

PRELIMINARY REPORT ON HOPPER DREDGE OPERATIONS
IN THE FREEPORT HARBOR CHANNEL PROJECT

OCTOBER 2009 – JANUARY 2010

On October 30, 2009 the contract hopper dredge *Glenn Edwards* began work on the Entrance and Jetty Channels of the Freeport Harbor Project. Contract specifications required dredging an estimated 1,631,000 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 along the Entrance Channel and 47 feet MLT with 2 feet of overdepth along the Jetty Channel.

Dredging began on October 30, 2009, and was completed on January 18, 2010. Dredging was not continuous; no dredging occurred during the period from November 26 to January 16. Two dredges were employed under this contract, they were the *Glenn Edwards* and *Bayport*. The *Glenn Edwards* worked from October 30 until November 25, and excavated 232 loads. The *Bayport* worked January 18, and removed 4 loads of dredged material. A total of 236 loads of dredged material were collected and deposited into Placement Area No. 1-A. Dredging was performed between Stations 78+63 along the Jetty Channel and (-)150+00 along the Outer Bar Channel. A total of about 2,420,755 CY of material was excavated from this project.

The dredges were 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 subcontract to the dredging contractor, Manson Construction Co.

During the performance of this dredging, one turtle take was experienced. This take was a green turtle on 10 November in Load No. 92. The water temperature was about 21.6°C.

Observer and incident reports, can all be accessed at the USACE Sea Turtle Data Warehouse. The link is: <http://el.erdc.usace.army.mil/seaturtles/project.cfm?Id=634&Code=Project>.

Coordination was conducted with the Sea Turtle Stranding and Salvage Network (STSSN). There were no reports of stranded turtles that bore injuries consistent with a potential encounter with a hopper dredge.

Material dredged consisted mostly of mud and silt with some clay. There were some problems with clogging of inflow and overflow screening because of heavy accumulations of debris and sea grasses. In order to moderate this problem, inflow screening efficiency was reduced while maintaining 100 percent overflow screening. Efforts to clear the screens resulted in delays to operations for up to four hours, primarily at the overflow screens. Consequently, it was decided to restore 100 percent inflow screening and reduce overflow screening efficiency. This remedy seemed to work acceptably, and eliminated most of the delays.