



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

REPLY TO  
ATTENTION OF:

CECW-PE (10-1-7a)

SUBJECT: St. Paul Harbor, Alaska

23 DEC 1996

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on harbor improvements and environmental restoration at St. Paul, Alaska. It is accompanied by the report of the district and division engineers. These reports are in partial response to a resolution adopted by the Committee on Public Works of the United States House of Representatives on 2 December 1970. The study resolution requested a review of the report of the Chief of Engineers on Rivers and Harbors in Alaska, published as House Document 414, 83rd Congress, 22nd Session; and other pertinent reports, with a view to determining whether any modifications of the recommendations contained therein are advisable at the present time. Preconstruction engineering and design activities for the St. Paul Harbor and restoration project will be continued under the authority provided by the 2 December 1970 resolution.

2. Section 101(b)(3) of the Water Resources Development Act of 1996 (WRDA 96), Public Law 104-303, authorized construction of a navigation and environmental restoration project at St. Paul Harbor, Alaska, subject to completion of a final report of the Corps of Engineers on or before December 31, 1996, and subject to the conditions recommended in that final report. This report constitutes the final report of the Corps of Engineers required by section 101(b). The authorizing language for the St. Paul Harbor project reflects a cost of \$18,981,000, with an estimated Federal cost \$12,239,000. Section 101(b)(3) cited project costs and cost sharing from

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earlier information provided by the Corps. The cost estimate and cost sharing have been adjusted to reflect current information on the project authorized by Section 101(b) of WRDA 1996. Paragraph 4 of this document contains the current information.

3. The reporting officers recommend modification of the existing authorized Federal navigation project and restoration of tidal flushing in Salt Lagoon, adjacent to the harbor. The plan consists of deepening the existing entrance channel, enlarging and deepening the maneuvering basin, constructing a spending beach and three offshore reefs, and restoring the historic storm-induced water exchange into Salt Lagoon. The entrance channel would be dredged to -30 feet mean lower low water (MLLW), with an additional 2 feet for advance maintenance; it would have an approach perpendicular to the main breakwater, with a 90 degree turn into the harbor, between the main and detached breakwaters. The width of the channel would vary from 250 feet in its approach up to 350 feet in the turn; it would decrease to 150 feet entering the harbor. The existing maneuvering area and mooring basin would be enlarged to a 415-by-830-foot maneuvering basin, dredged to a depth of -29.0 MLLW. The spending beach would be constructed in the area intended for the installation of mooring dolphins under the original project authorization, adjacent to the detached breakwater, to reduce wave heights within the harbor; it would be constructed to a crest elevation of +4 feet MLLW, using material dredged from the maneuvering basin. The mooring dolphins would be deauthorized; this feature is no longer required because of changes in anticipated harbor operations that have occurred since the initial design and construction of the existing project. The three offshore reefs, each 1,300 feet in length would be constructed to a depth of -12 feet MLLW, parallel to the main breakwater. A wave energy channel, 100 feet in width, with a bottom elevation of +2 feet MLLW would be constructed across Boulder Spit and the natural entrance channel into Salt Lagoon would be realigned to its

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location and configuration to restore water circulation and biological productivity to the lagoon. Dredged material would be placed at the new city landfill, a 7.7 mile haul distance, and in the spending beach island; approximately 60,000 of the 379,000 cubic yards of material dredged, would be required for the spending beach.

4. The estimated first cost of the authorized project, based on October 1996 price levels, is \$18,338,000, of which \$11,633,000 would be Federal and \$6,705,000 would be non-Federal. This cost includes \$15,746,000 for general navigation features (GNF), \$1,614,000 for sponsor's associated costs, \$926,000 for the environmental restoration of Salt Lagoon, and \$52,000 for lands, easements, rights-of-way and relocations (LERR). The non-Federal sponsor would be responsible for providing all lands, easements, rights-of way, and relocations for both the navigation and environmental restoration features; all inner harbor improvements, including the cost of deepening the moorage basin; a portion of the cost of GNF; and 25 percent of the cost of environmental restoration features. In addition, the sponsor would be responsible for operating and monitoring the environmental restoration features. Total average annual charges for the navigation portion of the project (including advance maintenance), based on a discount rate of 7-3/8 percent and a 50-year period for economic analysis, are \$1,546,000. Average annual benefits are estimated at \$2,613,000, and the benefit-cost ratio is 1.7. The restoration feature would increase flushing of Salt Lagoon and restore 227 acres of aquatic habitat. The restoration feature is justified based on environmental outputs and is not included in the economic analysis. The cost sharing for restoration follows the general principles of Section 1135 of the Water Resources Development Act of 1986, as amended. The recommended plan is the national economic development plan.

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5. Washington level review indicates that the recommended plan is technically sound, economically justified, 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 on project development. Also the views of interested parties, including Federal, State, and local agencies have been considered.

6. I generally concur in the findings of the reporting officers. Accordingly, I recommend implementation of the authorized project generally in accordance with the reporting officers' recommended plan, with such modifications as in the discretion of the Chief of Engineers may be advisable, and subject to applicable cost-sharing and financing requirements. My recommendation is made with the provision that, prior to implementation of the project, the non-Federal sponsors shall enter into binding agreements with the Federal Government to comply with the following requirements. For the separable and joint navigation improvements and restoration allocated to the harbor and lagoon, at St. Paul, Alaska, the non-Federal sponsor shall:

a. Provide all local service facilities and, for so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate, at its own expense, both the local service facilities and environmental restoration features, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

b. Provide all lands, easements, and rights-of-way, including those lands, easements, and rights-of way required for dredged or excavated material disposal areas and environmental restoration, and perform or ensure the performance of all relocations determined by the Federal

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Government to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation and restoration features;

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

d. Provide, during the period of construction, a cash contribution equal to the following percentages of the total cost of construction of the general navigation features:

(1) 10 percent of the costs attributable to dredging to a depth not in excess of 20 feet; and

(2) 25 percent of the costs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet;

e. Provide any additional amounts as are necessary to make its total contribution equal to 25 percent of the total project costs assigned to environmental restoration;

f. Repay with interest, over a period not to exceed 30 years following completion of construction of the project, up to an additional 10 percent of the total cost of construction of general navigation features depending upon the amount of credit given for the value of lands, easements, rights-of-way, and relocations provided by the non-Federal sponsor for the general navigation features. 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;

g. Give the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property

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that the non-Federal sponsor owns or controls for access to the general navigation and restoration features for the purpose of inspection, and, if necessary, for the purpose of operating, maintaining, repairing, replacing, and rehabilitating the general navigation and restoration features;

h. 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 local service facilities, except for damages due to the fault or negligence of the United States or its contractors;

i. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of three 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 the general navigation and restoration features, 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;

j. 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 general navigation and restoration features. 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

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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;

k. 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 general navigation and restoration features;

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

m. 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 (Public Law 100-17), 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 general navigation and restoration features, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

n. 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;" and

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o. Provide a cash contribution equal to the following percentages of the total historic preservation mitigation and data recovery costs attributable to commercial navigation and environmental restoration that are in excess of 1 percent of the total amount authorized to be appropriated for commercial navigation and environmental restoration, respectively:

(1) 10 percent of the costs attributable to dredging to a depth not in excess of 20 feet;

(2) 25 percent of the costs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet; and

(3) 25 percent of the costs attributable to environmental restoration.



JOE N. BALLARD

Lieutenant General, USA  
Chief of Engineers