The Atlantic Coast of New Jersey Coastal Processes Data Archive Summary Report Manasquan Inlet to Cape May Point December 2004 Edition

EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers, Philadelphia and New York Districts has been tasked to create a regional sediment budget from Sandy Hook, NJ to Cape May Point, NJ as part of the Corps of Engineers Regional Sediment Management (RSM) Program and the New Jersey Alternative Long-Term Nourishment Feasibility Study. The purpose of the regional sediment budget is to gain a better understanding of the coastal sediment resources so that existing and future beach nourishment needs are met and managed effectively for the State of New Jersey.

Prior to creating any regional sediment budget, a data inventory should be done to see what data has been collected in the past and what data is potentially missing that would be needed in order to create a regional sediment budget. The Atlantic Coast of New Jersey Coastal Processes Data Archive Summary Report was written in order to summarize existing coastal processes datasets the Philadelphia District has obtained from existing beachfill projects and beachfill projects currently being designed and studied.

Sections of the Report include summaries of hindcast wave data, wave data collected by gages and buoys, long-term water level data collected by NOAA and USGS, current measurements, previously published longshore transport rates and sediment budgets, along with a summary of Federal Borrow Areas used for beachfill projects in New Jersey.

The data summarized in this Report will be utilized in the creation of a regional sediment budget. The wave hindcast data will be extensively used in the regional sediment budget in order to calculate potential longshore sediment transport rates and shoreline change. The previously published transport rates will be used as a "reality check" against the updated longshore sediment transport rates. Water level data at specific locations will be used to conduct coastal modeling that will give results that "fine-tune" magnitudes and directions of potential sediment transport patterns at smaller scales. Sediment budgets done at the "inlet-scale" will benefit from the current measurements summarized in the Report in understanding potential sediment transport patterns that are current-driven.

To obtain the complete report, contact the USACE Philadelphia District at the link provided at the NAP RSM homepage, or by calling the Public Affairs Office at 215-656-6032.