

# **FINAL REPORT**

**Marine Endangered Species Monitoring Program  
Weeks Marine, Inc.  
Charleston District**

**Maintenance Dredging Project  
Georgetown Entrance Channel, South Carolina**

**Dates: 30 December 2003- 16 January 2004**

**Submitted by:**

**Tara Fitzpatrick  
Marine Endangered Species Observer  
Biologist/ Project Manager**

***Remsa, Inc.*  
4330 B Kecoughtan Rd  
Hampton, VA 23669  
(757) 723-2930**

## **ABSTRACT**

A twenty-four hour per day marine endangered species monitoring program was conducted onboard both the hopper dredge *R.N. Weeks* (30 December 2003 through 11 January 2004) and *B.E. Lindholm* (30 December 2003 through 16 January 2004) during the Georgetown Entrance Channel, South Carolina dredge maintenance project. Endangered and threatened sea turtles *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Lepidochelys kempii* (Kemp's ridley), *Dermochelys coriacea* (leatherback) and *Eretmochelys imbricata* (hawksbill) as well as the *Eubalaena glacialis* (Northern Right Whale) were the species targeted. No incidents of sea turtle/ whale injury or fatality were detected as result of dredge activity.

## **INTRODUCTION**

The REMSA Inc. Marine Endangered Species Observer Division was subcontracted by *Weeks Marine, Inc.* in the Charleston District to monitor the impact of dredging on endangered sea turtle species and northern right whales in the area of the dredge operation. Pursuant to agreements with the National Marine Fisheries Service (NMFS), four certified observers, two on each dredge were required onboard during the months of prime sea turtle and northern right whale activity for that area to document any detected incidents involving target species.

## **SCOPE OF WORK**

**REMSA** provided the necessary trained personnel and equipment to clean and monitor inflow screens onboard the hopper dredges *R.N. Weeks* and *B.E. Lindholm* for the necessary reports. Monitoring was performed 24 hours each day starting with the dredge *R.N. Weeks* (30 December 2003 through 11 January 2004) along with the Dredge *B.E. Lindholm* (30 December 2003 through 16 January 2004) to complete the dredge maintenance project. Observers inspected and cleaned all inflow and overflow screens, and inspected both dragheads each time they were brought on deck for cleaning and maintenance. Any death or injury involving target species, the Loggerhead turtle (*Caretta caretta*), Green turtle (*Chelonia mydas*), Kemp's ridley turtle (*Lepidochelys kempii*), Leatherback turtle (*Dermochelys coriacea*), and Hawksbill turtle (*Eretmochelys imbricata*) were to be identified, logged, measured, and photographed. Disposal of any animals recovered was the responsibility of the observer and dredge personnel. A load sheet was completed for each load whether or not turtle parts were found. In the case of an incident or take involving a sea turtle, incident report forms were to be completed and the observers are to contact NMFS and the ACOE within twenty-four hours of the incident. Daylight bridge watch was conducted during periods when the observer was not occupied with screen cleaning duties. Each northern right whale observation was to be reported within 72 hours to both the contracting officer and NMFS. Any physical contact with a right whale was to be immediately reported to both the Contracting Officer and NMFS. Observers ensured that dredge crew personnel were aware of the need to avoid incidents involving any endangered animal, and that civil and criminal penalties are possible for harming or harassing endangered species.

## **METHODS**

Dredge coverage began when the observers arrived onboard the *R.N. Weeks* (30 December 2003 through 11 January 2004) and the *B. E. Lindholm* (30 December 2003

through 16 January 2004) in Georgetown Entrance Channel, SC. Two certified observers were present during prime sea turtle and right whale activity working 12 hour shifts.

Both Dredges *R.N. Weeks* and *B.E. Lindholm* functioned with 100% inflow screening with sea turtle draghead deflectors being used. The screening baskets were fitted with 4" x 4" screening material to insure that parts of targeted species would not be allowed to flow through into the hopper. All dragheads and screening baskets were checked after each load of the observers 12-hour shift. The appropriate forms were filled out, noting any incidents regarding targeted species as well as the marine life present in the inflow and overflow boxes.

A bridge lookout was maintained during those daylight hours that the observer was not on deck checking screens. Watch was kept for turtles and whales in the dredging area and dump site.

## RESULTS

There were no reported sea turtle incidents during the dredge maintenance monitoring project at Georgetown Entrance Channel, South Carolina. No sea turtles or whales were sighted during the daylight bridge watches conducted by the observers.

The mean sea temperature during this period averaged nineteen 19 ° Celsius with a fluctuation of +/- 2°C. Many pods of bottlenose dolphin (*Tursiops truncatus*) were spotted throughout the bridge watches and were noted in the daily reports. Due to the nature of the material being dredged, there was very little biological by-catch recorded in the discharge boxes. All species were identified and recorded in daily report sheets to provide information for biological by-catch in the surrounding area (Appendix 1).

## SUMMARY

On 30 December 2003, the hopper dredge *R.N. Weeks* began dredging in Georgetown Entrance Channel, South Carolina along with the dredge *B.E. Lindholm* on 30 December 2003. Dredging was conducted for a total of eighteen days with a total of 188 loads between the two dredges, *R.N. Weeks* (73) and *B.E. Lindholm* (115).

No sea turtle specimens or parts thereof were collected from the screening baskets, thus there is no evidence that there was any injury or harassment involving targeted species. Many pods of bottlenose dolphin (*Tursiops truncatus*) were spotted throughout the bridge watches and were noted in the daily reports along with the biological by-catch.

If there are any questions regarding this report please feel free to contact me at the number below.

Tara Fitzpatrick  
Marine Endangered Species Observer  
Biologist/ Project Manager  
*REMSA, Inc.*  
4330 B Kecoughtan Rd.  
Hampton, VA 23669  
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**Appendix 1**  
**Biological By-Catch**

## Biological By-Catch

The following is a list of species encountered during the dredging project at Georgetown Entrance Channel, South Carolina. These numbers are estimates provided by the daily load sheets, which is not necessarily accurate. They provide a good indicator of species relative abundance on the two dredges.

- Spiny Dogfish- *Squalus acanthias* (5)
- Blue Claw Crab- *Callinectes sapidus* (4)
- Horseshoe Crab- *Limulus polyphemus* (10)
- Southern Flounder- *Paralichthys lethostigma* (4)
- Rosette Skate- *L. garmani* (3)