

**Marine Endangered Species Monitoring Program
Hopper Dredging Project Summary
Captiva Island, Florida
Beach Replenishment**



**US Army Corps of Engineers
Weeks Marine, Inc.
16 April – 26 April 2008**

**Submitted by:
Jennifer Kravassi
Marine Biologist**

*East Coast Observers, Inc.
787 W. 49th Street
Norfolk, VA. 23508
(757) 227-5779*

ABSTRACT

*A twenty-four-hour-per-day endangered species monitoring program was conducted onboard the hopper dredge R.N. Weeks from 16 April through 26 April 2008. Endangered and threatened species targeted include the Loggerhead (*Caretta caretta*), Kemp's Ridley (*Lepidochelys kempii*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*), and Leatherback (*Dermochelys coriacea*) sea turtles. Observer monitoring was provided by East Coast Observers, inc. (ECO, inc.) and was at 100%, using two observers approved by the National Marine Fisheries Service (NMFS). This project was awarded by the US Army Corps of Engineers (USACE), and contracted through Weeks Marine, Incorporated.*

INTRODUCTION

The endangered species observers conducted twenty four hour monitoring aboard the hopper dredge R.N. Weeks for ten days of the beach replenishment project off the coast of Captiva Island, Florida. Pursuant to agreements with NMFS, two certified observers were required to work onboard the dredge in 12 hour shifts allowing coverage 24 hours per day. As beach replenishment was critical to maintaining a healthy tourism influx in this resort area, beach erosion and damages from various hurricanes and tropical storms necessitated the urgency for this project. The presence of marine life including sea turtles and manatees are present virtually year round due to climate and water temperatures, making it critical to maintain species monitoring aboard the dredge.

SCOPE OF WORK

East Coast Observers, Inc. was subcontracted by Weeks Marine, Inc. to conduct onboard endangered species monitoring. ECO, inc. was to provide necessary trained personnel and relevant equipment to inspect, clean and monitor inflow screening located onboard the Dredge R.N. Weeks. Observers were also required to monitor the draghead and draghead deflector each time they were brought onboard for cleaning and maintenance, and complete load data sheets for each subsequent load. Any death or injury to endangered species was to be identified, measured, photographed and logged. Proper disposal of said species was to be performed by the observer and dredge personnel. Load sheets were to be completed for each individual load, and included pertinent information to each load. Load time start, load time stop, condition of screening and draghead deflector, type of dredged material, weather and sea conditions, screen contents and species bycatch. Any take information was to be noted on the load data sheet, and then detailed in a separate incident report. Daily and weekly summary forms were to be completed and given to dredge and USACE personnel. Day and night bridge watches were assigned to the observer when not occupied with screen and draghead inspection duties. A full listing of by-catch was logged by observers after each load inspection. Dredging commenced on 16 April 2008 and continued until 26 April 2008. No takes involving any endangered species occurred during the span of this project.

RESULTS

Project Date: 16 April 2008 – 26 April 2008

Project Length: 10 days

Coverage Level: 100% onboard dredge

Total Number of Takes: 0

Number of Loads: 52

Water Temperature: 24 - 25 degrees Celsius

Material Dredged: sand, rock and dead coral

BY-CATCH LISTING*

Clear Nosed Skate

Blue Crab

Sand Dollar

Channed Whelk

Lightning Whelk

Stone Crab

Florida Horse Conch

Emperor Helmet

Forbe's Sea Star

Common Beaded Star

Raja eglanteria

Callinectes sapidus

Echinarachius parma

Busycon canaliculatum

Busycon contrarium

Menippe mercenaria

Pleuroploca gigantea

Cassis madagascariensis

Asterias forbesi

Astropecten armatus

**These are the notable species logged after each load was inspected by observers. An addition of over 100 various shells were cataloged as well. List is available upon request.*

*Species seen near dredging area and pump out area are as follows:***

Bottlenose Dolphin

Loggerhead Turtle

Green Turtle

Tursiops truncatus

Caretta caretta

Chelonia mydas

***No endangered or threatened takes occurred during the span of this project.*