EXECUTIVE SUMMARY

Monitoring surveys were conducted in July and August 2007 at the New London Disposal Site (NLDS) as part of the Disposal Area Monitoring System (DAMOS) Program. The 2007 field effort consisted of bathymetric, sediment-profile imaging, and plan-view imaging surveys designed to characterize the seafloor topography of the disposal site, document the distribution of dredged material around recent and historic disposal locations, and assess the benthic conditions over recently formed and historic disposal mounds.

The July 2007 bathymetric survey was performed over a 2100 x 2100 m area encompassing the entire NLDS. Placement of approximately 321,000 m^3 of dredged material at NLDS from 2000 to 2007 resulted in the formation of a mound with a maximum height of approximately 4 m and dimensions of approximately 575 m long by 250 m wide. No other significant bathymetric changes were observed between 1997 and 2007.

The August 2007 sediment-profile imaging and plan-view imaging survey was performed at the recently formed NL-06 Mound and the historical mounds, NL-91 and Dow/Stonington (D/S) Mound Complex and the United States Coast Guard Academy (USCGA) Mound. Recolonization at the older mounds (USCGA and NL-91 and D/S Mound Complex) has continued as expected, with mature Stage III communities found at almost every station on both of these older mounds. The infaunal community at each of these mounds is now considered to be fully recovered with habitat conditions similar to those found at the reference stations.

The recent mound, NL-06, has also recovered from disposal-related disturbance. The 2007 NLDS survey was conducted eight months after the last recorded disposal activity at NL-06 which provided ample time for recolonization of the new mound. As expected, the RPD depths at the NL-06 Mound were significantly shallower than reference area values. However, all stations had advanced stages of recolonization with extensive burrowing and feeding voids present.

While future monitoring surveys at the site should include the NL-06 Mound to document the completion of the recolonization sequence, frequent monitoring of either the NL-91 and D/S Mound Complex or USCGA Mounds is determined to be unnecessary.