



REPLY TO  
ATTENTION OF

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

September 24, 2009

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 bar channel Louisiana, conducted during Fiscal Year (FY) 2009. 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. The government hopper dredge WHEELER performed maintenance dredging between August 28, 2009 and September 12, 2009.

This report is intended to assist your office in the continued review of hopper dredge activities in the New Orleans District, to complement FY 1995-2009 reports previously transmitted to your office, and to fulfill the reporting requirement for the New Orleans District's dredging in the Calcasieu bar channel. If you have questions regarding this report, please contact Melissa Hightower at (504) 862-1738.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward D. Creef".

Edward D. Creef  
Chief, Environmental Function

Enclosure

Project Report  
**ENDANGERED SPECIES MONITORING**  
Calcasieu River  
Bar Channel  
Maintenance Dredging  
09-2-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) 2009 maintenance dredging of the Calcasieu River -Bar Channel, Louisiana, by hopper dredges.

The government dredge WHEELER performed maintenance dredging in the Calcasieu River bar channel approximately Mile -1.7 to Mile -6.1 reach from August 28, 2009, through September 12, 2009 (Figure 1).

## **DREDGING**

On August 28, 2009, the hopper dredge WHEELER began work in the approximately Mile -1.7 to Mile -6.1 bar channel reach (Station 0+00 to 236+00). The required depth of dredging was -44 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. During this period, the dredge worked a total of 16 days and a total of 77 loads of dredged material were collected. During this work period, the WHEELER removed a total of 2,192,563 CY of material (1,626,330 cubic yards by agitation and 566,233 cubic yards by dredge and haul).

## **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 (NMFS) 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 (Jennifer Scott, Kelsey Hall) were employed by REMSA Inc., under subcontract to REMSA Inc. for this work. From August 28, 2009 to September 12, 2009, two observers were on board the WHEELER each day.

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 NMFS 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 WHEELER during this Calcasieu bar channel maintenance work. The vessel was required to have rigid draghead deflectors and 100% inflow screening with openings starting at 4" x 4." The WHEELER used both

inflow/overflow screenings for this job. An inspection for appropriate sea turtle protection measures (including the “paint test” for the draghead deflector) was performed by Mayo Brussard on August 28, 2009 and by Randall Valles on September 3, 2009 (Attachment 1). The WHEELER was found to be in compliance with all required sea turtle protection measures.

The WHEELER employed all 3 dragheads throughout its work. No major problems with deflector operating conditions were experienced. Screening used in this work was maintained at 100 percent effectiveness.

During this maintenance event there was one incidental sea turtle take, a Kemp’s ridley. Throughout the dredging work, both biological and non-biological debris were recovered from the screens. Biological material included blue crab, black drum, hard head catfish, wood, star drum, fish skull. An array of non-biological debris consisted of rope, line, plastic, microfilament, rubber, fiber glass, aluminum can, clothing, tires, chain, pipe, iron block, metal, shells, gloves, net, bucket, mud/clay, steel, fish hooks, onion sacks, wire, pvc, shoe, dust pan. Copies of the Endangered Species Observer Program Daily Reports are provided as Attachment 2.

Below mid-depth water temperatures were not measured. Surface water temperatures ranged from a low of 77° F (25 °C) to a high of 90° F (32.2 °C).

## **SEA TURTLE RELOCATION TRAWLING**

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

## **DISCUSSION**

One sea turtle, Kemp’s ridley, was incidentally taken during this hopper dredging work on the Calcasieu River bar channel during load 13 beginning September 2, 2009 at 2003 hours and ending September 3, 2009 at 0812 hours (Attachment 3). The location of the sea turtle take was at latitude: 29°41.711’N and longitude: 093°19.939’W. The surface water temperature was 85°F (29.4°C). Following the incidental take of a Kemp’s ridley sea turtle, a paint test performed on September 3, 2009 revealed that the drag head and Sea Turtle Deflectors were operating properly.

Surface water temperatures during this work were within the range of sea turtle tolerances (with 77°F (25°C) being the lower limit threshold). Water temperatures were recorded at their highest temperature of 90° F (32.2 °C) during early September.

## **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 WHEELER was employed in this Calcasieu River bar channel maintenance effort between August 28, 2009 through September 12, 2009. Relocation trawling was not required during this maintenance dredging work. There was one recorded sea turtle incidental take, a Kemp's ridley sea turtle, and no relocations, or sightings. There were multiple sightings of *T. truncatus* and one sighting of *P. Occidentalis*. Water temperatures during this work were within the range of sea turtle tolerances.

ATTACHMENT 1

HOPPER DREDGE INSPECTION

## Hightower, Melissa A MVN

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**From:** Morehouse, Edward A MVN  
**Sent:** Friday, September 04, 2009 2:53 AM  
**To:** Creef, Edward D MVN; Corbino, Jeffrey M MVN; Hightower, Melissa A MVN; Falk, Tracy A MVN; Calix, Yojna Singh MVN; Newman, Raymond C MVN  
**Cc:** Valles, Randall J MVN; Baker, Jeffrey G MVN; Wilson, Tyrone MVN  
**Subject:** Dredge Wheeler Draghead Paint Test, 03 September 2009

Please see report from Chief Mate Valles, below.

Capt. Morehouse

Edward A. Morehouse  
Master, US Dredge Wheeler  
US Army Corps of Engineers  
Phone: 504-862-1055 Fax: 504-862-2477

>  
>-----  
>From: Valles, Randall J MVN  
>Sent: Thursday, September 03, 2009 8:42 PM  
>To: Morehouse, Edward A MVN  
>Cc: Baker, Jeffrey G MVN  
>Subject: 2nd painting and inspection of over side drag heads and Turtle Deflectors  
>  
>Good Day,  
>  
> TASK: Apply lines of spray paint on the sides and bottoms of the starboard and port  
> drag heads and Turtle Deflectors to assure that drag arms are positively on the bottom of  
> channel while dredging. Lines of spray paint were applied on the inboard, outboard and  
> bottom of drag heads and Turtle Deflectors.  
>  
> WHEN: On August 28 @ 0900 prior to commencement of dredging and on September 3 @ 1745  
> as directed by Master.  
>  
> CONCLUSION:  
>  
> A. The markings of Aug. 28 show abraded wear to the lines of paint that were applied  
> to both drag heads and turtle  
> deflectors indicating a positive contact of the drags to the bottom of the channel  
> while dredging.  
>  
> B. The inspection of both drag heads after new lines of paint were applied ( Sept. 3  
> ), show apparent wear on the bottom  
> of the drag heads and Turtle Deflectors. Abrasion was most prominent on the bottom  
> than on the sides, indicating that  
> the drags are positively in contact with the bottom of channel.  
>  
> Randall Valles  
>Chief Mate  
>US Dredge Wheeler  
>  
>