

CORPS OF ENGINEERS, U. S. ARMY
Office of the President
MISSISSIPPI RIVER COMMISSION
Vicksburg, Mississippi

30 January 1963

SUBJECT: Interim Survey Report on Hurricane Study of Lake Pontchartrain, Louisiana and Vicinity

TO: Chief of Engineers
Department of the Army
Washington 25, D. C.

1. This report is in response to a Congressional Resolution adopted 4 February 1957 as follows:

"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES SENATE, That the Chief of Engineers of the United States Army is hereby requested to review the reports published as House Document Numbered 691, Seventy-ninth Congress, Second Session, and subsequent reports on Lake Pontchartrain, Louisiana, with a view to determining the advisability of extending the existing levee on the south shore of Lake Pontchartrain in Jefferson Parish, along the lake shore in St. Charles Parish to tie-in with the south guide levee of the Bonnet Carre Spillway, in view of recent changed physical or economic conditions."

2. The south shore levee in Jefferson Parish and the guide levee of the Bonnet Carre Spillway are features of the project for flood control in the alluvial valley of the Mississippi River authorized by the Flood Control Act of May 15, 1928, as amended. A report under the above resolution normally would be a responsibility of the Mississippi River Commission. However, the problem is related closely to a more extensive study of hurricane protection authorized by Public Law 71, 84th Congress, approved 15 June 1955. Accordingly, reports under the combined authority of Public Law 71, the above resolution, and another related resolution were submitted by the District Engineer, New Orleans District dated 21 November 1962 and by the Division Engineer, Lower Mississippi Valley Division dated 18 January 1963. The reports bear the same title as this report.

3. The hurricane study reports include a recommended project for a hurricane barrier at the east end of Lake Pontchartrain to prevent

entry of hurricane surges. The barrier would comprise enlargement of existing seaward levees of the Citrus and New Orleans East areas, which lie on the south shore of the lake, and a new embankment extending to the north shore, with control gates in Chef Menteur Pass and a navigation lock in the Rigolets. These proposed works are shown on Plate 3 of the District Engineer's report. The hurricane study finds that, with the height of hurricane surges reduced by the barrier, the existing Jefferson Parish levee is of adequate height to protect the south shore area in Jefferson Parish from a very severe hurricane. However, wave wash protection at a cost of \$509,000 is required to insure permanence of the levee, and is recommended. The hurricane study also finds that a new levee system, comprising 5.8 miles of lake shore levee between the Bonnet Carre Spillway and the St. Charles-Jefferson Parish line and 3.8 miles of lateral levee along the St. Charles-Jefferson Parish Line Canal, is justified by control of residual flood damage and resulting land enhancement. Construction of the levee, interior collection ditches along the levee, and a gravity drainage outlet, at a cost of \$5,441,000 for construction and \$258,000 for lands, damages and relocations, is recommended. The locations of these levee improvements are shown on Plate 3 of the District Engineer's report.

4. In conformance with policy established by action of Congress on previous hurricane studies, local interests are required to contribute a minimum of 30 percent of the total cost of hurricane protection works. The specific requirements recommended in the hurricane study report that are applicable to the Jefferson and St. Charles Parish levees are that prior to initiation of construction on each separable independent feature local interests give assurances satisfactory to the Secretary of the Army that they will without cost to the United States:

(a) Provide all lands, easements, and rights-of-way, including borrow and spoil-disposal areas necessary for construction, operation, and maintenance of the project;

(b) Accomplish all necessary alterations and relocations to roads, railroads, pipelines, cables, wharves, drainage structures, and other facilities required by the construction of the project;

(c) Hold and save the United States free from damages due to the construction works;

(d) Bear 30 percent of the first cost, to consist of the fair market value of the items listed in subparagraphs (a) and (b) above and a cash contribution as presently estimated below, to be paid either in a lump sum prior to initiation of construction or in installments at least annually in proportion to the Federal appropriation prior to start of pertinent work items, in accordance with construction schedules as required by the Chief of Engineers, or, as a substitute for any part of the cash contribution, accomplish in accordance with approved construction schedules items of work of equivalent value as determined by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined:

<u>Feature</u>	<u>Total Cost</u>	<u>Local Share</u>	<u>Lands and Relocations</u>	<u>Cash Contribution</u>
Jefferson Parish	\$ 509,000	\$ 153,000	\$ 0	\$ 153,000
St. Charles Parish	5,699,000	1,710,000	258,000	1,452,000

(e) Provide all interior drainage and pumping plants required for reclamation and development of the protected areas;

(f) Maintain and operate all features of the project in accordance with regulations prescribed by the Secretary of the Army, including levees, floodgates and approach channels, drainage structures, and drainage ditches or canals;

(g) Acquire adequate easements or other interest in land to prevent encroachment on existing ponding areas unless substitute storage capacity or equivalent pumping capacity is provided promptly.

5. The Mississippi River Commission has considered the reports of the District and Division Engineers, and finds that recommended plans for a hurricane barrier and lake-shore levee improvements in St. Charles and Jefferson Parishes are consistent with improvements under the jurisdiction of the Commission, and will provide adequate protection to the lake-shore areas in St. Charles and Jefferson Parishes.

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