 F (30 degrees C).

Bridge monitoring was not conducted.

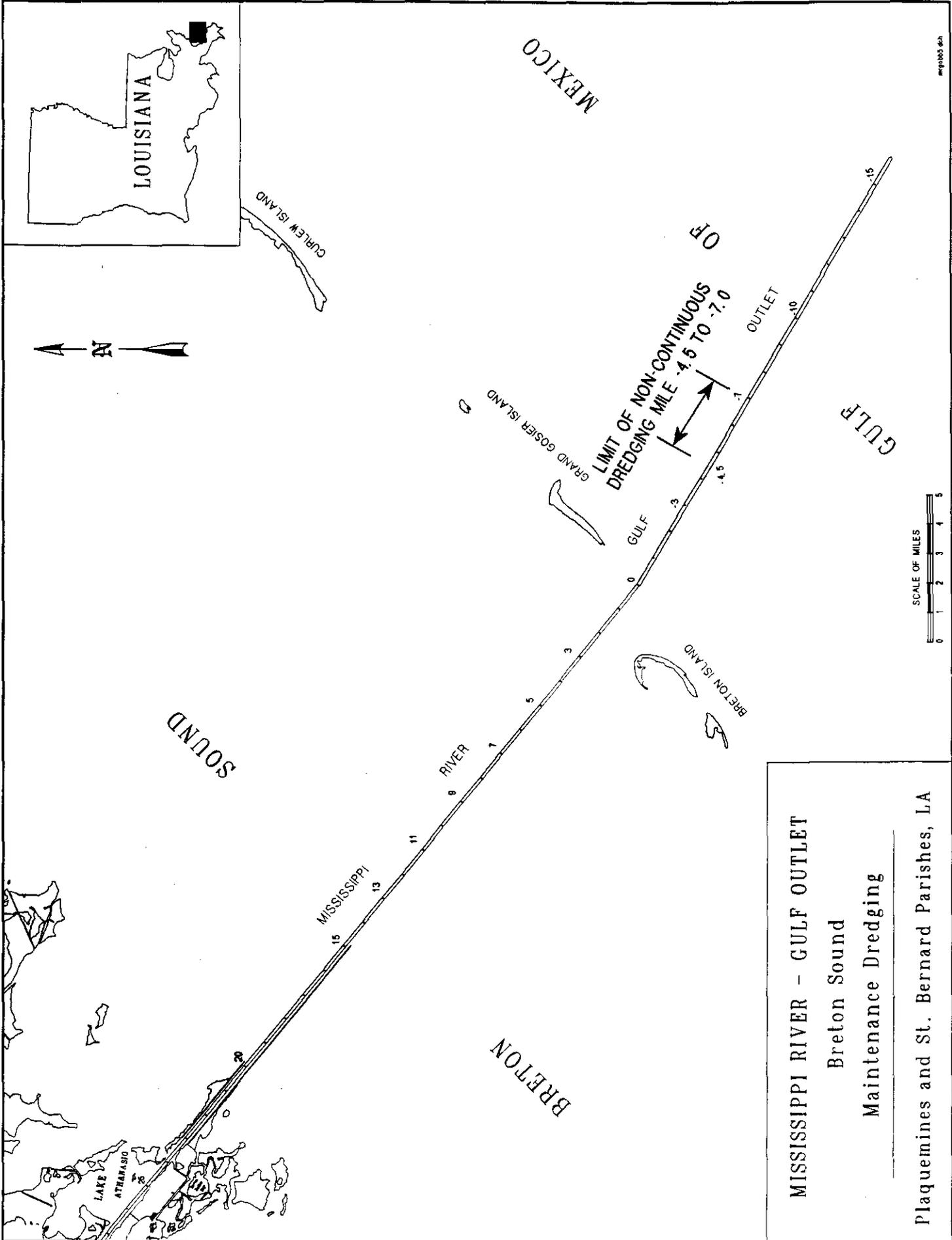
No screen clogging was reported during dredging activities. The light amount of debris collected may be attributed to the use of draghead deflectors throughout the contract.

DISCUSSION

One sea turtle take was recorded by the WHEELER during this dredging event. Temperature conditions during the maintenance event were well within range of sea turtle tolerances.

Table 1. Summary Sea Turtle Observer Reports WHEELER

DATE	DREDGE	NOTES
3 October 1998	WHEELER	Screens: Trash, starfish, catfish, shrimp, sea grass, shells Below Mid-Depth Temp: No data Surface Temp: 82 Data F Weather: Sunny Clear Other:
4 October 1998	WHEELER	Screens: Trash, starfish, shells, skate, woody debris, grass Below Mid-Depth Temp: No data Surface Temp: 87 F Weather: Clear Other:
5 October 1998	WHEELER	Screens: Trash, woody debris, shells, plant debris Below Mid-Depth Temp: No data Surface Temp: 87 F Weather: Overcast, Winds 20 knots Other:
6 October 1998	WHEELER	Screens: rope, fishing line, wood, shells, Below Mid-Depth Temp: No data Surface Temperature: 88 F Weather: Clear to Overcast , Winds 5-15 knots Other:
7 October 1998	WHEELER	Screens: debris, shells, conch shell Below Mid-Depth Temp: No data Surface Temp: 86-87 F Weather: Overcast, intermittent showers, Winds 5-10 knots Other: Kemp's Ridley Take at 23:33
8 October 1998	WHEELER	Screens: shells, rope, ray, wood Below Mid-Depth Temp: no data Surface Temp: 86 F Weather: Cloudy, Winds 5-20 knots Other:



MISSISSIPPI RIVER - GULF OUTLET
 Breton Sound
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 Plaquemines and St. Bernard Parishes, LA

Project Report
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Introduction

This report is submitted to fulfill requirements of the Endangered Species Act and the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The New Orleans District submits this preliminary report summarizing the results of Fiscal Year 1999 maintenance dredging of the Mississippi River-Gulf Outlet (MR-GO), Louisiana, bar channel by the Government Dredge MCFARLAND.

Scope of Work

The passage of Hurricane Georges across Breton Sound caused major shoaling in the Mississippi River-Gulf Outlet bar channel on September 29, 1998. Detailed surveys of the bar channel indicated that project depths in the vicinity of sea buoys 6 and 7 were -25 feet. The Mississippi River-Gulf Outlet bar channel project depth is -36 ft and the channel is maintained to a depth of -38 ft (project depth plus two feet advanced maintenance). The shoaling caused by Hurricane Georges necessitated emergency dredging in the bar channel. The Government dredge WHEELER was mobilized to the MR-GO on October 2, 1998. The WHEELER worked for a short time while awaiting the arrival of contract dredges and the Government dredge MCFARLAND to the channel. The MCFARLAND arrived at the MR-GO on October 11, 1998, and began maintenance dredging activities. The MCFARLAND completed its dredging operations on December 19, 1998. Dredging was conducted between approximate channel miles -3.3 and -5.0.

Maintenance dredging activities were conducted during the time period when sea turtle monitoring was required as described in the ITS. The results of monitoring are summarized in Table 1.

In 1995, and previous years, the National Marine Fisheries Service determined that listed whales are unlikely to be adversely affected by hopper dredging in the Gulf of Mexico. As a result, endangered species monitors for whales, bridge observers, were not required for this contract. Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4. and 6. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

Methodology

The dredge worked in dredge and haul mode. Material was deposited in the Ocean Dredged Material Disposal Site located south of and parallel to the navigation channel (Figure 1). The MCFARLAND was equipped with 4"x 4" inflow screens and sea turtle observers were on board monitoring for sea turtle takes from October 11, 1998, to November 30, 1998. The screens were inspected for sea turtles and sea turtle parts and cleared by hand of debris. Draghead deflectors were in use throughout dredging operations.

RESULTS

The MCFARLAND worked in the MR-GO bar channel from October 11, 1998, to November 30, 1998. No dredging was conducted during October 15, 16, and 17, 1998. Approximately 730,940 cubic yards of shoal material was removed by dredge and haul operations.

During this maintenance event there were no documented incidental sea turtle takes. Throughout the dredging work both biological and non-biological debris was recovered from the screens. Debris retained in the screens included unspecified trash, wood, clay, plastic, metal, rubber, rope, fiberglass, wire, rocks, and netting. The biological material collected included unspecified grasses, shells, jellyfish, blue crabs, spider crabs, horseshoe crabs, cownose rays, sting rays, skates, red drum, catfish, flounder, sharks, and yellow fin tuna. The results of the screen monitoring are summarized in table 1.

Water temperatures ranged from a maximum surface water temperature of 86 degrees F (30 degrees C) to a minimum surface water temperature of 68 degrees F (20 degrees C). Below mid-depth water temperatures were not sampled.

Bridge monitoring was not conducted.

No screen clogging was reported during dredging activities. The light amount of debris collected may be attributed to the use of draghead deflectors throughout the contract.

DISCUSSION

Although temperature conditions during the maintenance event were well within range of sea turtle tolerances, no sea turtle takes were recorded by the MCFARLAND.

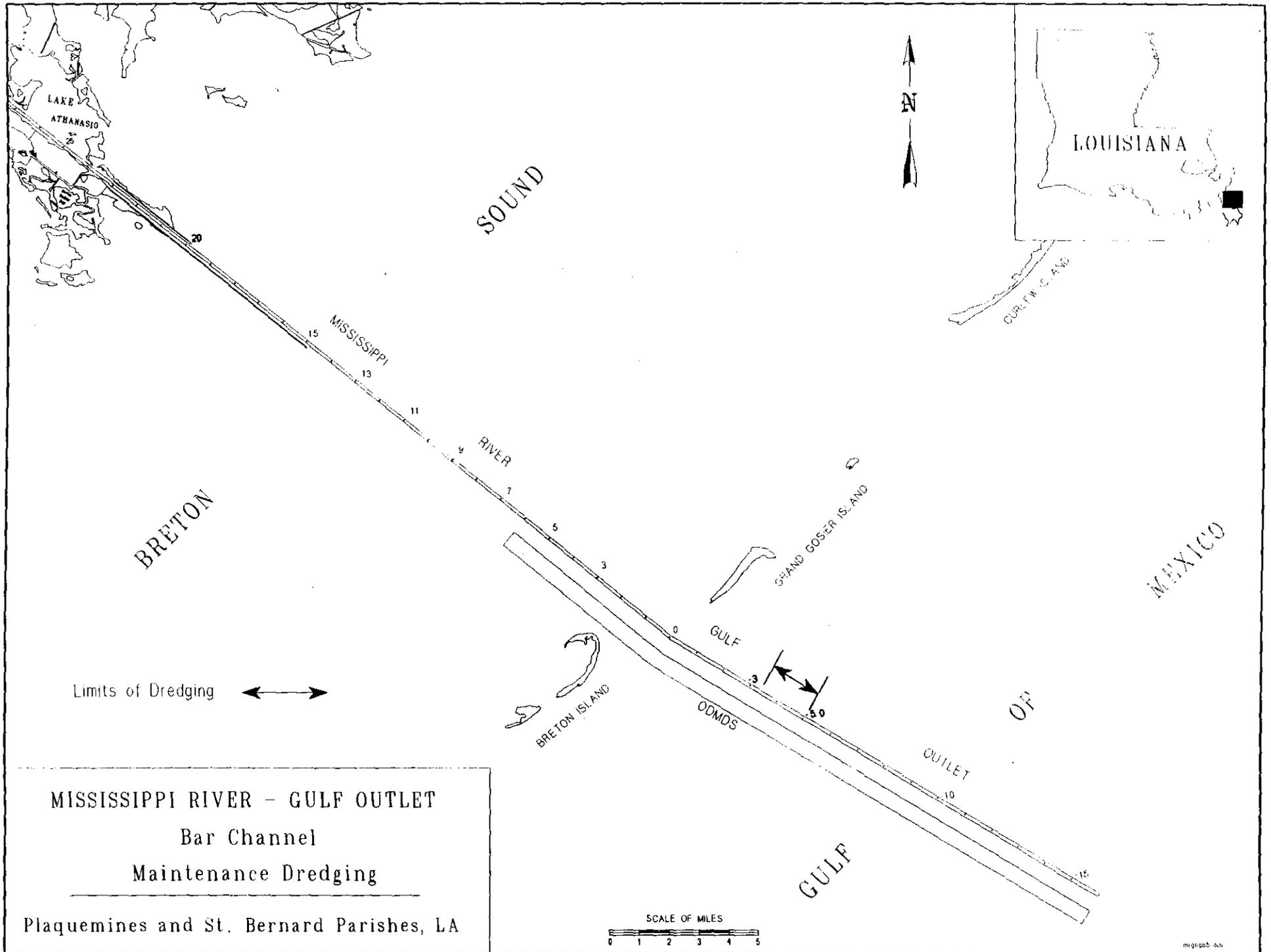


Figure 1

MISSISSIPPI RIVER - GULF OUTLET
 Bar Channel
 Maintenance Dredging
 Plaquemines and St. Bernard Parishes, LA

Table 1. Summary Sea Turtle Observer Reports

DATE	DREDGE	NOTES
11 October 1998	McFarland	Screens: small rocks, jellyfish, shells Below Mid-Depth Temp: Surface Temp: Weather: Clear 5-10 knot winds Other: 1830 boarded McFarland upon completion of load #5 on station commenced observation with McFarland load #6
12 October 1998	McFarland	Screens: shells, misc. debris mud, clay, rubber hose, wood, Below Mid-Depth Temp: Surface Temp: Weather: clear, sunny 5-10 knot winds Other: STBD drag arm only 2255-2352 NW 2358-0052 SE
13 October 1998	McFarland	Screens: misc. debris, mud, wood, shells, Below Mid-Depth Temp: Surface Temp: 86 F Weather: hazy, 5-15 knot winds Other:
14 October 1998	McFarland	Screens: mud, misc. debris, wood, eel, rock, shells, sting ray wing Below Mid-Depth Temp: Surface Temperature: 86 F Weather: clear 5-15 knot winds Other:
18 October 1998	McFarland	Screens: mud, some wood debris Below Mid-Depth Temp: Surface Temp: Weather: hazy, 10-20 knot winds Other:
19 October 1998	McFarland	Screens: mud, debris, shells, wood Below Mid-Depth Temp: Surface Temp: 82 F Weather: clear, 5-15 knot winds Other:

20 October 1998	McFarland	Screens: shells, small piece of plastic, wood Below Mid-Depth Temp: Surface Temp: Weather: winds 10-15 knot SE winds Other: Vessel at the dock for fuel and repairs, no loads were dug.
21 October 1998	McFarland	Screens: wood, sting ray, rock, shell, plastic, rubber, Below Mid-Depth Temp: Surface Temp: 81 F Weather: overcast 15-30 knot winds Other: New position for dredge between mile (7.0) (e/c sta. 3720 + 00) and mile (-7.6) (C/L sta. 3847 + 70). Informed by bridge officer not to go into cage because of rough weather
22 October 1998	McFarland	Screens: clear Below Mid-Depth Temp: Surface Temp: 78 F Weather: 25 knots NE winds Other:
24 October 1998	McFarland	Screens: metal objects, shells, rubber, wood, sting ray Below Mid-Depth Temp: Surface Temp: 75-76 F Weather: cloudy 10-20 knot winds Other:
25 October 1998	McFarland	Screens: rocks, stingray, wood, metal, grass debris, shells, plastic Below Mid-Depth Temp: Surface Temp: 76 F Weather: clear SE winds 10-20 knots Other:
26 October 1998	McFarland	Screens: grass, mixed debris, shells, wood, rope, plastic, metal Below Mid-Depth Temp: Surface Temp: 76-77 F Weather: clear 15-20 knot winds Other:

27 October 1998	McFarland	Screens: grass, plastic, wood, shells, rope rubber, fiberglass Below Mid-Depth Temp: Surface Temp: 76-77 F Weather: 10-15 knot winds Other:
28 October 1998	McFarland	Screens: grass, shells, fiberglass, plastic, wood, yellow fin tuna Below Mid-Depth Temp: Surface Temp: 76-78 F Weather: 10-15 knot winds Other: Time delay because of traffic in channel. M.M. sighting 6 bottlenose dolphins swimming at surface about 75 feet off port bow at 1641 hours.
29 October 1998	McFarland	Screens: plastic, grass, wood, shells, Below Mid-Depth Temp: Surface Temp: 78 F Weather: clear, light winds Other: Last dredge before docking for crew change, changed and washed down cages
30 October 1998	McFarland	Screens: wood Below Mid-Depth Temp: Surface Temp: 82 F Weather: clear, 10 knot winds Other:
31 October 1998	McFarland	Screens: grass, shells, shark, wood, plastic, metal, sting ray, shark, NK, Below Mid-Depth Temp: Surface Temp: 80-84 F Weather: clear 5-10 knot winds Other: Shark appeared to have been dead before brought up in dredge. Id as Bull Shark.
1 November 1998	McFarland	Screens: wood, rubber, grass, plastic, shells, fiberglass Below Mid-Depth Temp: Surface Temp: 80-79 F Weather: clear, 5-15 knot winds Other:

2 November 1998	McFarland	Screens: wood, grass, rope, shells, plastic, rubber, boat, wire, sting ray, rocks Below Mid-Depth Temp: Surface Temp: 79-80 F Weather: cloudy 10-15 knot winds Other:
3 November 1998	McFarland	Screens: blue crab, sheeps head, skate, flounder Below Mid-Depth Temp: 70-71 F Surface Temp: 68-74 F Weather: S 5-10 knots Other:
4 November 1998	McFarland	Screens: wood, skate, sting ray, plastic, spider crab, grass rocks, shells Below Mid-Depth Temp: Surface Temp: 77-78 F Weather: cloudy, 20-25 knot winds Other:
5 November 1998	McFarland	Screens: wood, grass, shells, red drum, rope, rocks, Below Mid-Depth Temp: Surface Temp: 76-72 F Weather: cloudy 15-25 knot winds Other: 1209-1210 3 bottlenose dolphins swimming at surface. 30 feet off Star. Bow
6 November 1998	McFarland	Screens: wood, grass, red drum, plastic, shells, sting ray, catfish, cownose ray, clay Below Mid-Depth Temp: Surface Temp: 69-81 F Weather: clear 15-25 knot winds Other:
7 November 1998	McFarland	Screens: skate, rocks, mud balls, rope, netting, clay, plastic, sting ray, stones Below Mid-Depth Temp: Surface Temp: 70-72 F Weather: clear 12-18 knot winds Other: Time delay- safety meeting

8 November 1998	McFarland	Screens: wood, clay, net, grass, clay, mud, shells, sting ray, logs, skate Below Mid-Depth Temp: Surface Temp: 72-70 F Weather: partly cloudy 10-15 knot winds Other:
9 November 1998	McFarland	Screens: wood, plastic, grass, rope, mud, clay Below Mid-Depth Temp: Surface Temp: 73 F Weather: cloudy 10-15 knot winds Other:
10 November 1998	McFarland	Screens: wood, shells, grass, clay, plastic, balls Below Mid-Depth Temp: Surface Temp: 73-79 F Weather: rain 15-20 knot winds Other:
11 November 1998	McFarland	Screens: wood, clay, shells Below Mid-Depth Temp: Surface Temp: 70-73 F Weather: overcast 12-20 knot winds Other:
12 November 1998	McFarland	Screens: wood, grass, shells Below Mid-Depth Temp: Surface Temp: Weather: partly cloudy 10 knot winds Other: crew change
13 November 1998	McFarland	Screens: wood, grass, shells, plastic Below Mid-Depth Temp: Surface Temp: 73 F Weather: cloudy with light winds Other:
14 November 1998	McFarland	Screens: wood, clay, shells, grass, plastic Below Mid-Depth Temp: Surface Temp: 73-73 F Weather: clear with light winds Other:

<p>15 November 1998</p>	<p>McFarland</p>	<p>Screens: wood, weeds, shells, plastic, horseshoe crab Below Mid-Depth Temp: Surface Temp: 70-76 F Weather: cloudy/rainy with light winds (10 knots) Other:</p>
<p>16 November 1998</p>	<p>McFarland</p>	<p>Screens: grass, fishing trap wire, docking line, metal, clay, wire mesh from (fish/crab) trap, twigs, shells, wood Below Mid-Depth Temp: Surface Temp: 70-74 F Weather: partly cloudy to clear, light winds Other: 0620- sighted 2 bottlenose dolphins 13-15m swimming toward the Bow</p>
<p>17 November 1998</p>	<p>McFarland</p>	<p>Screens: shells, wood, twigs, clay, plastic jugs (3), grass, plastic, skate, log, brush, mud Below Mid-Depth Temp: Surface Temp: 72-73 F Weather: cloudy, 10 15 knot winds Other: 1530 sighted 3-5 bottlenose dolphins 15-20m swimming in small area just off the port side of vessel didn't move from spot as vessel passed</p>
<p>18 November 1998</p>	<p>McFarland</p>	<p>Screens: plastic, clay, balls, shells, twigs, skate, ray, grass, rope Below Mid-Depth Temp: Surface Temp: 72-74 F Weather: clear, slight wind Other:</p>

<p>19 November 1998</p>	<p>McFarland</p>	<p>Screens: wood, shells, flatfish (flounder), plastic Below Mid-Depth Temp: Surface Temp: 72-74 F Weather: clear, calm Other: (0805) Bottlenose dolphins sighted (7 animals) came up to bow of vessel then left. Flatfish was with spawn close to ripe (summer flounder)</p>
<p>20 November 1998</p>	<p>McFarland</p>	<p>Screens: mud, clay, grass, wood, shells, plastic, flounder Below Mid-Depth Temp: Surface Temp: 72-74 F Weather: cloudy, 5-25 knot winds Other: 1555-(w-29'25 w 89'00) Marine mammal sightings: dead decomposing dolphin-animals missing most of mid-section but head and tail intact. Been dead some time but still in one piece</p>
<p>21 November 1998</p>	<p>McFarland</p>	<p>Screens: clay, wood, shells, skate, shrimp net wire, plastic Below Mid-Depth Temp: Surface Temp: 73-69 F Weather: rain, 10-25 knot winds Other: Drag took longer because of rough weather</p>
<p>22 November 1998</p>	<p>McFarland</p>	<p>Screens: wood, grass, clay, plastic, shells, fish (unidentified) \ clam, skate, Below Mid-Depth Temp: Surface Temp: 70-72 F Weather: rain, 10-25 knot winds Other:</p>
<p>23 November 1998</p>	<p>McFarland</p>	<p>Screens: wood, clay, grass, mud, plastic, shark, rope, fishing net, metal, skate, Below Mid-Depth Temp: Surface Temp: 72-74 F Weather: cloudy, 10-15 knot winds Other:</p>

24 November 1998	McFarland	Screens: grass, wood, clay, plastic, metal, fish(unidentified), shells Below Mid-Depth Temp: Surface Temp: 74-72 F Weather: clear, 5-15 knot winds Other:
25 November 1998	McFarland	Screens: grass, wood, clay, shells, metal Below Mid-Depth Temp: Surface Temp: 72-74 F Weather: clear, calm winds Other:
27 November 1998	McFarland	Screens: wood, mud Below Mid-Depth Temp: Surface Temp: 72 F Weather: clear- 5 knot winds Other:
28 November 1998	McFarland	Screens: clay, mud, wood, shells, summer flounder, metal, plastic, skate, net twine Below Mid-Depth Temp: Surface Temp: 70-73 F Weather: clear-5-10 knot winds Other: Marine mammals were sighted(bottlenose dolphin) all down the Mississippi River-Gulf Outlet from the dock in New Orleans to its mouth in the gulf.
29 November 1998	McFarland	Screens: wood, grass, clay, mud, stingray, Below Mid-Depth Temp: Surface Temp: 70-74 F Weather: cloudy 5-10 knot winds Other: Mechanical down time-1.5 hour
30 November 1998	McFarland	Screens: mud, clay, wood, grass, crab Below Mid-Depth Temp: Surface Temp: 74-70 F Weather: cloudy 5-10 knot winds Other:

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Introduction

This report is submitted to fulfill requirements of the Endangered Species Act and the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The New Orleans District submits this preliminary report summarizing the results of Fiscal Year 1999 maintenance dredging of the Mississippi River-Gulf Outlet (MR-GO), Louisiana, bar channel by the Contract Dredge OUACHITA.

Scope of Work

The passage of Hurricane Georges across Breton Sound caused major shoaling in the MR-GO bar channel on September 29, 1998. Detailed surveys of the bar channel indicated that project depths in the vicinity of sea buoys 6 and 7 were -25 feet. The MR-GO bar channel project depth is -36 ft and the channel is maintained to a depth of -38 ft (project depth plus two feet advanced maintenance). The shoaling caused by Hurricane Georges necessitated emergency dredging in the bar channel. The Government dredge WHEELER was mobilized to the MR-GO on October 2, 1998. The WHEELER worked for a short time while awaiting the arrival of contract dredges and the Government dredge MCFARLAND to the channel. The OUACHITA arrived at the MR-GO on October 8, 1998, and began maintenance. Maintenance dredging of the MR-GO bar channel by the hopper dredge OUACHITA was conducted under contract DACW29-99-C-0001. The OUACHITA completed its dredging operations on January 16, 1999. Dredging was conducted between approximate channel miles -4.0 and -7.0.

Maintenance dredging activities were conducted during the time period when sea turtle monitoring was required as described in the ITS. The results of monitoring are summarized in Table 1.

In 1995 and previous years, the National Marine Fisheries Service determined that listed whales are unlikely to be adversely affected by hopper dredging in the Gulf of Mexico. As a result, endangered species monitors for whales, bridge observers, were not required for this contract. Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4. and 6. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

Methodology

The dredge worked in dredge and haul mode. Material was deposited in the Ocean Dredged Material Disposal Site located south of and parallel to the navigation channel (Figure 1). The OUACHITA was equipped with 4"x 4" inflow screens and sea turtle observers were on board monitoring for sea turtle takes between October 8, 1998, and November 30, 1998. The screens were inspected for sea turtles and sea turtle parts and cleared by hand of debris. Draghead deflectors were in use throughout dredging operations.

Results

The OUACHITA worked from October 8, 1998, to January 16, 1999. Approximately 1,539,787 cubic yards of shoal material was removed by dredge and haul operations.

Throughout the dredging work both biological and non-biological debris was recovered from the screens. Debris retained in the screens included unspecified trash and wood. The biological material collected included unspecified grasses, sea grasses, starfish, shrimp, crabs, rays, flounder, and shells. The results of the screen monitoring are summarized in table 1.

Water temperatures ranged from a maximum surface water temperature of 80 degrees F (26.7 degrees C) to a minimum surface water temperature of 68 degrees F (20 degrees C). Below mid-depth water temperatures were not sampled.

Bridge monitoring was not conducted.

No screen clogging was reported during dredging activities. The light amount of debris collected may be attributed to the use of draghead deflectors throughout the contract.

Discussion

No turtle takes or sightings were recorded during this dredging event. Temperature conditions during the maintenance event were well within the range of sea turtle tolerances.

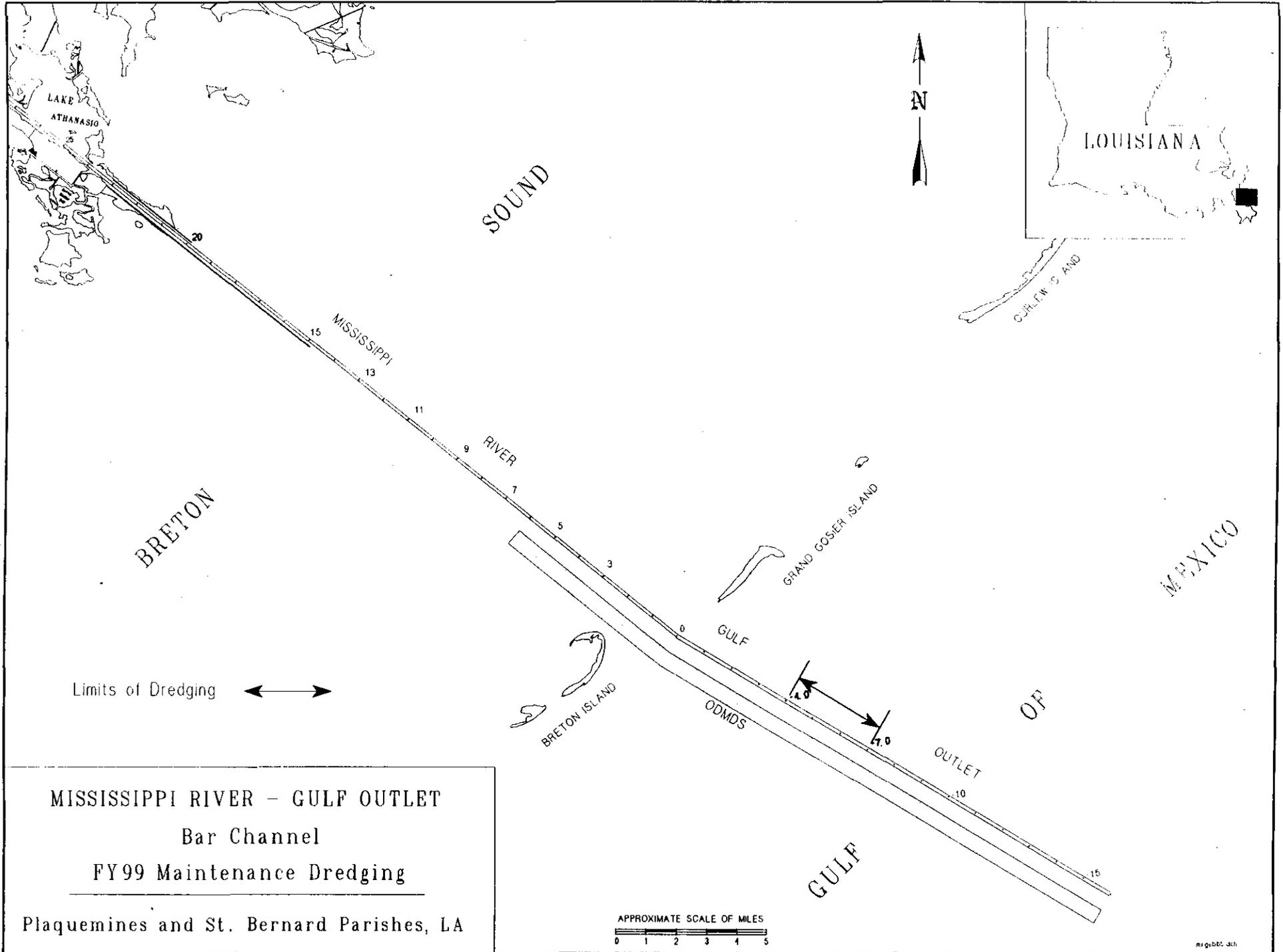


Figure 1

MISSISSIPPI RIVER - GULF OUTLET
 Bar Channel
 FY99 Maintenance Dredging
 Plaquemines and St. Bernard Parishes, LA

Table 1. Summary Sea Turtle Observer Reports OUACHITA

DATE	DREDGE	NOTES
8 October 1998	OUACHITA	Screens: Grass, eel, stingray, sea star Below Mid-Depth Temp: No data Surface Temp: No data Weather: Clear, seas 2-4 feet, winds 10-20 knots Other:
9 October 1998	OUACHITA	Screens: stingray, electric ray, clearnose skate, eels seastar, crab, wood, grass Below Mid-Depth Temp: No data Surface Temp: 69.8 F Weather: Clear, seas 2-4 feet, winds 5-15 knots NE Other: Deflectors biting into material which may cause dragarm to tear off. Adjusted angle of deflector
10 October 1998	OUACHITA	Screens: stingrays, eels, crabs, electric ray, flounder, croaker, grass, wood Below Mid-Depth Temp: No data Surface Temp: 68 F Weather: Clear, seas 1-3 feet, winds 5-15 knots NE Other: grass remains largest component of samples
11 October 1998	OUACHITA	Screens: stingrays, crabs, eels, flounder, wood, electric ray, catfish, black tip shark, grass, trash Below Mid-Depth Temp: No data Surface Temp: 68 F Weather: Clear, seas 1-3 feet, winds 5-15 knots NE Other:
12 October 1998	OUACHITA	Screens: ray, flounder, catfish, crabs, eels, electric rays, wood, plastic Below Mid-Depth Temp: No data Surface Temp: 68 F Weather: Clear, winds 5-15 knots NNE Other:

13 October 1998	OUACHITA	Screens: stingrays, catfish, seastars, crabs, eels, jellyfish, conch, skate, blackfin, searobin, wood, grass Below Mid-Depth Temp: No data Surface Temp: 68 F Weather: Clear, winds 5-10 knots Other:
14 October 1998	OUACHITA	Screens: blackfin, searobin, catfish, horseshoe crab, wood, pen shell, grass, plastics Below Mid-Depth Temp: No data Surface Temp: 68 F Weather: Clear, seas 1-3 feet, winds 5-15 knots NNE Other:
15 October 1998	OUACHITA	Screens: NO REPORT Below Mid-Depth Temp: Surface Temp: Weather: Clear Other:
16 October 1998	OUACHITA	Screens: NO REPORT Below Mid-Depth Temp: Surface Temp: Weather: Other:
17 October 1998	OUACHITA	Screens: rays, skates, sea grass, wood scrap Below Mid-Depth Temp: No data Surface Temp: 77-79 F Weather: Winds 12-20 knots, seas 4-6 feet Other:
18 October 1998	OUACHITA	Screens: sea grass, rays, wood, whelk Below Mid-Depth Temp: No data Surface Temp: 77-79 F Weather: Sunny, winds ESE Other:

19 October 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 79 F Weather: Clear, winds E Other: No dredging in Venice refueling
20 October 1998	OUACHITA	Screens: plastic, wood, flounder, sea grass Below Mid-Depth Temp: No data Surface Temp: 79-80 F Weather: Sunny, seas 2 feet Other:
21 October 1998	OUACHITA	Screens: sea grass, starfish, fish, crabs, shrimp, rays, eels, wood Below Mid-Depth Temp: No data Surface Temp: 80 F Weather: Partly cloudy, seas 2-4 feet Other:
22 October 1998	OUACHITA	Screens: No Data Below Mid-Depth Temp: No data Surface Temp: 79-80 F Weather: Winds 25-35 knots, seas 5-6 feet Other: Stopped work during the day because of weather conditions
23 October 1998	OUACHITA	Screens: No Data Below Mid-Depth Temp: No data Surface Temp: 74 F Weather: No Data Other: Did not work due to weather conditions
24 October 1998	OUACHITA	Screens: sea grass, rays, fish, starfish, flounder, netting, wood, plastic, Below Mid-Depth Temp: No data Surface Temp: 79 F Weather: Seas 2-3 feet Other:

25 October 1998	OUACHITA	Screens: sea grass, fish, sea cucumber, eels, crab, skates, plastic, wood, fishing line Below Mid-Depth Temp: No data Surface Temp: 74 F Weather: Seas 2-3 feet, E winds (4-5 Force) Other:
26 October 1998	OUACHITA	Screens: sea grass, wood, metal can, skate Below Mid-Depth Temp: No data Surface Temp: 75 F Weather: Seas 1-3 feet, ENE winds (4 Force) Other:
27 October 1998	OUACHITA	Screens: sea grass, wood Below Mid-Depth Temp: No data Surface Temp: 75 F Weather: Seas 1-3 feet, NE winds (4 Force) Other:
28 October 1998	OUACHITA	Screens: sea grass, fish (drum), wood plastic Below Mid-Depth Temp: No data Surface Temp: 75 F Weather: Seas 1-4 feet, ESE winds (4 Force) Other:
29 October 1998	OUACHITA	Screens: sea grass, gastropods, wood, plastic, rope Below Mid-Depth Temp: No data Surface Temp: 74-75 F Weather: Clear, winds less than 10 knots Other:
30 October 1998	OUACHITA	Screens: sea grass, cownose ray, wood, plastic, wire Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: Clear Other: dredge offline for short time due to malfunction of pump

31 October 1998	OUACHITA	Screens: wood, plastic, netting Below Mid-Depth Temp: No data Surface Temp: 75 F Weather: Clear, winds from east Other: saw numerous comb jellyfish, dusky shark
1 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: No data Other:
2 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 76-77 F Weather: Cloudy, winds 8-15 knots Other:
3 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: Cloudy to clear, winds 8-15 knots Other:
4 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 75-76 F Weather: Mostly cloudy, winds 10-25 knots Other:
5 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 71-75 F Weather: Winds 15-20 knots, seas 4-5 feet Other:

6 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 69-71 F Weather: Clear, winds 10-15 knots Other:
7 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 68-69 F Weather: Partly cloudy, winds ENE to SE Other:
8 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 68-69 F Weather: Partly cloudy, winds east to southeast Other:
9 November 1998	OUACHITA	Screens: sand, clay Below Mid-Depth Temp: No data Surface Temp: 69-70 F Weather: winds calm to 20 knots Other:
10 November 1998	OUACHITA	Screens: sand, clay Below Mid-Depth Temp: No data Surface Temp: 70-71 F Weather: Afternoon squalls Other: dredge stopped work 2349 hrs
11 November 1998	OUACHITA	Screens: Below Mid-Depth Temp: Surface Temp: Weather: Other: No dredging today

12 November 1998	OUACHITA	Screens: Clay, sand Below Mid-Depth Temp: No data Surface Temp: 71 F Weather: Overcast, winds 18 knots Other: dredge resumed after a day and a half of repairs
13 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70-71 F Weather: Clear to overcast, winds 8-20 knots Other:
14 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70 F Weather: Clear, winds 5-18 knots Other:
15 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70-72 F Weather: Severe thunderstorm Other:
16 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70 F Weather: Winds variable Other:
17 November 1998	OUACHITA	Screens: sand, clay Below Mid-Depth Temp: No data Surface Temp: 70-71 F Weather: Partly cloudy, winds 8-18 knots Other:

18 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 70-72 F Weather: Clear, winds 10 knots or less Other:
19 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 72 Data F Weather: Foggy, winds 0-10 knots Other:
20 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70-72 F Weather: Winds variable Other:
21 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70-72 F Weather: Overcast, winds 20-25 knots Other:
22 November 1998	OUACHITA	Screens: No data Below Mid-Depth Temp: No data Surface Temp: 68-72 F Weather: Overcast, winds variable Other:
23 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 71 F Weather: Foggy, winds 10 knots Other:

24 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 70-71 F Weather: Foggy to clearing Other:
25 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 72 F Weather: Clear, winds variable Other:
26 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 71-72 F Weather: Clear to hazy/fog, winds variable Other:
27 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 71 F Weather: Mostly clear, winds variable Other:
28 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 71 F Weather: Clear Other:
29 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 71 F Weather: Winds variable Other:
30 November 1998	OUACHITA	Screens: clay, sand Below Mid-Depth Temp: No data Surface Temp: 71-72 F Weather: Clear, winds light Other:

Project Report
ENDANGERED SPECIES MONITORING
Mississippi River-Gulf Outlet
Bar Channel
Maintenance Dredging
99-4-MRGO

Operations Technical Support Branch
US Army Corps of Engineers
New Orleans District
504-862-2504

Introduction

This report is submitted to fulfill requirements of the Endangered Species Act and the Incidental Take Statement (ITS) "for sea turtle takes resulting from Hopper Dredging activities" dated September 22, 1995. The New Orleans District submits this preliminary report summarizing the results of Fiscal Year 1999 maintenance dredging of the Mississippi River-Gulf Outlet (MR-GO), Louisiana, bar channel by the Contract Dredges STUYVESANT and EAGLE I.

Scope of Work

The passage of Hurricane Georges across Breton Sound caused major shoaling in the MR-GO bar channel on September 29, 1998. Detailed surveys of the bar channel indicated that project depths in the vicinity of sea buoys 6 and 7 were -25 feet. The MR-GO bar channel project depth is -36 ft and the channel is maintained to a depth of -38 ft (project depth plus two feet advanced maintenance). The shoaling caused by Hurricane Georges necessitated emergency dredging in the bar channel. The Government dredge WHEELER was mobilized to the MR-GO on October 2, 1998. The WHEELER worked for a short time while awaiting the arrival of contract dredges and the Government dredge MCFARLAND to the channel. The OUACHITA arrived at the MR-GO on October 8, 1998, and began maintenance. The MCFARLAND began working in the channel on October 10, 1998.

The STUYVESANT began work in the MR-GO bar channel on October 21, 1998, under contract DACW29-99-C-0004, and completed its dredging operations on November 30, 1998. The STUYVESANT conducted dredging between approximate channel miles -4.5 and -8.0. Also under contract DACW29-99-C-0004, the hopper dredge EAGLE I began work in the MR-GO bar channel on November 30, 1998, and completed its dredging operations on December 28, 1998. The EAGLE I conducted dredging between approximate channel miles -4.5 and -6.0.

Maintenance dredging activities were conducted during the time period when sea turtle monitoring was required as described in the ITS. The results of monitoring are summarized in Table 1.

In 1995, and previous years, the National Marine Fisheries Service determined that listed whales are unlikely to be adversely affected by hopper dredging in the Gulf of Mexico. As a result, endangered species monitors for whales, bridge observers, were not required for this contract. Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4. and 6. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

Methodology

The dredges worked in dredge and haul mode. Material was deposited in the Ocean Dredged Material Disposal Site located south of and parallel to the navigation channel (Figure 1). The STUYVESANT and the EAGLE I were equipped with 4"x 4" inflow screens. Sea turtle observers were on board the STUYVESANT monitoring for sea turtle takes from October 21 through November 30, 1998. Sea turtle observers were on board the EAGLE I monitoring for sea turtle takes on November 30, 1998. The screens were inspected for sea turtles and sea turtle parts and cleared by hand of debris. Draghead deflectors were in use throughout dredging operations.

Results

The STUYVESANT worked from October 21, 1998, to November 30, 1998. The EAGLE I worked from November 30, 1998, to December 28, 1998. Approximately of 1,350,694 cubic yards of shoal material was removed by dredge and haul operations by both hopper dredges under contract DACW29-99-C-0004.

Throughout the dredging work both biological and non-biological debris was recovered from the screens. Debris retained in the screens included unspecified trash and wood. The biological material collected included flounder, starfish, skate, sting rays, whelks, and grass. The results of the screen monitoring are summarized in Table 1.

Water temperatures ranged from a maximum surface water temperature of 78 degrees F (25.6 degrees C) to a minimum surface water temperature of 63 degrees F (17.2 degrees C). Below mid-depth water temperatures ranged from a maximum of 76 degrees F (24.4 degrees C) to a minimum of 62 degrees F (16.7 degrees C).

Bridge monitoring was not required.

No screen clogging was reported during dredging activities. The light amount of debris collected may be attributed to the use of draghead deflectors throughout the contract.

Discussion

No turtle takes or sightings were recorded during this dredging event. Temperature conditions during the maintenance event were well within range of sea turtle tolerances.

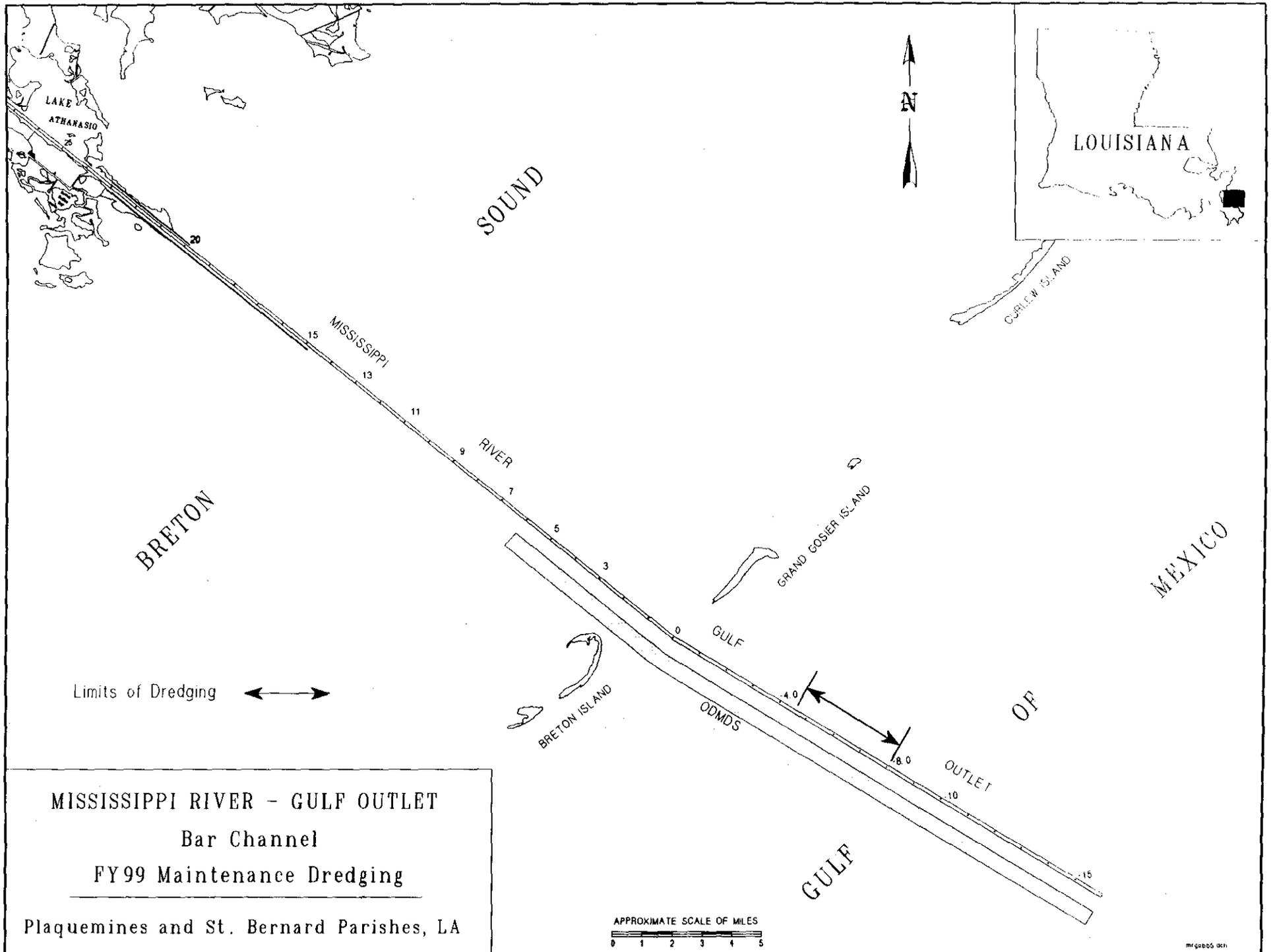


Figure 1

MISSISSIPPI RIVER - GULF OUTLET

Bar Channel

FY99 Maintenance Dredging

Plaquemines and St. Bernard Parishes, LA

APPROXIMATE SCALE OF MILES
0 1 2 3 4 5

Table 1. Summary Sea Turtle Observer Reports STUYVESANT and EAGLE I

DATE	DREDGE	NOTES
21 October 1998	STUYVESANT	Screens: flounder, skate Below Mid-Depth Temp: 76 F Surface Temp: 78 F Weather: Partly cloudy, seas 4-8 feet Other: Monitoring started on load four
22 October 1998	STUYVESANT	Screens: No biological specimens Below Mid-Depth Temp: 75 F Surface Temp: 75 F Weather: Partly cloudy, winds 20-30 knots Other: dredging ceased due to severe weather
23 October 1998	STUYVESANT	Screens: No data Below Mid-Depth Temp: No data Surface Temp: No data Weather: Overcast, Winds 20 knots Other: Not dredging en route to New Orleans for repairs
24 October 1998	STUYVESANT	Screens: No data Below Mid-Depth Temp: No data Surface Temp: No data Weather: Clear Winds 10 knots Other: at New Orleans dock for repairs
25 October 1998	STUYVESANT	Screens: No data Below Mid-Depth Temp: 75 F Surface Temp: 76 F Weather: Clear, winds 10-15 knots Other: departed for dredging area in afternoon
26 October 1998	STUYVESANT	Screens: whelk, skates, grass Below Mid-Depth Temp: 74-75 F Surface Temp: 76 F Weather: Clear, Winds 5-15 knots Other: Dredging with starboard side
27 October 1998	STUYVESANT	Screens: grass, skates, lightening whelks Below Mid-Depth Temp: 72-74 F Surface Temp: 73-74 F Weather: Clear Other: dredging with starboard side only

28 October 1998	STUYVESANT	Screens: moon snails, lightening whelk, starfish, grass, net, plastic, wood Below Mid-Depth Temp: 72 F Surface Temp: 72 F Weather: Clear, wind 15-20 knots Other: dredging with starboard side only
29 October 1998	STUYVESANT	Screens: No Data Below Mid-Depth Temp: No data Surface Temp: No data Weather: Clear, winds 5-10 knots Other: At the Venice Dock for repairs
30 October 1998	STUYVESANT	Screens: No Data Below Mid-Depth Temp: No data Surface Temp: No data Weather: Clear, winds 10 knots Other: At the Venice Dock for repairs
31 October 1998	STUYVESANT	Screens: No Data Below Mid-Depth Temp: No data Surface Temp: No data Weather: Clear, winds 5-10 knots Other: Departed Venice 12:30 arrived at channel at 23:35
1 November 1998	STUYVESANT	Screens: grass, whelks, stingray, wood, plastic, trash Below Mid-Depth Temp: 72 F Surface Temp: 73 F Weather: Partly cloudy, winds 5-15 knots Other:
2 November 1998	STUYVESANT	Screens: skate, flounder, whelk Below Mid-Depth Temp: 73 F Surface Temp: 73-74 F Weather: Partly cloudy, winds 10-15 knots Other:
3 November 1998	STUYVESANT	Screens: drum, flounder, sting ray, whelks, wood rock, trash Below Mid-Depth Temp: 72-73 F Surface Temp: 73 F Weather: Cloudy, winds 5-10 knots Other:

4 November 1998	STUYVESANT	Screens: sting ray, whelk, wood, trash Below Mid-Depth Temp: 72 F Surface Temp: 73 F Weather: Partly cloudy Other:
5 November 1998	STUYVESANT	Screens: cobia, drum, sting ray, eel, lightning whelk Below Mid-Depth Temp: 71 F Surface Temp: 72 F Weather: Partly cloudy, winds 30-45 knots Other:
6 November 1998	STUYVESANT	Screens: flounder, sting ray, skates, whelks Below Mid-Depth Temp: 67-68 F Surface Temp: 68-69 F Weather: Partly cloudy, winds 15-20 knots Other:
7 November 1998	STUYVESANT	Screens: sting rays, whelks Below Mid-Depth Temp: 68 F Surface Temp: 68 F Weather: Clear, winds 10-15 knots Other:
8 November 1998	STUYVESANT	Screens: flounder, whelks, skates Below Mid-Depth Temp: 62-64 F Surface Temp: 64-65 F Weather: Clear, winds and seas calm Other:
9 November 1998	STUYVESANT	Screens: sting ray, catfish, wood, shell, trash Below Mid-Depth Temp: 63 F Surface Temp: 63-64 F Weather: Partly cloudy, seas 1-2 feet Other:
10 November 1998	STUYVESANT	Screens: flounder, whelk, wood, trash Below Mid-Depth Temp: 62-63 F Surface Temp: 63-64 F Weather: Cloudy, rain, winds 5-10 knots Other:

11 November 1998	STUYVESANT	Screens: No Data Below Mid-Depth Temp: No data Surface Temp: No data Weather: Partly cloudy, winds 10 knots Other: Vessel docked for refueling and repairs
12 November 1998	STUYVESANT	Screens: flounder, skates, whelks Below Mid-Depth Temp: 66 F Surface Temp: 68 F Weather: Cloudy, winds 10-15 knots Other:
13 November 1998	STUYVESANT	Screens: whelks, wood, trash Below Mid-Depth Temp: 67-68 F Surface Temp: 68-69 F Weather: Cloudy, winds 5-10 knots Other:
14 November 1998	STUYVESANT	Screens: No biological specimens Below Mid-Depth Temp: 68 F Surface Temp: 69 F Weather: Cloudy, wind 5-10 knots Other:
15 November 1998	STUYVESANT	Screens: flounder, skate, whelks Below Mid-Depth Temp: 67 F Surface Temp: 68-69 F Weather: Cloudy, rain, wind 5-10 knots Other:
16 November 1998	STUYVESANT	Screens: flounder, sea star, skate, whelk Below Mid-Depth Temp: 68 F Surface Temp: 68-69 F Weather: Cloudy, winds 0-5 knots Other:
17 November 1998	STUYVESANT	Screens: skate, sting ray, wood, trash Below Mid-Depth Temp: 66-69 F Surface Temp: 68-69 F Weather: Cloudy, wind 10-15 knots Other:

18 November 1998	STUYVESANT	Screens: flounder Below Mid-Depth Temp: 67 F Surface Temp: 68 F Weather: Partly cloudy, wind 10 knots Other:
19 November 1998	STUYVESANT	Screens: wood, shells, trash Below Mid-Depth Temp: 67 F Surface Temp: 68 F Weather: Clear and calm Other:
20 November 1998	STUYVESANT	Screens: drum Below Mid-Depth Temp: 67 F Surface Temp: 68 F Weather: Cloudy and calm Other:
21 November 1998	STUYVESANT	Screens: jack Below Mid-Depth Temp: 67-68 F Surface Temp: 69-70 F Weather: Rain, cloudy, wind 45-55 knots Other:
22 November 1998	STUYVESANT	Screens: flounder, sting ray Below Mid-Depth Temp: 66 F Surface Temp: 68-69 F Weather: Rainy, cloudy, winds 15-40 knots Other:
23 November 1998	STUYVESANT	Screens: skate, flounder Below Mid-Depth Temp: 68 F Surface Temp: 70 F Weather: Fog, cloudy, winds 5-10 knots Other:
24 November 1998	STUYVESANT	Screens: skate, dogfish, ray, whelk, wood, trash Below Mid-Depth Temp: 67 F Surface Temp: 68-69 F Weather: Partly cloudy, winds 15-25 knots Other:

25 November 1998	STUYVESANT	Screens: No biological specimens Below Mid-Depth Temp: 67 F Surface Temp: 68 F Weather: Clear, winds 15-20 knots Other:
26 November 1998	STUYVESANT	Screens: No biological specimens Below Mid-Depth Temp: 68 F Surface Temp: 70 F Weather: Clear, winds 15-30 knots Other:
27 November 1998	STUYVESANT	Screens: stingray, sea star Below Mid-Depth Temp: 67-68 F Surface Temp: 68-69 F Weather: Clear and calm Other:
28 November 1998	STUYVESANT	Screens: flounder, eel Below Mid-Depth Temp: 68 F Surface Temp: 70 F Weather: Clear, winds calm Other:
29 November 1998	STUYVESANT	Screens: flounder Below Mid-Depth Temp: 67 F Surface Temp: 68 F Weather: Cloudy, winds calm Other:
30 November 1998	STUYVESANT	Screens: flounder Below Mid-Depth Temp: 67 F Surface Temp: 68 F Weather: Partly cloudy, winds 5-10 knots Other:
30 November 1998	EAGLE I	Screens: whelk, maki maki, metal Below Mid-Depth Temp: 71.6 F Surface Temp: 69.8 F Weather: Mostly clear, winds light Other: