

# **FINAL REPORT**

Marine Endangered Species Monitoring Program

Emergency Dredging Project

Port Canaveral Harbor, Florida

Dates: 12 September – 24 September 2004

28 September – 6 October 2004

Submitted by:

Will Parks

Marine Endangered Species Observer Program

Sr. Project Manager/Biologist

REMSA, Inc.

124 W. Queens Way

Hampton, VA 23669

757-722-0637

## **ABSTRACT**

*A twenty-four hour per day marine endangered species monitoring program was conducted onboard the hopper dredge Padre Island from 12 September thru 24 September 2004 and 28 September thru 6 October 2004 during the Port Canaveral, Florida emergency dredging project. Endangered and threatened sea turtles *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Lepidochelys kempii* (Kemp's ridley), *Dermochelys coriacea* (leatherback) and *Eretmochelys imbricata* (hawksbill) were the species targeted. There were three incidents involving target species.*

## **INTRODUCTION**

The **REMSA Inc.** Marine Endangered Species Observer Division was subcontracted by *Great Lakes Dredge and Dock* under their contract with the Jacksonville District of the US Army Corps of Engineers (USACE) to monitor the impact of dredging on endangered sea turtle species in the area of the dredge operation. Pursuant to agreements with the National Marine Fisheries Service (NMFS), two certified observers were required onboard during the months of prime sea turtle 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 maintain inflow screens onboard the hopper dredge *Padre Island*. Monitoring was performed 24 hours each day for the duration of the 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. 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 were to contact NMFS and the USACE within twenty-four hours of the incident. Daylight bridge watch was conducted during periods when the observer was not occupied with screen cleaning duties. 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 *Padre Island* on 12 September 2004 and work postponed however, on 24 September 2004 due to the approach of Hurricane Jeanne. Coverage was reinitiated post hurricane on 28 September 2004 and continued until project completion on 6 October 2004. Two certified observers were present during prime sea turtle activity, each working 12 hour shifts.

The dredge *Padre Island* functioned with 100% inflow screening with sea turtle draghead deflectors being used as well. 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 hopper load was completed during the observers 12-hour shift. The appropriate forms were filled out, noting any incidents regarding targeted species as well as noting other 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 in the dredging area and dump site.

## **RESULTS**

There were a total of three takes associated with the dredging of this project. The first occurred on the evening of 13 September at 2330 hrs. A small live green sea turtle was found in the starboard draghead of the dredge. The turtle had lacerations on the ventral side at the base of the neck and right front flipper and was given first aid by the dredge observer. The observer then called REMSA's project manager Trish Bargo for instructions on handling the situation. Ms. Bargo asked the observer to check on crew boat availability and then called the local stranding agency. Personnel from the Marine Science Center indicated they were able to accept the injured animal immediately and arrived at the docks at midnight. Ms. Bargo attempted to make arrangements to have the crew boat retrieve the animal from the dredge and then transport the animal to the dock for pickup by Marine Science Center personnel. Unfortunately, due to communications failures, the crew boat never arrived. Ms. Bargo was informed the following morning at 0600 hrs that the animal was still onboard the dredge. The crew boat arrived at the dredge at app. 0630 hrs and the animal was then finally transported in for rehabilitation, but the turtle died three days later.

The second take occurred on 21 September at 1208 hrs and was also a juvenile green turtle. The specimen was found in the starboard skimmer with many abrasions and a broken neck.

The third take occurred on 28 September at 1730 hrs. Another green turtle was found alive in the forward basket on the port side. This turtle had a crack on the carapace and was bleeding from its left eye. It died 20 minutes after its recovery.

Photos of turtles involved in incidents are located in Appendix 1 at the end of this document.

## **SUMMARY**

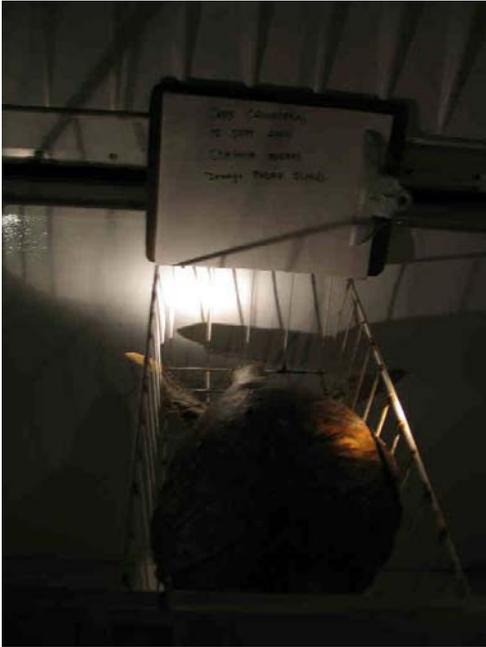
On 12 September 2004, the hopper dredge *Padre Island* began dredging in Port Canaveral, Florida. On 24 September 2004, dredging was postponed due to Hurricane Jeanne. Dredging was re-initiated on 28 September 2004 and continued until 6 October 2004. Dredging was conducted for a total of 22 days with a total of 82 loads. There were 3 incidents involving sea turtles during the dredging of Port Canaveral Harbor.

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. Information was recorded and copies were made for the USACE and NMFS.

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

Will Parks  
Marine Endangered Species Observer Program  
Sr.Project Manager/Biologist  
*REMSA, Inc.*  
124 W. Queens Way  
Hampton, VA 23669  
(757) 722-0637

## Appendix 1



Take #1

***Chelonia mydas***

13 September 04

*Dredge Padre Island*



Take #2

***Chelonia mydas***

21 September 04

*Dredge Padre Island*



Take #3

***Chelonia mydas***

28 September 04

Dredge *Padre Island*