

Project Report
ENDANGERED SPECIES MONITORING
Mississippi River-Gulf Outlet
Bar Channel
Maintenance Dredging
01-3-MRGO

Operations Technical Support Branch
US Army Corps of Engineers
New Orleans District
504-862-2521

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 2001 maintenance dredging of the Mississippi River-Gulf Outlet (MR-GO), LA, bar channel by the Contract Dredge MANHATTAN ISLAND.

Scope of Work

Maintenance dredging of the MR-GO bar channel by the hopper dredge MANHATTAN ISLAND was conducted under contract DACW29-01-C-0036. The MANHATTAN ISLAND performed dredging work between July 16, 2001, and 30 July, 2001, and between August 18, 2001, and August 24, 2001. The MANHATTAN ISLAND conducted dredging between approximate channel Miles -3.3 and -7.6.

Maintenance dredging activities were conducted by the MANHATTAN ISLAND 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 navigational 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 navigational channel (Figure 1). The MANHATTAN ISLAND was equipped with 4"x 4" inflow screens and sea turtle observers were on board monitoring for sea turtle takes. The screens were inspected for sea turtles and sea turtle parts and cleared by hand of debris. Glynn Banks of the U.S. Army Corps of Engineers, Environmental Research and Development Center (ERDC) was on board the dredge during all 23 days of its maintenance dredging activities to provide expertise in helping to avoid the incidental taking of sea turtles.

Sea turtle relocation trawling was performed in areas of the MR-GO bar channel ahead of the MANHATTAN ISLAND from August 17, 2001, through August 24, 2001. Relocation trawling was performed primarily during daylight hours within the navigational channel. Trawling was performed with paired 60-foot long nets featuring 8-inch mesh. All sea turtles sampled were identified, measured, weighed, tagged, and released approximately 3 miles west of the navigational channel.

Results

The MANHATTAN ISLAND worked from July 16, 2001, through July 30, 2001, and from August 18, 2001, through August 24, 2001. Approximately 316,823 cubic yards of shoal material were removed by dredge and haul operations.

During this maintenance event there were six sea turtle sightings and one documented incidental sea turtle take. Four loggerheads, one unknown species, and one either green or hawksbill sea turtle were sighted from the hopper dredge. One loggerhead sea turtle was taken on July 24, 2001. Throughout the dredging work both biological and non-biological debris was recovered from the screens. The biological material collected included skates, rays, blue crabs, and dogfish. The majority of the non-biological debris consisted of assorted trash, wood, and nets. The results of the screen monitoring are summarized in Table 1, and Endangered Species Observation Program Daily Reports are provided as Attachment 1.

Water temperatures ranged from a maximum surface water temperature of 86 degrees F (30.0 degrees C) to a minimum surface water temperature of 83 degrees F (28.3 degrees C). Below mid-depth water temperatures ranged from a maximum of 85 degrees F (29.4 degrees C) to a minimum of 82 degrees F (27.8 degrees C).

Sea turtle relocation trawling was performed from August 17, 2001, through August 24, 2001, in the MR-GO bar channel. Two female loggerhead sea turtles were captured and released about 3 miles west of the navigational channel. Additionally, two loggerheads and five unidentified individuals were sighted, but not captured, by the trawler crew. Weights, measurements, and tag information on the two sampled sea turtles are summarized in Table 2. Relocation trawling report sheets are provided as Attachment 2.

Bridge monitoring was conducted opportunistically.

Discussion

During this maintenance event (July 16 – July 30, 2001 and August 17 – August 24, 2001) there was one documented incidental sea turtle take on July 24, 2001. Sea turtle relocation trawling was performed in the MR-GO navigational channel ahead of the hopper dredge from August 17 – August 24, 2001. Sea turtle relocation trawling resulted in the capture, and subsequent release approximately three miles west of their point of capture in the navigational channel, of two female loggerhead sea turtles. Additionally, six loggerheads, one green or hawksbill sea turtle, and six unidentified individuals were observed by individuals on the hopper dredge and the relocation trawler. Temperature conditions during the maintenance event were well within range of sea turtle tolerances.

Glynn Banks of ERDC was on board the MANHATTAN ISLAND during all 23 days of maintenance dredging performed in the MR-GO bar channel. Mr. Banks noted that this hopper dredge experienced numerous instances of the draghead becoming plugged with sediments. This required that the draghead be pulled off the bottom surface while operating the pumps to take in

only water to help clear the dragarm pipeline of clogs. The dredge did not have water ports located in the top of the dragheads that would have relieved the necessity of raising the draghead off of the bottom to perform such an action. Even though this type of action increases the likelihood that sea turtles in the vicinity of the draghead would be taken by the dredge, only one such incidental take was recorded. It may be worthwhile to note that the MANHATTAN ISLAND operated in the same MR-GO bar channel reach that the government hopper dredge McFARLAND had previously worked from April – June 2001.

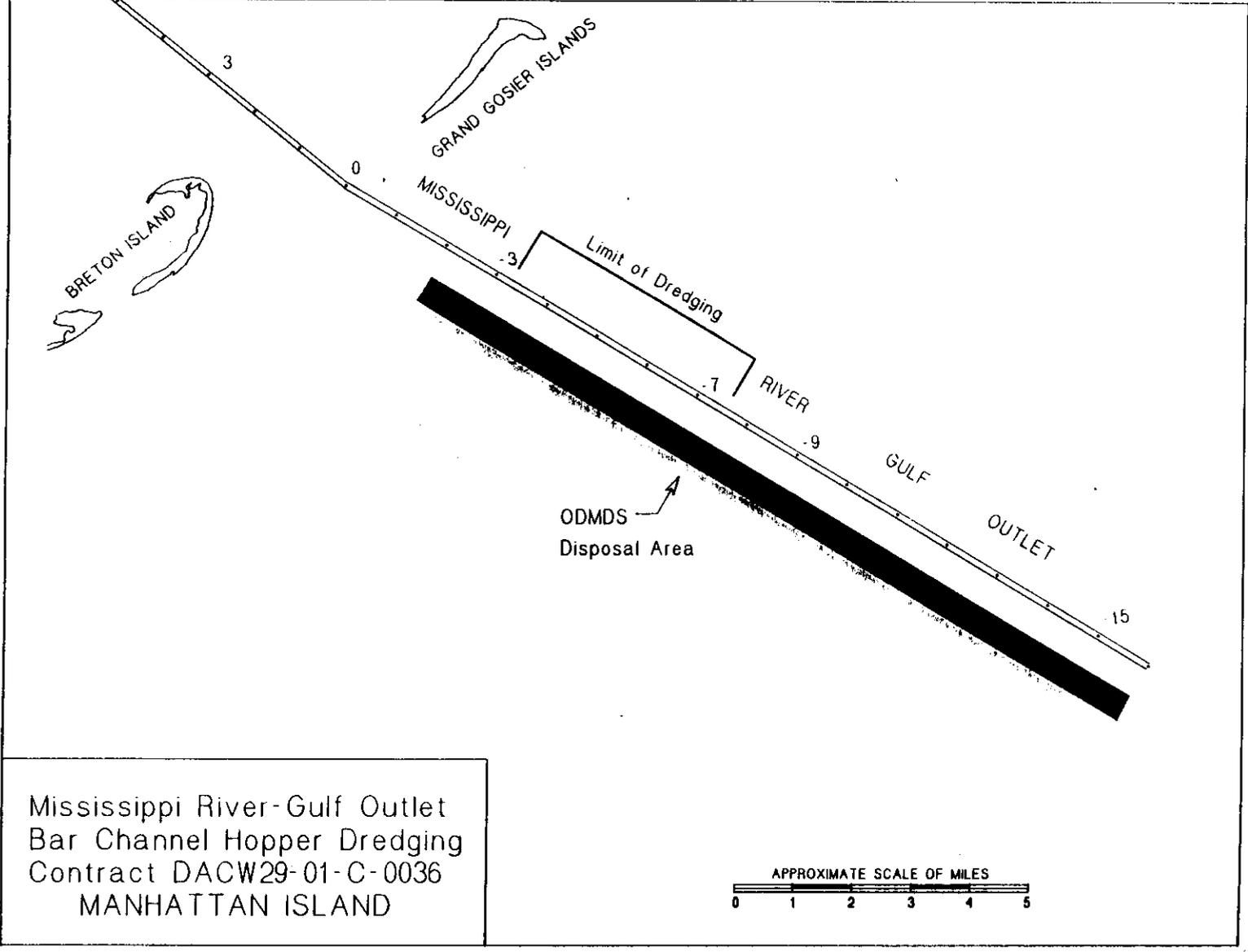


Figure 1

Mississippi River-Gulf Outlet
 Bar Channel Hopper Dredging
 Contract DACW29-01-C-0036
 MANHATTAN ISLAND

Table 1. Summary Sea Turtle Observer Reports Manhattan Island

DATE	DREDGE	NOTES
16 July 2001	Manhattan Island	Screens: Clay, wood Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds SE 5-10 knots, Seas 2-3', Partly Cloudy Other:
17 July 2001	Manhattan Island	Screens: Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds E-SE 8-12 knots, Seas 2-3', Partly Cloudy Other: Bottlenose dolphins 6-12
18 July 2001	Manhattan Island	Screens: Rays, wood, trash Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds light, Seas calm, Partly cloudy Other: Bottlenose dolphins 12
19 July 2001	Manhattan Island	Screens: Rays, wood Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds calm, Seas 1', Partly cloudy Other: Bottlenose dolphins 15-21
20 July 2001	Manhattan Island	Screens: Trash, wood, clay, rays Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds light, Seas calm, Partly cloudy Other: Loggerhead sighted in channel (0952)
21 July 2001	Manhattan Island	Screens: Skates Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds variable 5-20 knots, Seas 2-3', Partly cloudy Other:
22 July 2001	Manhattan Island	Screens: Rays, trash Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 83 °F (28.3°C) Weather: Winds northerly 10-15 knots, Seas 2-4', Cloudy Other: Bottlenose dolphin

23 July 2001	Manhattan Island	Screens: Rays Below Mid-Depth Temp: 83 °F (28.3°C) Surface Temp: 84 °F (28.9°C) Weather: Winds NE 5-15 knots, Seas 2-3', Partly cloudy Other: Bottlenose dolphins 2
24 July 2001	Manhattan Island	Screens: Below Mid-Depth Temp: 84 °F (28.9°C) Surface Temp: 85 °F (29.4°C) Weather: Winds southerly 10 knots, Seas 2-3', Partly cloudy Other: 1 loggerhead sighted (1044), 1 loggerhead taken (2240), bottlenose dolphins 12
25 July 2001	Manhattan Island	Screens: Below Mid-Depth Temp: 84 °F (28.9°C) Surface Temp: 85 °F (29.4°C) Weather: Winds variable 15-35 knots, Seas 2-6' Other: Last day at MRGO (return to MR-SWP)
18 August 2001	Manhattan Island	Screens: Trash, clay, nets, blue crabs Below Mid-Depth Temp: 82°F (27.8 °C) Surface Temp: 83°F (28.3°C) Weather: Partly Cloudy, Winds N 5-15 knots, Seas 2-3' Other: Bottlenose dolphins sighted
19 August 2001	Manhattan Island	Screens: Plastic, blue crabs Below Mid-Depth Temp: 82-84°F (27.8 - 28.9 °C) Surface Temp: 83-85°F (28.3 - 29.4 °C) Weather: Partly cloudy, Winds variable 5-10 knots, Seas 1-2' Other:
20 August 2001	Manhattan Island	Screens: Below Mid-Depth Temp: 83°F (28.3°C) Surface Temp: 84°F (28.9°C) Weather: Partly cloudy, Winds variable 5-25 knots, Seas 1-5' Other: Sighted sea turtle in channel (green or hawksbill) (1313), bottlenose dolphins sighted
21 August 2001	Manhattan Island	Screens: Net, plastic Below Mid-Depth Temp: 83-85°F (28.3 - 29.4 °C) Surface Temperature: 84-86°F (28.9 - 30°C) Weather: Mostly clear, Winds variable 10 knots, Seas 1' Other: Loggerhead (1536) and Unknown species sighted in channel (1220), bottlenose dolphins sighted

22 August 2001	Manhattan Island	Screens: Clay, trash Below Mid-Depth Temp: 84°F (28.9°C) Surface Temp: 85°F (29.4°C) Weather: Mostly clear, Winds easterly 10 knots, Seas 1-2' Other: Bottlenose dolphins sighted
23 August 2001	Manhattan Island	Screens: Trash, rope, wood, ray, dogfish Below Mid-Depth Temp: 84°F (28.9°C) Surface Temp: 85°F (29.4°C) Weather: Partly cloudy, Winds variable 5-10 knots, Seas 1-2' Other: Bottlenose dolphins sighted
24 August 2001	Manhattan Island	Screens: Trash, clay, nets, rays Below Mid-Depth Temp: 84°F (28.9°C) Surface Temp: 85°F (29.4°C) Weather: Mostly clear, Winds light, Seas calm Other: Loggerhead sighted at dump site (0943) , bottlenose dolphins sighted

Table 2. Summary Sea Turtle Relocation Trawling Tagging Data for MRGO Bar Channel: Manhattan Island

Date	Sea Turtle Species	Sex	Time of Capture	Flipper Tag Info	Lat/Long Coordinate of Capture	Weights & Measurements	Comments
19 Aug 2001	Cc	F	1052	Left: SST179 Right: SST174 Pit Tag: 0001219ED9	29° 27' 63" 89° 03' 52"	Carapace Length: 64.3cm Carapace Width: 54.9cm Plastron Length: 50.1cm Plastron Width: 54.2cm Weight: 89 lbs.	
22 Aug 2001	Cc	F	0818	Left: SST172 Right: SST173 Pit Tag: 000121217	29° 28' 04" 89° 04' 38"	Carapace Length: 74.4cm Carapace Width: 61.2cm Plastron Length: 61.7cm Plastron Width: 66.4cm Weight: 139 lbs.	Plastron w/fresh scrapes similar to beach crawls. Signs of sea turtle deflector.