DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
2600 ARMY PENTAGON
WASHINGTON, DC 20310-2600

DAEN

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SUBJECT: New York – New Jersey Harbor and Tributaries Study, New York and New Jersey – East Riser, New Jersey Actionable Element

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on flood risk management recommendations for the New York – New Jersey Harbor and Tributaries Study, New York and New Jersey – Final Integrated Interim Response Feasibility Report and Environmental Assessment for East Riser, New Jersey. It is accompanied by the report of the New York District North Atlantic Division engineer(s). This study is an interim response to the authorization in Public Law 84-71. The authorization provided that the Secretary of the Army is "...hereby authorized and directed to cause an examination and survey to be made of the eastern and southern seaboard of the United States with respect to hurricanes, with particular reference to areas where severe damages have occurred... Such survey, to be made under the direction of the Chief of Engineers, shall include the securing of data on the behavior and frequency of hurricanes, and the determination of methods of forecasting their paths and improving warning services, and of possible means of preventing loss of human lives and damages to property, with due consideration of the economics of proposed breakwaters, seawalls, dikes, dams, and other structures, warning services, or other measures which might be required". Preconstruction engineering and design activities will continue under Public Law 84-71. The study authority manages coastal storm risk as the study's primary focus, however, subsequent legislation, including but not limited to Section 8106(a) of the Water Resources Development Act (WRDA) of 2022 (33 U.S.C. § 2282g), allows for the consideration of other flood drivers secondary to coastal storm risk management. The non-Federal Sponsor submitted a joint request to the Office of the Assistant Secretary of the Army for Civil Works (OASA(CW)) for such work to be completed. The OASA(CW) provided a response on March 26, 2025, indicating that the New York District work together with the non-Federal Sponsor to complete this analysis. Section 8106(a) of the Water Resources Development Act (WRDA) 2022 included language directing the Secretary to formulate alternatives to maximize net benefits on a more comprehensive basis to address flooding problems, at the non-Federal sponsor's request.

2. The reporting officers recommend authorizing a flood risk management feature that will reduce the risk of fluvial flood impacts to residential and commercial structures. The Recommended Plan is the National Economic Development (NED) Plan. The Recommended Plan, known as the East Riser Actionable Element Site, includes

channel modifications and three bridge culvert replacements, consisting of two road bridges and a railroad bridge, which are intended to reduce flood risk by 26% under the U.S. Army Corps of Engineers (USACE) Intermediate Relative Sea Level Change (RSLC) scenario.

a. The channel modifications include widening and deepening of the East Riser Channel, bank stabilization, and replanting of vegetation. There are approximately 4,150 linear feet (LF) of channel improvements, consisting of excavation and dredging to make the channel deeper and wider, from the downstream face of the Moonachie Avenue railroad bridge to the existing East Riser tide gate. The channel width will be increased to an average of approximately 10 feet along the profile. Channel modifications are anticipated to require approximately 61,600 cubic yards (CY) of material to be removed and disposed of offsite at a state licensed and approved location.

b. The culvert replacements are located at Commercial Avenue with a bridge opening modification to a rectangular culvert opening approximately 30 feet wide and eight feet high, and at Amor Avenue a bridge opening modification to a rectangular culvert opening approximately 30 feet wide and eight feet high.

c. A railroad bridge replacement is proposed at Seaman's Landing, to include a rectangular culvert replacement approximately 44 feet wide and eight feet high.

3. The proposed project requires mitigation for the permanent disturbance of 0.024 acres of scrub/shrub wetlands. This will be fulfilled through the purchase of credits from an approved mitigation bank, unless rectification is able to fulfill the requirement along with normal operations and maintenance for the project. The estimated total cost of fish and wildlife mitigation, including rectification, is $1,500,000.

4. The New Jersey Department of Environmental Protection is the non-Federal cost sharing sponsor for all features of the project. In addition to the Recommended Plan, this study acknowledges and relies upon the non-Federal sponsor's additional floodplain management responsibilities and emergency response actions in conjunction with state and Federal Emergency Management Agency (FEMA) related programs to mitigate the plan's residual risk including potential life loss and damages to critical infrastructure. Based on October 2025 price levels, the estimated total project first cost is $278,334,000. The total project first cost includes the value of lands, easements, rights-of-way, relocations, and dredged or excavated material disposal areas (LERRD) estimated to be $41,854,000. The current project plan requires perpetual channel improvement easements, related to the culvert and railroad bridge replacements, temporary work easements for construction staging, and a perpetual road easement for future Operations and Maintenance. Cost sharing is applied in accordance with the provisions of Section 103 of the WRDA of 1986, as amended (33 U.S.C. § 2213), as follows:

a. The Federal share of the project first cost for initial construction is estimated at $180,916,000 and the non-Federal share, which includes the cost of LERRD, is estimated at $97,417,000, which equates to 65 percent Federal and 35 percent non-Federal.

b. The additional annual cost of operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) for the Recommended Plan is estimated to be $414,000. OMRR&R activities include actions to sustain the constructed project and to maintain the stated level of benefits at the completion of construction and into the future. The non-Federal sponsor will be responsible for 100 percent of the cost of project OMRR&R.

5. Based on a 3.25 percent discount rate and a 50-year period of analysis, the equivalent average annual benefits are estimated at $12,768,000 and equivalent average annual costs are estimated at $7,961,000, with equivalent average annual net benefits of $4,807,000 and a benefit-to-cost ratio (BCR) of 1.6 to 1. All project costs are allocated to the authorized purpose of flood risk management.

6. The Recommended Plan outlined herein aligns with several "Bands of Emphasis," as outlined in the Assistant Secretary of the Army for Civil Works (ASA(CW)) February 2026 guidance, including:

a. Protecting human life and safety (Band 1)

b. Protecting infrastructure economically or strategically significant to nation (Band 2)

c. Protecting human property (Band 4)

d. Protecting state level infrastructure (Band 6)

e. Protecting municipal infrastructure (Band 7)

7. The study report fully describes flood risk to structures and life safety associated with inland flooding. The Recommended Plan is estimated to reduce flood damages by 26% under the USACE Intermediate RSLC scenario and by 29% under the USACE Low RSLC scenario. Damage reduction varies by event and location within the Actionable Element Site. The Recommended Plan would greatly reduce fluvial flooding but not fully eliminate future damages, and residual risk would remain from coastal storm inundation. The residual risk, along with the potential consequences, has been communicated to the non-Federal sponsor and will become a requirement of any communication and evacuation plan.

8. Remaining residual risk from coastal storms in the area of the East Riser Actionable Element may be addressed in a future feasibility study, subject to the availability of funds or through actions by other entities.

a. USACE identified a tide gate as a potential coastal storm risk management feature for the Hackensack River. A tide gate would require residual risk features behind it to manage high frequency events and other risk contributors, including flood risk management. The recommendation for East Riser Actionable Element is consistent with that finding..

b. Addressing the coastal storm risk and riverine risk concurrently for the East Riser Actionable Element was evaluated under the Meadowlands Rebuild by Design study completed by the New Jersey Department of Environmental Protection, which concluded that such a solution is viable and necessary in the long term, and identified the channel work and easing culvert constrictions as a first increment of the project. The recommendation for East Riser Actionable Element is consistent with that finding.

c. Teterboro Airport, owned and operated by the Port Authority of New York and New Jersey, upstream of the East Riser Actionable Element Site, has identified necessary drainage improvements that could induce flooding along East Riser Channel if implemented in the existing condition. Construction of the East Riser Actionable Element will allow for construction of these drainage improvements to maintain continuity of operations at Teterboro Airport during heavy local rainfall without inducing flooding downstream.

9. Implementation strategies for the risk management system would be a shared responsibility conducted in coordination with the non-Federal sponsor and FEMA to cost effectively reduce risk from flooding.

10. All compliance with required applicable environmental laws and regulations has been completed.

11. In accordance with USACE policy on the review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and rigorous review process. The comprehensive review process included District Quality Control Review, Agency Technical Review, and Headquarters Policy and Legal Compliance review to confirm the planning analyses, alternative design and safety, and the quality of decisions. Washington-level review indicates that the plan recommended by the reporting officers complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies, as well as other administrative and legislative policies and guidelines. The views of interested parties, including federal, state, and local agencies, were considered and all comments from public reviews have been addressed and incorporated into the final report documents where appropriate.

12. USACE decision documents recognize cost risk and uncertainty surrounding implementation. All cost estimates will carry a degree of uncertainty. The estimated total

project first cost for the Recommended Plan at the 80 percent confidence interval is estimated at $278,333,000. This project carries a degree of uncertainty such that if the main drivers described below are realized, the first cost for the Recommended Plan could increase to approximately $300,416,000. The recommended plan has various construction components. These components are at 90 percent in project definition. The overall recommended plan is at 90 percent design. Based on the recommended project design of the construction components, the total project cost is designated as a Class 3 estimate. The total project first cost includes a contingency value of $61,995,000, which is approximately 29 percent of the estimated base project cost of $216,338,000. The cost contingencies are intended to cover cost and schedule increases due to the identified project risks and their probability of occurrence. Changes to assumptions or the basis of design can result in additional risks not currently identified. For the Recommended Plan project first costs, the currently known major uncertainty drivers are the following: 1) potential schedule impacts if HTRW is discovered, requiring a clean site be provided by the non-Federal sponsor (at 100% non-Federal sponsor cost); 2) design elements may be refined during the PED phase; 3) variation in major material costs, overhead costs, and bid assumptions; and 4) availability of Federal and non-Federal funds, and the sponsor's ability to obtain all required real estate interests in a timely fashion as reflected in the project schedule. As the project moves into the next phases, USACE will focus risk management and mitigation on the primary cost and other significant risk drivers to the extent within USACE control. However, there still exists the potential for other unanticipated and uncontrollable changes in environmental or economic conditions that could further increase the total project first cost beyond the current estimate and/or necessitate changes in the project's design.

13. In full consideration of the risks as documented in the preceding paragraphs in this report, I concur in the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend that flood risk management improvements for initial Actionable Elements, known as the East Riser Actionable Element Site, be authorized in accordance with the reporting officers' Recommended Plan at an estimated cost of $278,333,000 for initial construction, with such modifications as in the discretion of the Chief of Engineers may be advisable. Federal implementation of the project for flood risk management includes, but is not limited to, the following items of local cooperation to be undertaken by the non-Federal sponsor in accordance with applicable Federal laws, regulations, and policies:

a. Provide a minimum of 35 percent, up to a maximum of 50 percent, of construction costs, as further specified below:

1. Provide, during design, 35 percent of design costs in accordance with the terms of a design agreement entered into prior to commencement of design work for the project;

2. Pay, during construction, a contribution of funds equal to 5 percent of construction costs;

3. Provide all lands, easements, rights-of-way, and placement area improvements and perform all relocations determined by the Federal government to be required for the project;

4. Provide, during construction, any additional contribution necessary to make its total contribution equal to at least 35 percent of construction costs;

b. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) that might reduce the level of flood risk reduction the project affords, hinder operation and maintenance of the project, or interfere with the project's proper function;

c. Inform affected interests, at least yearly, of the extent of risk reduction afforded by the flood risk management features; participate in and comply with applicable Federal floodplain management and flood insurance programs; prepare a floodplain management plan for the project to be implemented not later than one year after completion of construction of the project; and publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with the project;

d. Operate, maintain, repair, rehabilitate, and replace the project or functional portion thereof at no cost to the Federal government, in a manner compatible with the project's authorized purposes and in accordance with applicable Federal laws and regulations and any specific directions prescribed by the Federal government;

e. Give 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 project to inspect the project, and, if necessary, to undertake work necessary to the proper functioning of the project for its authorized purpose;

f. Hold and save the Federal government free from all damages arising from design, construction, operation, maintenance, repair, rehabilitation, and replacement of the project, except for damages due to the fault or negligence of the Federal government or its contractors;

g. Perform, or ensure performance of, any investigations for hazardous, toxic, and radioactive wastes (HTRW) that are determined necessary to identify the existence and extent of any HTRW regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, and any other applicable law, that may exist in, on, or under real property interests that the Federal government determines to be necessary for construction, operation, and maintenance of the project;

h. Agree, as between the Federal government and the non-Federal sponsor, to be solely responsible for the performance and costs of cleanup and response of any HTRW regulated under applicable law that are located in, on, or under real property interests required for construction, operation, and maintenance of the project, including the costs of any studies and investigations necessary to determine an appropriate response to the contamination, without reimbursement or credit by the Federal government;

i. Agree, as between the Federal government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the owner and operator of the project for the purpose of CERCLA liability or other applicable law, and to the maximum extent practicable shall carry out its responsibilities in a manner that will not cause HTRW liability to arise under applicable law; and

j. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, (42 U.S.C. 4630 and 4655) and the Uniform Regulations contained in 49 C.F.R Part 24, in acquiring real property interests necessary for construction, operation, and maintenance of the project including those necessary for relocations, and placement area improvements; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

14. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program or the perspective of higher review levels within the Executive Branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the non-Federal sponsor, interested Federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

WILLIAM H. GRAHAM JR.
Lieutenant General, USA
Chief of Engineers