



DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CECW-PE (10-1-7a)

05 APR 1996

SUBJECT: Long Beach Island, New York

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the study of hurricane and storm damage reduction for Long Beach Island, New York, from Jones Inlet to East Rockaway Inlet, on the Atlantic Coast of Long Island, located in Nassau County. It is accompanied by the report of the district and division engineers. These reports are in partial response to a resolution by the Committee on Public Works and Transportation of the United States House of Representatives adopted 1 October 1986. This resolution requested the review of the previous report on the Atlantic Coast of Long Island, New York, Jones Inlet to East Rockaway Inlet, with a view towards determining the feasibility of providing storm damage reduction works for Long Beach Island.

2. The plan developed by the district engineer consists of a 110-foot-wide beach berm at an elevation of +10 feet National Geodetic Vertical Datum (NGVD), backed by a dune system at an elevation of +15 feet NGVD with a crest width of 25 feet, approximately 7.7 miles long. The plan also includes the rehabilitation of 16 existing groins, construction of 6 new groins, and appurtenant project features such as dune grass planting, sand dune fencing, vehicle access ramps, and dune walkovers, with suitable advance beachfill and periodic nourishment to ensure the integrity of the design.

3. As reported by the district engineer, based on October 1995 price levels, the total first cost of the plan is estimated at \$72,090,000, of which \$46,859,000 would be Federal and \$25,232,000 would be non-Federal. Of the non-Federal share, the total cash contribution required is \$24,440,000, with the balance consisting of the estimated creditable cost for lands, easements,

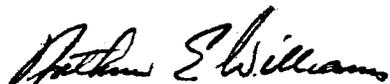
CECW-PE

SUBJECT: Long Beach Island, New York

rights-of-way, relocations, and suitable borrow and dredged or excavated material disposal areas (LERRD's). Average annual benefits are estimated at \$17,513,000, and average annual costs are estimated at \$9,224,000, yielding net benefits estimated at \$8,289,000. The resulting benefit-to-cost ratio is 1.9, based on the Federal interest rate of 7.625 percent and a 50-year period of analysis. Based on information available at this time, the plan developed by the district engineer is the national economic development plan.

4. I generally concur in the findings of the reporting officers. The plan developed is technically sound, economically justified, and socially and environmentally acceptable. The plan conforms with essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other Administration and legislative policies and guidelines.

5. However, recognizing current budget realities, the Administration has determined that hurricane and storm damage reduction projects, like Long Beach Island, New York, generally, should be considered for implementation by State and non-Federal interests that benefit from them. Therefore, consistent with current shoreline protection policy, project facts contained in my report and the reports of the district and division engineers concerning the Long Beach Island, New York project are provided for information only.



ARTHUR E. WILLIAMS
Lieutenant General, USA
Chief of Engineers