



**DEPARTMENT OF THE ARMY**  
**OFFICE OF THE CHIEF OF ENGINEERS**  
**WASHINGTON, D.C. 20310-2600**

REPLY TO  
ATTENTION OF

23 AUG 2002

CECW-PM (10-1-7a)

SUBJECT: Morganza, Louisiana, to the Gulf of Mexico, Mississippi River and Tributaries

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on reducing hurricane and storm damages for the Morganza to the Gulf of Mexico area of Louisiana. It is accompanied by the report of the district and the Mississippi River Commission. These reports are in final response to a resolution by the Committee on Public Works and Transportation of the United States House of Representatives on April 30, 1992. The study resolution requested a review of "the report of the Chief of Engineers on the Mississippi River and Tributaries Project, published as House Document 308, Eighty-eighth Congress, Second Session, and other pertinent reports, to determine whether modifications of the recommendations contained therein are advisable in the interest of flood control, navigation, wetlands conservation and restoration, wildlife habitat, commercial and recreational fishing, salt water intrusion and fresh water and sediment diversion, and other purposes in the area between the East Atchafalaya Protection Levee and the Mississippi River/Bayou Lafourche System, from Morganza, Louisiana, to the Gulf of Mexico." Pre-construction engineering and design activities for the Morganza, Louisiana, to the Gulf of Mexico project will continue under the authority provided by the resolution cited above.

2. The reporting officers recommended a plan to reduce hurricane and storm damages by providing a 100-year level of protection. The recommended plan includes raising or constructing 72 miles of levees to elevations varying from +15.0 feet National Geodetic Vertical Datum (NGVD) to +9.0 feet NGVD. The plan includes constructing nine 56-foot-wide sector gate structures in various waterways, one 125-foot floodgate in the Gulf Intracoastal Waterway (GIWW) near Bayou Lafourche, two 125-foot floodgates in the GIWW near Houma, a 200-foot-wide and 1,200-foot-long lock structure in the Houma Navigation Canal (HNC), and new discharge pipes for six existing pump stations. The plan also includes twelve sets of 6-foot by 6-foot concrete box culverts through the levee to allow tidal ebb and flow. Mitigation features in the plan include the creation of 1,352 acres of marsh habitat and widening 10,600 feet of Minors Canal by 40 feet. Consistent with reducing hurricane and storm damages in an environmentally sustainable manner, the project will be designed and operated to achieve coastal wetland

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conservation through the improved distribution of freshwater inflows to wetlands wherever feasible. The specific designs and operating plans will be formulated in consultation with the interagency habitat evaluation team.

3. The State of Louisiana Department of Transportation and Development (DOTD) is the non-Federal cost sharing sponsor for all features of the plan. Based on October 2001 price levels, the total first cost of the plan is estimated at \$680,000,000, all for hurricane and storm damage reduction (which is cost shared at 65 percent Federal and 35 percent non-Federal). The total cost includes \$48,000,000 for environmental mitigation. The total cost of the plan would be cost shared \$442,000,000 Federal and \$238,000,000 non-Federal. The equivalent average annual costs are \$52,254,000 and the average annual benefits are \$79,871,000 based on an interest rate of 6 1/8 percent and a 50-year period of analysis. The equivalent average annual net benefits are \$27,617,000 and the benefit-to-cost ratio is approximately 1.5 to 1.0. The recommended plan is the national economic development plan.

4. Washington-level review indicated that the plan recommended by the reporting officers is technically sound, economically justified, and environmentally and socially 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. Also, the views of interested parties, including Federal, state, and local agencies, have been considered. The plan incorporates the recommendations presented in the U.S. Fish and Wildlife Service's Fish and Wildlife Coordination Act Report.

5. I concur in the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend that improvements for hurricane and storm damage reduction for the Morganza, Louisiana, to the Gulf of Mexico, Mississippi River and Tributaries, project be authorized in accordance with the reporting officers' plan with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Federal and State laws and policies, including the Water Resources Development Act of 1986, as amended by Section 210 of the Water Resources Development Act of 1996.

6. Federal implementation of the recommended project would be subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies, including the following requirements:

a. Provide a minimum of 35 percent of total project costs as further specified below:

(1) Enter into an agreement that provides, prior to execution of a project cooperation agreement for the project, 25 percent of design costs,

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(2) Provide, during construction, any additional funds needed to cover the non-Federal share of design costs,

(3) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or ensure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of the project,

(4) 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 project, and

(5) Provide, during construction, any additional costs as necessary to make its total contribution equal to at least 35 percent of total project costs.

b. For so long as the project remains authorized, operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, at no cost to the Government, in accordance with applicable Federal and State laws and any specific directions prescribed by the Government.

c. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the local sponsor owns or controls for access to the project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project.

d. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, which provide that the Secretary of the Army shall not commence the construction of any water resources project, or separable element thereof, until the non-Federal sponsor has entered into a written agreement to furnish its required cooperation for the project or separable element.

e. Hold and save the Government free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the Government or the Government's contractors.

f. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project to the extent and in such detail as will properly reflect total project costs.

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g. Perform, or cause to be performed, any investigations for hazardous substances that 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 necessary for the construction, operation, and maintenance of the project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.

h. Assume complete financial responsibility 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 Government determines necessary for the construction, operation, or maintenance of the project.

i. To the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA.

j. Prevent obstructions of, or encroachments on, the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) that might reduce the level of protection of the project, hinder its operation or maintenance, or interfere with its proper function, such as any new development on project lands or the addition of facilities that would degrade the benefits of the project.

k. 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, and performing relocations for construction, operation, and maintenance of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

l. Comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, 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."

m. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to have prepared a floodplain management plan within one year after the date of signing a project cooperation agreement. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to

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preserve the level of flood protection provided by the project. As required by Section 402, implement the plan not later than 1 year after completion of the construction of the project. Provide an information copy of the plan to the Government upon its preparation.

n. Provide the non-Federal share of that portion of the costs of mitigation and data recovery activities associated with historic preservation that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement.

o. Participate in and comply with applicable Federal floodplain management and flood insurance programs.

p. 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.

q. Inform affected interests, at least annually, regarding the limitations of the projection afforded by the project.

7. 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 nor 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 the Congress, the sponsor, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.



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