

Reilly, F.J. and V.J. Bellis (1983) "The Ecological Impact of Beach Nourishment with Dredged Materials on the Intertidal Zone at Bogue Banks, North Carolina", U.S. Army, Corps of Engineers, Coastal Engineering Research Center, Miscellaneous Report No. 83-3, 74 pages.

Field studies were conducted over the period January 1977 to August 1978 to evaluate the immediate effects and recovery rates of a nourished beach. The studies were carried out on the nourished beach at Fort Mason, NC and a comparable unnourished beach. Significant findings indicated that during nourishment, all organisms were buried since no increase in populations were found on the adjacent beaches. *Emerita talpoida* was found to recover rapidly; however the age of the population was primarily solely at the one-year class whereas at the control beach, the ages were more widely distributed. Although all other numerically important species showed signs of recovery, their populations remained lower than before nourishment.

Saloman, C.H., S.P. Naughton and J.L. Taylor (1982) "Benthic Community Response to Dredging Borrow Pits, Panama City Beach, Florida" U.S. Army, Corps of Engineers, Coastal Engineering Research Center, Miscellaneous Report No. 82-3, 138 pages.

In July and August, 1976, the Corps of Engineers pumped approximately 230,000 cubic meters of sand onto the beaches of Panama City, FL. The sand was taken from numerous borrow areas located 305 to 610 meters offshore in water depths of 6-9 meters. The dredge holes were initially 5 m below the ambient bottom. This study focusses on the environmental effects in the vicinity of the dredge areas and included documentation of the hydrography (temperature and salinity). The borrow areas were found to fill initially with material that was finer than on the adjacent bottom; however when the pits were nearly filled, the surface sediment characteristics approached those of the adjacent bottom. The bottom community in the vicinity of the borrow pit declined immediately following the dredging; however the recovery was virtually complete after one year. Measures of recovery included species richness, abundance of individuals, diversity and equitability indices and several statistical tests. It is concluded that the dredging has had no adverse long-term effects on bottom-