
JANUARY 1999

NAVIGATION STUDY FOR

PONCE DELEON INLET, FLORIDA
VOLUSIA COUNTY, FLORIDA - 14310

FINAL FEASIBILITY REPORT
WITH FINAL ENVIRONMENTAL ASSESSMENT



**US Army Corps
of Engineers®**
Jacksonville District
South Atlantic Division

WATER RESOURCES DEVELOPMENT ACT OF 1999

August 5, 1999.--Ordered to be printed

Mr. SHUSTER, from the committee of conference, submitted
the following

CONFERENCE REPORT

[To accompany S. 507]

The committee of conference on the disagreeing votes of the two Houses on the amendment of the House to the bill (S. 507), to provide for the conservation and development of water and related resources, to authorize the Secretary of the Army to construct various projects for improvements to rivers and harbors of the United States, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the Senate recede from its disagreement to the amendment of the House to the text of the bill and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the House amendment, insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.--This Act may be cited as the "Water Resources Development Act of 1999".

(b) TABLE OF CONTENTS.--The table of contents of this Act is as follows:

TITLE I--WATER RESOURCES PROJECTS

→ Sec. 101. Project authorizations.
Sec. 102. Small flood control projects.

Sec. 101 (b)

BEACH AND PIERCES POINT, NEW JERSEY.--The project for shore protection and ecosystem restoration, Delaware Bay coastline, Delaware and New Jersey: Reeds Beach and Pierces Point, New Jersey, at a total cost of \$4,057,000, with an estimated Federal cost of \$2,637,000 and an estimated non-Federal cost of \$1,420,000.

(7) LITTLE TALBOT ISLAND, DUVAL COUNTY, FLORIDA.--The project for hurricane and storm damage prevention and shore protection, Little Talbot Island, Duval County, Florida, at a total cost of \$5,915,000, with an estimated Federal cost of \$3,839,000 and an estimated non-Federal cost of \$2,076,000.

(8) PONCE DE LEON INLET, FLORIDA.--The project for navigation and related purposes, Ponce de Leon Inlet, Volusia County, Florida, at a total cost of \$5,454,000, with an estimated Federal cost of \$2,988,000 and an estimated non-Federal cost of \$2,466,000.

(9) SAVANNAH HARBOR EXPANSION, GEORGIA.--

(A) IN GENERAL.--Subject to subparagraph (B), the project for navigation, Savannah Harbor expansion, Georgia, including implementation of the mitigation plan, with such modifications as the Secretary considers appropriate, at a total cost of \$230,174,000 (of which amount a portion is authorized for implementation of the mitigation plan), with an estimated Federal cost of \$145,160,000 and an estimated non-Federal cost of \$85,014,000.

(B) CONDITIONS.--The project authorized by subparagraph (A) may be carried out only after--

(i) the Secretary, in consultation with affected Federal, State of Georgia, State of South Carolina, regional, and local entities, reviews and approves an environmental impact statement for the project that includes--

(I) an analysis of the impacts of project depth alternatives ranging from 42 feet through 48 feet; and

(II) a selected plan for navigation and an associated mitigation plan as required under section 906(a) of the Water Resources Development Act of 1986 (33 U.S.C. 2283(a)); and

(ii) the Secretary of the Interior, the Secretary of Commerce, the Administrator of the Environmental Protection Agency, and the Secretary approve the selected plan and determine that the associated mitigation plan adequately addresses the potential environmental impacts of the project.

(C) MITIGATION REQUIREMENTS.--The mitigation plan shall be implemented before or concurrently with construction of the



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

REPLY TO
ATTENTION OF:

CECW-PE (10-1-7a)

29 SEP 1999

SUBJECT: Ponce de Leon Inlet, Florida

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the navigation study for Ponce de Leon Inlet in Volusia County, Florida. It is accompanied by the report of the district and division engineers. These reports are in final response to a resolution by the Committee on Public Works and Transportation of the United States House of Representatives dated 21 May 1991. The resolution requested the U.S. Army Corps of Engineers review the existing Federal project for Ponce de Leon Inlet to determine if modifications are advisable in the interest of navigation and other purposes.

2. Section 101 (b) (8) of the Water Resources Development Act of 1999 (WRDA 1999), Public Law 106-53, authorized construction of the Ponce de Leon Inlet in Volusia County, Florida project for navigation subject to completion of a favorable final report of the Chief of Engineers on or before December 31, 1999. This report constitutes the final report of the Corps of Engineers in response to this legislation.

3. The reporting officers recommend modifying the Ponce de Leon Inlet navigation project by constructing a 1,000-foot-long seaward extension of the exiting south jetty, with scour apron, and placing aids to navigation at the inlet. The Federal Government would share the cost of maintaining this feature of the modified project with the non-Federal project sponsor. The 1,000-foot long extension of the south jetty would extend seaward, parallel to the existing north jetty, and have a crest elevation of +7 feet, referenced to mean low water (MLW). The jetty extension would be constructed of stone and be 15-feet wide at its crest. A 30-foot-wide by 4-foot-thick scour apron would extend the length of the jetty extension to protect against scour damage within the inlet throat. Both the jetty and scour apron would be founded on 2-foot-thick stone bedding. The foundation of the jetty extension would be at elevation -10 feet MLW. The jetty extension would be sand tight up to elevation -3 feet MLW and permeable from -3 feet MLW to +7 feet MLW. The total footprint at the base of the south jetty extension would be 105 feet wide. The construction would require excavating approximately 25,000 cubic yards of material. All excavated material is expected to be beach quality sand, and would be placed on the south side of the south jetty. The proposed length and orientation of the jetty extension are based on the results of physical and numerical model studies of hydraulic, wave, current, and bathymetric interactions in the Ponce de Leon Inlet. Based on these studies, construction of the south jetty extension is expected to induce the deep-water channel to migrate toward the center of the inlet. Additionally, the jetty extension is expected to significantly reduce sediment

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transport and deposition in the inlet and in the adjacent reach of the Atlantic Intracoastal Waterway. There is no identified requirement for compensatory mitigation for the proposed project modification.

4. Based on October 1998 prices, the estimated first cost is \$5,454,000 of which \$2,985,000 would be the Federal share while \$2,469,000 would be the non-Federal share. Average annual benefits and costs based on a discount rate of 6.875 percent and a 50-year period of economic evaluation are estimated at \$567,000 and \$426,000 respectively. The average annual net benefit is \$141,000, and the benefit-to-cost ratio is 1.3 to 1.

5. I concur in the findings, conclusions, and recommendation of the reporting officers. The plan developed is technically sound, economically justified, and environmentally and socially acceptable. The plan conforms to 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. Also, the views of interested parties, including Federal, State, and local agencies, have been considered.

6. Accordingly, I recommend that modifications to Ponce de Leon Inlet, Volusia County, Florida, be implemented generally in accordance with the reporting officers' recommended plan, and with such modifications as in the discretion of the Chief of Engineers may be advisable. This recommendation is subject to non-Federal interests agreeing to comply with applicable Federal laws and polices, including the following requirements:

- a. Enter into an agreement which provides, prior to construction, 25 percent of design costs;
- b. Provide, during construction, any additional funds needed to cover the non-Federal share of design costs;
- c. Provide, during construction, 50 percent of total project costs allocated to recreational navigation as further specified below:
 - (1) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of the recreational navigation features of the project;
 - (2) Provide or pay to the Government the cost of providing all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of the recreational navigation features of the project; and

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(3) Provide, during construction, any additional costs as necessary to make its total contribution equal to 50 percent of total project costs allocated to recreational navigation;

d. For project costs allocated to commercial navigation, provide, during the period of construction, a cash contribution equal to 10 percent of the total cost of construction of the general navigation features attributable to channel depths not in excess of 20 feet;

e. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the project, up to an additional 10 percent of the total cost of construction of general navigation features. The value of lands, easements, rights-of-way, and relocations provided by the non-Federal sponsor for the general navigation features, described below, may be credited toward this required payment. If the amount of credit exceeds 10 percent of the total cost of construction of the general navigation features, the non-Federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of lands, easements, rights-of-way, and relocations in excess of 10 percent of the total cost of construction of the general navigation features;

f. Provide to the Government 100 percent of the cost to operate, maintain, replace, repair, and rehabilitate (OMRR&R) all features of the project allocated to recreational navigation. The OMRR&R costs for the 1,000-foot south jetty extension are allocated to commercial navigation (15 percent) and recreational navigation (85 percent) purposes. The non-Federal sponsor will pay its proportional share of OMRR&R costs at the time of each maintenance event. Accordingly the non-Federal sponsor's share of OMRR&R costs for the 1,000-foot south jetty extension, is currently estimated to be 85 percent and the Federal Government's share, is estimated to be 15 percent;

g. Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the commercial navigation features of the project (including all lands, easements, and rights-of-way, and relocations necessary for dredged material disposal facilities);

h. Accomplish all removals determined necessary by the Federal Government other than those removals specifically assigned to the Federal Government;

i. Grant the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the general navigation features for the purpose of inspection, and, if necessary, for the purpose of operating, maintaining, repairing, replacing, and rehabilitating the project;

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j. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

k. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total cost of construction of project, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local governments at 32 CFR, Section 33.20;

l. Perform, or cause to be performed, any investigations for hazardous substances as are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the construction, operation, maintenance, repair, replacement, or rehabilitation of the project. However, for lands that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigation unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

m. Assume complete financial responsibility, as between the Federal Government and the non-Federal sponsor, for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project;

n. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987, and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for construction, operation, maintenance, repair, replacement, and rehabilitation of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

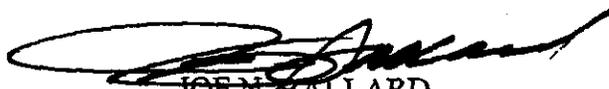
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p. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army;"

q. Provide a cash contribution equal to the non-Federal cost share of the project's total historic preservation mitigation and data recovery costs attributable to commercial navigation and recreational navigation that are in excess of 1 percent of the total amount authorized to be appropriated for commercial navigation and recreational navigation; and

r. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.



JOE N. BALLARD
Lieutenant General, U.S. Army
Chief of Engineers