

FINAL REPORT

Marine Endangered Species Monitoring Program

Maintenance Dredging Project

Bean Dredging

USNS Mayport Harbor, FL

Project Number: M912-EP-05-C-0037

Dates: 28 February 2006 – 07 March 2006

Submitted by:



Marine Endangered Species Observer Program

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ABSTRACT

*A twenty-four hour per day marine endangered species monitoring program was conducted onboard the hopper dredge Stuyvesant from 28 February thru 07 March 2006 during the USNS Mayport Harbor, FL dredging project. This project was staffed by an observer from Coastwise Consulting for the first 7 loads on 27 February. REMSA observers took over on load #9 on 28 February. Endangered and threatened sea turtles *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Lepidochelys kempii* (Kemp's ridley), *Dermochelys coriacea* (leatherback), *Eretmochelys imbricata* (hawksbill) and marine mammal *Eubalaena glacialis* (Northern Right Whale) were the species of interest. See results for information on a *Lepidochelys kempii* that was found during load #4 by Coastwise Consulting. There were zero incidents thereafter involving sea turtles during loads observed by REMSA observers. There were two possible Northern Right Whale sightings called in on 01 March and 05 March 2006. The crew was notified and the proper precautions were taken to avoid injury or harassment to these animals. One possible humpback sighting was made on 03 March 2006.*

INTRODUCTION

The REMSA Inc. Marine Endangered Species Observer Division was subcontracted by *Bean Stuyvesant* 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 species of interest.

SCOPE OF WORK

REMSA provided the necessary trained personnel and equipment to clean and maintain inflow and overflow screens onboard the hopper dredge *Stuyvesant*. 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 species of interest, 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. A 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 REMSA observers arrived onboard the *Stuyvesant* on 28 February 2006. This dredging job began on 27 February 2006 with Coastwise observers working the first day of the job which entailed load numbers 1-8. REMSA observation began 28 February 2006 with load number 9 and completed the job to load number 77 for a total of 69 loads. Two certified observers were present during prime sea turtle activity, each working 12 hour shifts.

The dredge *Stuyvesant* 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 species of interest as well as noting other marine life present in the inflow boxes.

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

RESULTS

There were no incidents involving the species of interest as a direct result from dredging in Mayport, FL by the *Stuyvesant*. The *Stuyvesant* was one of four dredges that worked on this project. REMSA observers were present only on the *Stuyvesant* and cannot be responsible for any events that occurred on other dredges working this project. A Kemp's ridley (*Lepidochelys kempii*) was found in load #4, but was not related to this dredging project. See the data below on 27 February 2006 for more information. Appropriate measures were taken to avoid these animals, and as a result no species of interest were harmed or harassed.

On 27 February 2006 (load 4), while Coastwise Consulting was staffing the observer, a piece of a Kemp's ridley turtle was found in a screening basket. Remarks taken from the USACE Sea Turtle Data Warehouse are as follows: moderately decomposed dinner plate sized turtle; posterior carapace and rear flippers with decomposing flesh and gray skin. Specimen thought to have been dead for at least a few days. From this information the USACE determined that this turtle was from a previous project (King's Bay) and was to be attributed to that job.

On 28 February 2006 there was one 11-inch turtle rib found with no evidence of flesh or blood present. An incident report form was not filled out because it was not considered a fresh take.

On 01 March 2006 a Northern Right Whale sighting was called in, reportedly spotted within the 15nm range of dredging operations. This sighting was not confirmed by the observers on the bridge. *Stuyvesant* slowed transit to recommended 5kts for 24hr period.

On 03 March 2006, load #39 at 1245hrs, a whale sighting believed to be a humpback was observed ¼ mile from the *Stuyvesant*.

On 05 March 2006 at 1215hrs a whale sighting was called in by the survey team. The whale was seen at the dump sight. *Stuyvesant* slowed transit to recommended 5kts for 24hr period.

For more information refer to Appendix A.

SUMMARY

On 27 February 2006, the hopper dredge *Stuyvesant* began dredging in USNS Mayport Harbor, FL until 07 March 2006. Dredging was conducted for a total of 9 days with a total of 77 loads. An observer from Coastwise Consulting started the project and was relieved by REMSA observers on load 9. A take was discovered on load #4 and was determined to be a take from pervious project in King's Bay, GA. REMSA Marine Endangered Species Observers (MESO) began work on 28 February 2006 with load #9 and completed the job 07 March 2006 with load #77. There were zero lethal takes of sea turtles during the project where REMSA observers were aboard.

All pertinent information was recorded and copies were made for the USACE, the NMFS, and Bean Dredging.

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

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APPENDIX A
WEEKLY REPORTS

ENDANGERED SPECIES OBSERVER PROGRAM

WEEKLY SUMMARY

USACE DISTRICT: Jacksonville
 PROJECT NAME: USN Mayport Hbr DREDGE NAME: Stuyvesant

Dates: 02/27/2006 - 03/05/2006 Load #s: 1-65

Areas dredge worked: Mayport Harbor, USN FL

Were there incidents involving endangered or protected species? YES NO

Which species? _____

Comments: There were numerous days where the slow bell was observed due to aerial sightings of N. Right Whale. 2/28/06
P. Kusmierski boarded 0730, 2/28/06.
D. Monson & D. Dominguez replaced P. Kusmierski @ 1330 3/3/06.

Dredge material consisted of a mixture of sand, shell, silt, mud & clay.

Biotic material from inflow screens were: horseshoe crab, blue crab, southern stingray, sand dollar, jellyfish, eels, gastropods & bivalves, wood, clear nose skati, turtle nb (old - not fresh), sponge crab, cowhose skate, southern flounder, blueback herring, whelk egg casing, portion of unid. fish

Abiotic material from inflow screens were: fiberglass pieces, fuel line, wire & cable, plastic, cloth line, fishing line, plastic bags, mop & cotton foam, rubber mats & misc., spoils, burlap, alum. cans, rock, metal pieces, net, chain, pipe, tackle, upholstery, tarp pieces, vinyl - railroad & tablecloth, snore, aerobics, shackles, O2 bottle, diver sign, golfball, baseball cap, propellor, welders helmet

BRIDGE WATCH SUMMARY

Date/Time	Species	# Sightings/# Animals	Location/Comments
2/28/06 1001, 1247 1745	<u>T. truncatus</u>	3 / 1, 7, 3	50' off stbd in basin @ dig site, -surfacing & diving @ buoy feeding, swimming from 1A to basin
3/1/06 1205, 1715	<u>T. truncatus</u>	5+ / 7, 1	@ dig site, w/in 100' of dredge, mid channel near buoy #8, surfacing & diving
3/2/06 1108, 1408, 1805	<u>T. truncatus</u>	8 / 5, 2, 2	swimming near buoy 1A @ dig site, end of channel swimming out, up channel near buoy 8 port side
3/3/06 thru out day	<u>T. truncatus</u>	multi / 50-75	@ dig site & enroute to disposal site
3/3/06 1245	<u>humpback whale</u>	3 / 1	3/4 - 1 mi S of buoys 1/4 mi from ship
3/4/06 0752, 0957	<u>T. truncatus</u>	multi / 3, 5-7, 10-12	Mayport Hbr @ dig site
3/5/06 0731, 1152-1230 1413-1456	<u>T. truncatus</u> "	multi / 3, 3-4, 1, 5-6	buoy 2 b/wn jetty & buoy Mayport Hbr @ entrance to jetty @ stem jetty

Observer name Dr. Monson / D. Dominguez

