

EXECUTIVE SUMMARY

The Rockland Disposal site is located in the center of West Penobscot Bay (Fig. 1-1), 3.3 NM northeast of the Rockland Breakwater. This site was first used during October 1973-February 1974 for disposal of approximately 69,000 m³ (90,200 yds³) of material from Rockland Harbor. The disposal site is a 0.5 nautical mile square centered at 44°07.01'N, 69°00.3'W. Water depths within the disposal area range from 65 to 80 meters. The disposal site is marked with a buoy deployed and maintained by the U.S. Coast Guard.

An earlier baseline survey of the disposal site was conducted during the period 24 September - 2 October 1984 to determine existing conditions of the bottom before the start of dredging projects from the Searsport area. This survey included precision bathymetry, sediment characterization (chemical and physical), a side scan survey, and REMOTS® sediment profiling. The present study was conducted during the period 19-24 May 1985 to assess the transport of dredged material during disposal operations and to perform bathymetric and side scan surveys of the area after approximately 360,000 yd³ (275,400 m³) of dredged material from the Searsport project had been deposited. vertical profiles of temperature and salinity were conducted, and current meters were deployed for approximately one month at the disposal site. The results of the data analysis were used to estimate the percent of material expected to reach the bottom during disposal operations and to delineate the extent of dredged material throughout the disposal site.