

PRELIMINARY REPORT ON HOPPER DREDGE OPERATIONS

IN THE CORPUS CHRISTI SHIP CHANNEL PROJECT

FEBRUARY - MAY 2007

On February 24, 2007, the contract hopper dredge *Columbia* began work on the Entrance Channel of the Corpus Christi Ship Channel Project. Contract specifications required dredging an estimated 1,096,000 cubic yards (CY) of shoal material. The required depth of dredging was 49 feet below Mean Low Tide (MLT, Corps of Engineers Datum), with 2 feet of allowable overdepth dredging.

Dredging began on February 24, 2007, and was completed on May 23, 2007. A total of 670 loads of dredged material were collected and deposited into Placement Area No. 1. Dredging was performed between Stations 840+00 to 210+00 along the Outer Bar Channel. A total of 954,566 CY of material were excavated from this project.

The dredge was equipped with rigid draghead turtle deflectors, and 100% inflow screening with a 4-inch square mesh. NMFS-approved turtle observers provided 24-hour/day monitoring of dragheads and screens for each load cycle. The observers were employed by Coastwise Consulting, Inc. under a subcontract to the contractor, Sunset Marine, Inc.

Relocation trawling was initiated on March 19, 2007, and was performed on a 24-hour daily basis during dredging operations. A total of 1,515 tows were conducted. During this effort, 37 turtles were tagged and relocated; this total included 24 Kemp's ridleys; 12 loggerheads; and one green turtle.

During the performance of this dredging, four turtle takes were experienced, two loggerheads and two greens. The first take was a loggerhead and occurred on April 15, in load No. 362; the second take occurred on April 17, in load No. 382. Takes three and four were green turtles taken on May 13 in load No. 571, and May 18 in load No. 621, respectively. Both of the greens were alive and appeared to be well except for minor injuries. They were transported to a rehabilitation facility for care and observation, but the turtle from May 13 died several days later. The water temperature during the loggerhead takes was about 21.1°C, whereas the temperature during the green turtle takes was 26.0 to 26.5°C.

Coordination was conducted with the Sea Turtle Stranding and Salvage Network (STSSN). There were five reports of stranded turtles that bore injuries that might be consistent with an encounter with a hopper dredge: three Kemp's ridley, one loggerhead, and one green.

Trawling and tagging data, observer and incident reports, and stranding information can all be accessed at the USACE Sea Turtle Data Warehouse when this information becomes available. The link is: <http://el.erdc.usace.army.mil/seaturtles/list.cfm?Code=Project&Step=2&Type=SWG>.