PRELIMINARY REPORT ON OPERATION OF HOPPER DREDGES
IN THE MOREHEAD CITY AND WILMINGTON HARBOR OCEAN BARS
24 FEBRUARY – 06 APRIL 2005

Contract number W912-PM-05-C-0002 included maintenance dredging work for both the Morehead City Harbor ocean bar and the Wilmington Harbor ocean bar. The hopper dredge *Bayport* of Manson Construction Company was utilized for both projects. On February 24, 2005 the *Bayport* began work on the Morehead City Harbor Ocean Bar. Contract specifications required dredging an estimated 88,000 cubic yards (CY) of shoal material. The required depth of dredging was 45 feet, with 2 feet of allowable overdepth dredging (47 feet). The before dredge surveys (14-18 February) identified an increase in quantity to a required 270,999 y^3 (358,548 y^3 including over-depth), a difference of 182,999 y^3 from the contract requirement; thus, the project took longer than anticipated. On 19 March the Morehead City portion of the contract was completed. A total of 105 loads of dredged material (285,119 CY) were deposited in the nearshore zone and the offshore dredged material disposal site (ODMDS). The nearshore disposal was the primary dumpsite with the ODMDS utilized during rough seas.

Sea turtle compliance inspections were performed in accordance with the "COE Sea Turtle Inspection Checklist for Hopper Dredges (See attached MFR dated 24 February)." The dredge was equipped with rigid draghead turtle deflectors, and 100% inflow and overflow 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 under a subcontract to the dredging contractor. Relocation trawling was not conducted under this contract. The water temperature during the Morehead City portion of the project ranged from 46° F to 50° F. No sea turtle takes were observed; however, there were 12 *Tursiops truncates* sightings and 1 Harbor Porpoise sighting throughout the project. Copies of the observer reports were provided to Craig Theriot, a CSC contractor at the U.S. Army Engineer Research and Development Center (ERDC).

On 20 March work began on the Wilmington Harbor Ocean Bar. Contract specifications indicated a 31 March completion date; however due to increased quantities at both Morehead City and Wilmington Harbor and poor weather throughout the Morehead City portion of the contract, a variance request and risk assessment was written to SAD for approval to dredge through 30 April (See attached risk assessment). Approval from SAD was granted and a total of 135 loads (445,510 CY) were dredged from the outer bar and disposed of at Old Baldhead shoal.

Sea turtle compliance inspections were performed in accordance with the "COE Sea Turtle Inspection Checklist for Hopper Dredges (See attached MFR dated 23 March)." The dredge was equipped with rigid draghead turtle deflectors, and 100% inflow screening with 4-inch square mesh. Large amounts of woody debris were encountered throughout the project making observer coverage of the screened material difficult (<50% of inflow). As a result of the large amounts of floating woody debris only 25% overflow screening could be implemented. NMFS-approved turtle observers provided 24-hour/day

monitoring of dragheads and screens for each load cycle. The observers were employed by Coastwise consulting under a subcontract to the dredging contractor. Relocation trawling was not conducted under this contract. The water temperature during the Wilmington Harbor portion of the project ranged from 50° F to 58° F. Copies of the observer reports were provided to Craig Theriot, a CSC contractor at the U.S. Army Engineer Research and Development Center (ERDC). No sea turtle takes were observed; however, there were 2 sightings of one sub-adult loggerhead sea turtle (57° F water temperature). On 06 April the Wilmington Harbor ocean bar portion of the contract was completed.