

FINAL REPORT

Marine Endangered Species Monitoring Program
Weeks Marine, Inc.
Galveston District

Maintenance Project
Houston Harbor Ship Channel, Texas

Dates: 07 July- 08 October 2004



Submitted by:

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ABSTRACT

A twenty-four hour per day marine endangered species monitoring program was conducted onboard the hopper dredge *B.E. Linkholm* 09 July through 08 October 2004 during the Houston Harbor Ship Channel 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) were the species targeted.

INTRODUCTION

The **REMSA Inc.** Marine Endangered Species Observer Division was subcontracted by *Weeks Marine, Inc.* in the Galveston District 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 monitor inflow screens onboard the hopper dredge *B.E. Lindholm*. Monitoring was performed 24 hours each day from 09 July 2004 until project completion on 08 October 2004. 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 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. 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

The dredge *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 in the dredging area and dump site.

RESULTS

There was one reported sea turtle incident during the monitoring project at Houston Ship Channel, Galveston maintenance project. On 12 July (load #013), a sea turtle bone was recovered. The specimen was an aged juvenile sea turtle rib bone. The specimen showed evidence that the bone was aged by dark mud stains, lack of odor and attachments of marine invertebrates. This specimen was recorded as an old decomposed bone.

The mean sea temperature during this period averaged thirty-one 31 ° 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.

There were no sea turtle takes reported during the monitoring project at Houston Ship Channel, Texas. No sea turtles were sighted during the daylight bridge watches conducted by the observers.

SUMMARY

On 09 July 2004, hopper dredge *B.E. Lindholm* began dredging in Houston Ship Channel, Texas. One sea turtle incident was recorded during the dredge maintenance project in Houston Ship Channel, Texas. The incident was not a result of the dredging activity, thus there is no evidence that there were any injury or harassment involving targeted species. Information was recorded and copies were made for Weeks Marine, NMFS, and ACOE.

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.

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