

EXECUTIVE SUMMARY

The western Long Island Sound Disposal Site (WLIS) is located 2.5 nautical miles north of Lloyd Point, NY, between the Stamford and Eatons Neck historic disposal grounds. Since disposal first began at the site in March 1982, varying quantities of dredged material have been deposited annually. As a result, three dredged material disposal mounds ("A", "B", and "C") currently exist at the site (Figure 1-1).

The disposal buoy was located at the "B" mound at coordinates 40 59.340 N and 73 29.346 W during the 1987-88 disposal season (1 September 1987 to 1 June 1988), identical to its position during the 1986-87 season. Tabulation of scow logs indicated that approximately 52,842 m³ (69,074 yds³) of dredged material were deposited at or near the buoy between 17 November 1987 (when the last bathymetric survey occurred at the site) and the end of the 1987-88 disposal season on 1 June 1988.

From 19 to 22 July 1988, field operations were conducted at WLIS to provide information on the fate of recently-disposed dredged material and assess the environmental effects of past and recent disposal operations. The field operations consisted of a precision bathymetry survey, REMOTS® sediment-profile photography, measurements of near-bottom and near-surface dissolved oxygen concentrations, and determination of the vertical profiles of temperature and salinity at selected stations. The objectives of the 1988 monitoring cruise at WLIS were to:

- delineate the extent material deposited at survey, and topography of the dredged the site since the November 1987
- characterize dissolved oxygen depth gradients as well as assess near-bottom dissolved oxygen concentrations relative to REMOTS® benthic analyses at and near the disposal site.