



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

May 24, 2007

Operations Division  
Technical Support Branch

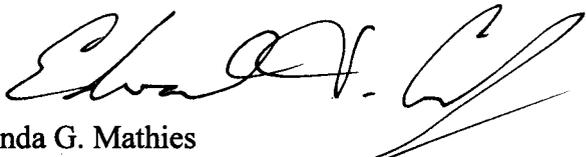
Dr. Roy Crabtree  
Regional Director  
National Marine Fisheries Service  
Southeast Regional Office  
263 13<sup>th</sup> Avenue  
South St. Petersburg, Florida 33701

Dear Dr. Crabtree:

The U.S. Army Corps of Engineers, New Orleans District, is forwarding the Endangered Species Report for hopper dredge channel maintenance of the Calcasieu River, Louisiana, bar channel conducted during Fiscal Year (FY) 2007. This will fulfill requirements of the Incidental Take Statement " for sea turtle takes resulting from Hopper Dredging activities" dated November 19, 2003, and revised on January 9, 2007. Under contract W912P8-07-C-0041, the hopper dredge NEWPORT performed maintenance dredging between February 24, 2007, and April 24, 2007.

This report is intended to assist your office in the continued review of hopper dredge activities in the New Orleans District, to complement FY 1995-2006 reports previously transmitted to your office, and to fulfill the reporting requirement for the New Orleans District's dredging in the Calcasieu bar channel with the contract dredge NEWPORT. If you have questions regarding this report, please contact Mr. Edward Creef at (504) 862-2521.

Sincerely,

  
Linda G. Mathies  
Chief, Environmental Function

Enclosure

Project Report  
**ENDANGERED SPECIES MONITORING**  
Calcasieu River  
Bar Channel  
Maintenance Dredging  
07-1-Calc

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

## **INTRODUCTION**

This report is submitted in fulfillment of requirements of the Endangered Species Act (ESA) and the Section 7 Consultation - Biological Opinion concerning Dredging of Gulf of Mexico Navigation' Channels and Sand Mining ("Borrow") Areas Using Hopper Dredges by U.S. Army Corps of Engineers Galveston, New Orleans, Mobile, and Jacksonville Districts (Consultation Number F/SER/2000/01287) dated November 19, 2003, and revised on January 9, 2007. The U.S. Army Corps of Engineers, New Orleans District (MVN) submits this report, in compliance with reasonable and prudent measure No. 9 – Reporting, summarizing the results of Fiscal Year (FY) 2007 maintenance dredging of the Calcasieu River, Louisiana, bar channel by hopper dredges.

Contract W912P8-07-C-0041 was awarded on February 13, 2007 to Manson Construction Company. The hopper dredge NEWPORT performed maintenance dredging in the Calcasieu River bar channel Mile -0.2 to Mile -9.3 reach from February 24, 2007, through April 24, 2007 (Figure 1).

## **DREDGING**

On February 24, 2007, the NEWPORT began work in the Mile -0.2 to Mile -9.3 bar channel reach. The required depth of dredging was -43 feet Mean Low Gulf (MLG) and the dredging width was 800 feet (full cut). All work was performed in either the agitation mode, or in the dredge and haul mode with disposal into the ocean dredged material disposal site (ODMDS).

## **TURTLE MONITORING PROGRAM**

A result of the ESA consultation process was the requirement to document turtle takes by hopper dredges. In order to accomplish this task, before hopper dredging operations commenced, they were equipped such that all inflows and/or overflows would be screened. The configuration and location of the screens depends upon the construction of the dredge. The starting mesh size of this screening is 4-inches by 4-inches. Additionally, around-the-clock monitoring by National Marine Fisheries Service-approved protected species observers was conducted to identify any turtles or turtle parts that were caught on these screens. Draghead deflectors were also deployed to deflect any turtles that may happen to be in, or near, the path of the draghead during excavation. The design of the deflectors is such that a sediment riffle is created ahead of the draghead, cushioning any contact with turtles thereby minimizing injuries.

The NMFS-approved protected species observers (Travis Tobey, Kenneth Coonrod, Tu Tran, and Jessica Taylor) were employed by Coastwise Consulting, Inc., under subcontract to Manson Construction Company. The NMFS-approved protected species observers inspected and cleaned all inflow and overflow screening at the end of each load. Dragheads and deflectors were also inspected immediately after each load, and dredge personnel were informed if repairs were necessary. Data sheets were completed daily, detailing all biological samples and debris

found in the screening and dragheads. The NMFS-approved protected species observers also recorded the start, end, and discharge times for each load, the specific location of the dredging area, the type of material being dredged, weather, tide and water temperature data, the condition of the screening, and any other pertinent information.

In 2003, 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. A bridge watch for sea turtles and marine mammals was maintained during all daylight hours, except when the NMFS-approved protected species observers were off the bridge, cleaning and inspecting the screens and dragheads. All sightings of sea turtles and cetaceans were recorded in a bridge watch logbook.

Throughout the maintenance event, dredging operations were conducted following the items listed in reasonable and prudent measures 4 through 8. This included advising the Contractor of the potential presence of sea turtles in the navigation channel and reporting and operating requirements.

## **DEFLECTOR & SCREEN CONFIGURATIONS**

Sea turtle monitoring activities were conducted aboard the NEWPORT during this Calcasieu bar channel maintenance work. The vessels were required to have rigid draghead deflectors and 100% inflow screening or overflow screening with openings starting at 4" x 4." An inspection of the dredge for appropriate sea turtle protection measures was performed by MVN project inspectors Mayo Broussard and Allen Crawford on February 25 and 26, 2007 (Attachment 1). The NEWPORT was found to be in compliance with all required sea turtle protection measures.

The NEWPORT began its work in the Calcasieu River bar channel on February 24, 2007, and finished on April 24, 2007. During this period, the dredge worked a total of 58 days between bar channel miles Mile -0.2 to Mile -9.3. No work was performed on April 10-11, 2007, due to a mandatory all-hands safety seminar. A total of 117 loads of dredged material were collected. The NEWPORT excavated a total of 5,382,806 CY of material from this project (5,185,188 cubic yards by the agitation method and 197,618 cubic yards by the dredge and haul method).

The NEWPORT employed two dragheads (split toe type deflectors) throughout its work. No major problems with deflector operating conditions were experienced. Inflow screening used in this work was maintained at 100 percent effectiveness. The port inflow screen was damaged on April 8 and subsequently repaired on April 10.

During this maintenance event there were no documented incidental sea turtle takes. Throughout the dredging work, both biological and non-biological debris were recovered from the screens. Biological material included wood, seagrass, crabs, redfish, and shells. Non-

biological debris primarily consisted of trash, nets, wire, rope, and metal. Copies of the Endangered Species Observer Program Daily Reports are provided as Attachment 2.

No sightings of sea turtles were reported.

Below mid-depth water temperatures were not measured. Surface water temperatures ranged from a low of 60° F (15.6°C) to a high of 70° F (21.1°C).

## **SEA TURTLE RELOCATION TRAWLING**

Sea turtle relocation trawling was not performed for this maintenance work from in the Calcasieu River bar channel.

## **DISCUSSION**

No sea turtles were incidentally taken, relocated, or sighted during this hopper dredging work on the Calcasieu River bar channel. Surface water temperatures during this work were within the range of sea turtle tolerances (with 51.8°F (11°C) being the lower limit threshold). A general seasonal pattern of increasing water temperatures from February 2007 through April 2007 was observed. Water temperatures were recorded at their lowest level of 60° F (15.6°C) on February 26, 2007.

## **SEA TURTLE STRANDING AND SALVAGE NETWORK**

Throughout this hopper dredging work, coordination was conducted with the Sea Turtle Stranding and Salvage Network. There were no reports of stranded turtles that bore injuries consistent with a potential encounter with a hopper dredge.

## **SUMMARY**

The hopper dredge NEWPORT was employed in this Calcasieu River bar channel maintenance effort between February 24, 2007, and April 24, 2007. Relocation trawling was not required during this maintenance dredging work. There were no recorded sea turtle incidental takes, relocations, or sightings. Water temperatures during this work were within the range of sea turtle tolerances.

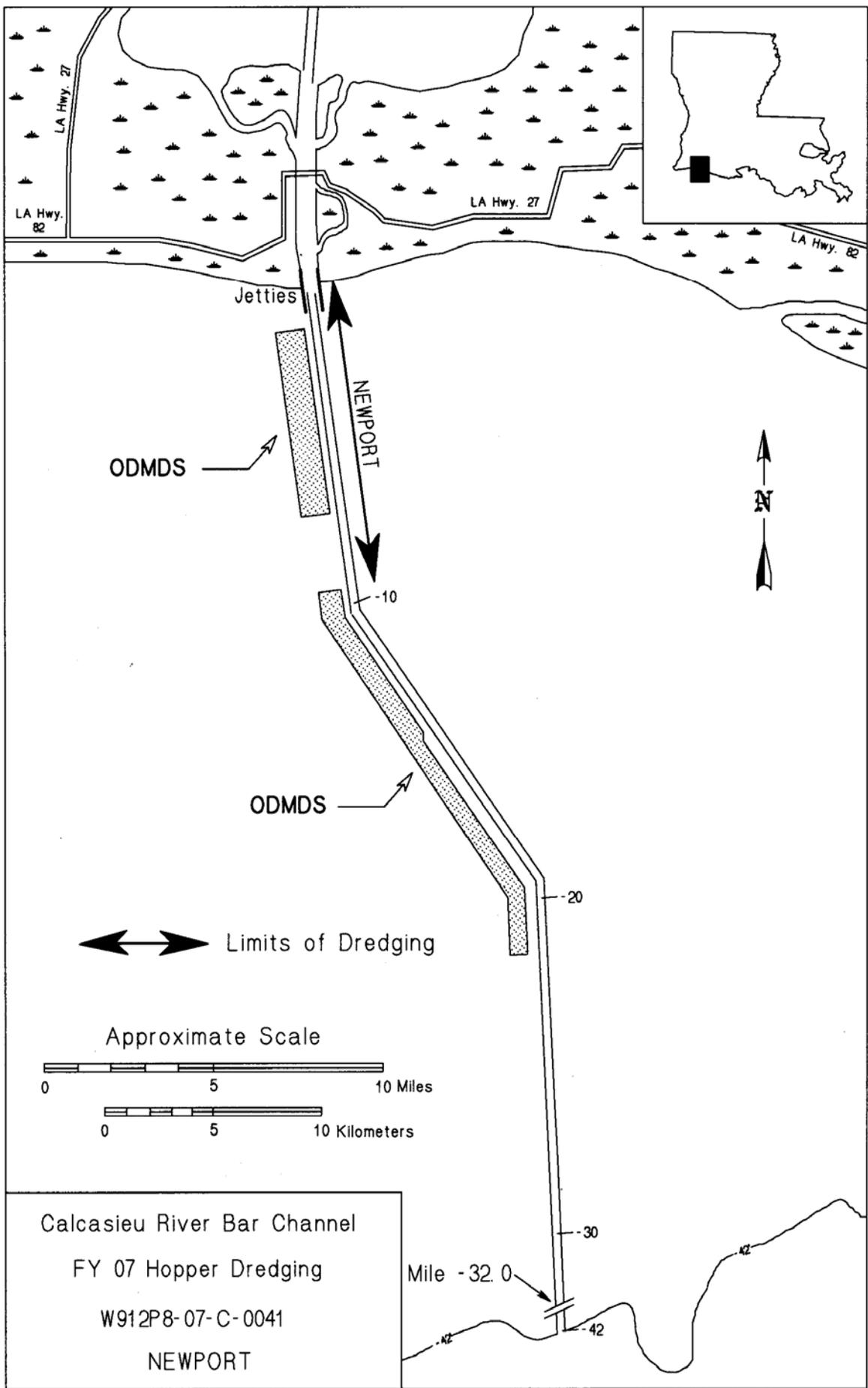


Figure 1

ATTACHMENT 1

HOPPER DREDGE INSPECTION

## USACE SEA TURTLE INSPECTION CHECKLIST FOR HOPPER DREDGES

**Contract #:** W912P8-07-C-0041, Calcasieu Bar Channel  
**Contractor:** Manson Construction Co.  
**Dredge:** Newport  
**Date:** Sat., 25-26 Feb 2007

	YES	NO	N/A
1. Contract plans and specs and/or all applicable permits reviewed.	X		
<b>2. <u>List of inspection requirements:</u></b>			
a. Leading edge angle (90 degrees or less).	X		
b. Approach angle or leading edge plowing depth (6 inches or more).	X		
c. Aft rigid attachment of deflector to the drag head (hinged or trunnion).	X		
d. Forward deflector attachment point (adjustable pinned or cable/chain with stop).	X		
e. Opening between drag head and deflector (4"X 4" max).	X		
f. Is screening of dredged material required?	X		
g. Are inflow screens or overflow screens or both required?	X		
h. Are inflow basket screen openings 4"X 4" max and is 100% of the dredged material being screened.	X		
i. Lighting of inflow and overflow screens and proper access for cleaning (must meet EM 385-1-1).	X		
j. Checked structural design of deflector (per approved deflector submittal).	X		
k. Reviewed Dredge operational requirements ( starting /stopping dredge pump, draghead plugging, razing draghead, turning the dredge).	X		
l. Dredging data recorded and collected (drag elevation, slurry density & velocity)	X		
m. Is turtle trawling required by specs or permit? If so is it being performed? <u>Not necessary @ this time</u>			
n. Turtle observers requirements ( <u>24 hours</u> req.)	X		
<b>3. <u>Reviewed turtle deflector submittals for:</u></b>			
o. Structural soundness	X		
p. Leading edge angle (90 degrees or less).	X		
q. Approach angles for dredging depths.	X		
r. 4"X 4" opening between deflector and drag head(s).	X		
<b>4. <u>Performed pre-dredging inspections:</u></b>			
s. Reviewed and inspected all items in paragraph 3a-n.	X		
<b>5. <u>Performed dredging operation inspections:</u></b>			
t. Reviewed and inspected all items in paragraph 3a-n.	X		
u. Performed paint test to assure deflector is plowing at least 6" into the dredge material. (over penetration will reduce production and increase fuel consumption of the dredge).	X		
v. Dredge ridden though at least one dredging cycle (dredging, to the dump and back to the dredge site).			
w. Drag tender observed to assure proper operation of the dredging equipment in accordance with the plans and specs (starting/stopping dredge pump, lower dragarm angle, swell compensator, slurry specific gravity, plugging of the draghead, ship crabbing).	X		

\*Cont'd on Page 2

**USACE SEA TURTLE INSPECTION CHECKLIST FOR HOPPER DREDGES**

**Contract #:** W912P8-07-C-0041, Calcasieu Bar Channel  
**Contractor:** Manson Construction Co.  
**Dredge:** Newport  
**Date:** Sat., 25-26 Feb 2007

	<b>YES</b>	<b>NO</b>	<b>N/A</b>
x. Lockout-tagout procedure for cleaning the inflow and overflow screens being conducted (must meet EM 385-1-1).	<b>X</b>		
y. Reviewed contract plans, specs and permit requirements with turtle observers and assured inspections of screens and deflectors and reporting of any maintenance required.	<b>X</b>		
z. Reviewed with Dredge Captain about maintaining the screens and deflectors.	<b>X</b>		

**COMMENTS:**

Contractor conducting proper procedures and Paint Test showed minimum 6" to 8" depth being plowed and leading edge angle 90 degrees or less.

COE Inspector(s): Mayo J. Broussard and Allen Crawford

Name:

Office Symbol: **CEMVN-CD-LAO**

Date of Inspection: **25-26 Feb 2007**

ATTACHMENT 2

Protected Species Observers

Daily Reports



































ENDANGERED SPECIES OBSERVER PROGRAM

DAILY REPORT

USACE DISTRICT: NEW ORLEANS  
 PROJECT NAME: CALCASIEU BAR CHANNEL DREDGE NAME: NEWPORT

Date: 4/4/07 Load #s: 81 - 82 Areas dredge worked: \_\_\_\_\_

Beaufort Sea State: 0 1 2 3 4 5 6 7 8 9 10 11 12

AIR TEMP: 73 °C/F (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))  
 WATER TEMP: Surface \_\_\_\_\_ °C/F Column (mid-depth) \_\_\_\_\_ °C/F Bottom \_\_\_\_\_ °C/F

Condition of deflector: Good Condition of screening: Good

Were there incidents involving endangered or protected species? YES \_\_\_\_\_ NO 1

Which species? (complete incident form(s)) \_\_\_\_\_

Comments (type of material, biological specimens, unusual circumstances, etc): \_\_\_\_\_

No incidents involving endangered or protected species

Dredged material: mud, clay

Biota: grass

Abiata: trash, netting

BRIDGE WATCH SUMMARY

Time	Species	# Sightings/# Animals	Location/Comments
<u>1847</u>	<u>T. truncatus</u>	<u>1 / 1</u>	<u>50 yards NW</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Observer name Jessica Taylor, Tu Tran





































































ENDANGERED SPECIES OBSERVER PROGRAM

DAILY REPORT

USACE DISTRICT: NEW ORLEANS  
 PROJECT NAME: CALCASIEU BAR CHANNEL DREDGE NAME: NEWPORT

Date: 2/28/2007 Load #s: 10-11 Areas dredge worked: 10<sup>top</sup> → 300<sup>top</sup>

Beaufort Sea State: 0 1 2 3 4 5 6 7 8 9 10 11 12

AIR TEMP: 62-68 °C/F  
 WATER TEMP: Surface 61 °C/F Column (mid-depth) \_\_\_\_\_ °C/F Bottom \_\_\_\_\_ °C/F

Condition of deflector: Good 100% Condition of screening: Good 100%

Were there incidents involving endangered or protected species? YES \_\_\_ NO X

Which species? (complete incident form(s)) N/A

Comments (type of material, biological specimens, unusual circumstances, etc):

NO INCIDENTS INVOLVING PROTECTED OR ENDANGERED SPECIES.

MATERIAL DREDGED: MUD

BIOTA: WOOD

ABIOTA: PLASTIC, WIRE, FISH NET, TRASH

BRIDGE WATCH SUMMARY

Time	Species	# Sightings/# Animals	Location/Comments

Observer name TRAVIS TOBEY  
KENNETH COONROD





ENDANGERED SPECIES OBSERVER PROGRAM

DAILY REPORT

USACE DISTRICT: NEW ORLEANS  
 PROJECT NAME: CALCASIEU BAR CHANNEL DREDGE NAME: NEWPORT

Date: 2/25/2007 Load #: 2-5 Areas dredge worked: 10<sup>100</sup> → 300<sup>100</sup>

Beaufort Sea State: 0 1 2 3 4 5 6 7 8 9 10 11 12

AIR TEMP: 64-71 °C/F (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))  
 WATER TEMP: Surface      °C/F Column (mid-depth)      °C/F Bottom      °C/F

Condition of deflector: GOOD 100% Condition of screening: GOOD 100%

Were there incidents involving endangered or protected species? YES      NO X

Which species? (complete incident form(s)) N/A

Comments (type of material, biological specimens, unusual circumstances, etc):     

NO INCIDENTS INVOLVING PROTECTED OR ENDANGERED SPECIES

MATERIAL DREDGED: MUD

BIOTA: WOOD

ABIOTA: PLASTIC, RAGS, TRASH

BRIDGE WATCH SUMMARY

Time	Species	# Sightings/# Animals	Location/Comments
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>
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Observer name TRAVIS TOBEY  
KENNETH COONROD

