EXECUTIVE SUMMARY

During the spring of 1983, a series of dredging and disposal operations have occurred utilizing the Central Long Island Sound Disposal Site. A major effort has been made under the DAMOS program to monitor these disposal operations at four different locations within the CLIS site. These locations and associated operations are defined as follows:

- MQR Site - Disposal of approximately 1 million m^3 of sediment from New Haven Harbor dumped using a Loran-C navigation control system

- Cap Site 1 - Disposal of approximately 25000 m^3 of sediment from Black Rock Harbor to be capped by silt from New Haven

- Cap Site 2 - Disposal of approximately 30000 m^3 of sediment from Black Rock Harbor to be capped by sand from the outer channel of New Haven

- FVP Site - Disposal of approximately 55000 m^3 of sediment from Black Rock Harbor

An overview of the CLIS disposal site showing the relative positions of the disposal points and the extent of survey coverage is presented in Figure 1-1. All of these sites have been studied in detail using replicate precision bathymetric surveys, side scan sonar, precision grab sampling and diver observations as well as additional, more specialized observations in some cases.

This report is being compiled to provide a summary of data obtained during the period of disposal in order to assess the effectiveness of the disposal operation. Consequently, all data have not yet been reviewed for accuracy, and in the case of replicate bathymetric surveys, fully corrected for tide and sound velocity. However, even though absolute values of depths may not be fully corrected, the relative differences between surveys are valid and comparisons to determine distribution and thickness of dredged material can be made with confidence.

A summary of the work conducted at the CLIS Disposal Site during recent months is presented in Table 1-1. The following sections provide a quick look summary of data from each site. Further amplification and interpretation of results will be provided in future reports. After completion of disposal operations in June, additional work at the CLIS site will consist of intensive post disposal monitoring and subsequent periodic cruises to monitor long term effects.