ED-7
61-1

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160

IN REPLY REFER TO
LMNED-MP

15 July 1976

SUBJECT: Lake Pontchartrain, Louisiana and Vicinity, Justification of Additional Engineering & Design (E&D) and Supervision & Administration (S&A) Funds

Division Engineer, Lower Mississippi Valley,
ATTN: LMVED

1. Additional funds are required to accomplish a benefit reanalysis and an environmental study for the subject project. The benefit reanalysis is required in order to provide an overall economic analysis for the subject project and an incremental analysis for each hydrologic unit of the project area. The environmental study is required in order to insure an adequate before and after analysis of the effects of the barrier structures on salinity regimes within Lake Pontchartrain and on ingress and egress of marine and estuarine organisms through the Chef Menteur and the Rigolets Passes. This study is further required in order to determine the value of the surrounding marshlands to the life systems within the lake and to define the interactions between the lake and marsh systems and thus the effects of varied land use on both systems.

2. Benefit reanalysis.

a. Authority. The benefit reanalysis has been directed by the Chief of Engineers; reference paragraph 4 of the 2d indorsement to a New Orleans District letter dated 20 June 1972 and entitled "Lake Pontchartrain, Louisiana and Vicinity, Lake Pontchartrain Barrier Plan, General Design Memorandum No. 2, Supplement No. 5B, New Orleans East Lakefront Levee, Paris Road to South Point." (A copy of this indorsement and the 3d and 4th indorsements are inclosed for ready reference--inclosure 1).

b. Scope of work. The reanalysis will require the following work:

(1) Obtaining location and/or intensification benefits within each hydrologic unit (HU).

(2) Obtaining inundation reduction benefits (present and future) for each HU.

(3) Obtaining employment benefits attributable to each feature of project construction.

(4) Projecting demographic and socioeconomic trends in each HU under with and without project conditions.

(5) Projecting land use, types of development, and rates of development disaggregations with special emphasis on the critical St. Charles Parish, New Orleans East, and Chalmette areas.

(6) Appraising land values by types of development, with and without the project, in each HU.

(7) Complying with new regulations and requirements which have come into being subsequent to both the original economic analysis and recent surveys updating original field data.

Accomplishment of the above work will provide a new overall economic analysis for the Lake Pontchartrain project and an incremental analysis for each hydrologic unit of the project area.

c. Funds required. Funds expended through 31 May 1976 total $147,034 including $54,355 for an A-E contract for collection of economic field data. The estimated additional funds required to complete the benefit reanalysis are as follows:

FY 77	$40,000
FY 78	20,000
TOTAL	$60,000

The funds expended plus the estimated additional funds required total $207,000 (rounded).

3. Comprehensive environmental study.

a. Justification. In accord with the requirements of the National Environmental Policy Act of 1969, environmental and biological inventory data are needed to provide a continuing assessment of the environmental impacts associated with all aspects of construction, operation and maintenance of the project features.

LMNED-MP 15 July 1976

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In a public meeting held on 22 February 1975 in New Orleans, the US Fish and Wildlife Service recommended that studies be initiated to determine the effects of the barrier structures on Lake Pontchartrain salinity regimes, and on the ingress and egress of marine and estuarine organisms through Chef Menteur and The Rigolets passes; and that if these studies indicate that the structures are detrimental to this estuarine ecosystem, the structures should be modified to rectify the problems. A similar recommendation for a periodic review and evaluation regarding the effects on fish and wildlife was made by the Louisiana Wildlife and Fisheries Commission.

Since the deferring of the St. Charles Parish Lakefront levee construction in 1973, we have been committed to additional environmental studies needed to fully evaluate the relationship of the marsh to the surrounding ecosystem and to provide a basis for a decision on whether the lakefront levee or any alternative feature should be built.

In his 20 August 1975 statement of findings for the public meeting, Brigadier General Heiberg stated that he had made, among others, the following determination:

"Continued study of the environmental effects of the project is necessary. This is especially true of the St. Charles Parish area and the barrier complexes. We are contemplating a thorough and comprehensive data collection and evaluation effort to augment the environmental studies of the Lake Pontchartrain estuary which we have made over the past 2 decades. This effort combined with our continuing sampling and evaluation programs will insure an adequate before and after environmental analysis of the project works. This effort will also assist in resolving the matter of the St. Charles Parish lakefront levee and the alternative works proposed for that area. Should any significant detrimental environmental effects be discovered through these analyses, the Corps of Engineers would move quickly to alleviate these effects."

b. Scope of work. The study will require the following work:

(1) Obtaining environmental baseline data which is needed for long-range planning and assessment of cumulative impacts of natural and manmade environmental changes in Lake Pontchartrain and surrounding wetlands.

(2) Obtaining specific information for management of the salinity regime of Lake Pontchartrain by means of the Seabrook Complex, land-use decisions associated with levee construction in the St. Charles Parish wetlands, and determination of the effects of the proposed barrier structures on the biological resources of Lake Pontchartrain.

(3) Obtaining biological data which are needed to combine with data obtained from on-going water quality and modeling studies in order to provide a basis for management of the land and water resources of the Pontchartrain Basin.

c. Funds required. An estimate of $290,000 (E&D cost only) has been included in the project cost estimate (PB-3). The estimated cost has escalated to $1,025,000 (E&D and S&A cost). The major justification for the increase in cost from the original estimate is the increase in technical complexity and the expansion of geographical extent of the study. The first estimate ($290,000) covered studies which emphasized only the St. Charles Parish wetlands and which were directed toward an eventual decision on the construction of the St. Charles Parish Lakefront levee. The present estimate ($1,025,000) is for studies which include the entire Pontchartrain Basin. The most significant factors in the escalation of estimated costs from the first estimate to the present estimate are:

(1) Additional water chemistry studies are needed in order to establish the nutrient budget for the lake and baseline data for prediction of effects of environmental changes. This results in a need for three additional professionals, additional support personnel and analytical equipment and supplies.

(2) A greater effort must be made in fisheries data collection, including nekton and nursery area studies. The first estimate relied on the available literature, which is insufficient. In addition, fisheries data must be collected concurrently with all other data in order to establish the proper trophic relationships in the lake community.

(3) A larger sampling boat is needed due to safety considerations and the required on-board refrigeration, power generation, and analytical equipment.

(4) The logistic problems associated with sampling this large geographical area necessitate the establishment of a centrally located base camp and support facility for storage of equipment and boat docking.

(5) Additional small boats are required for work in shallow areas.

(6) More vehicles are required to transport personnel, equipment, and samples.

(7) More consideration is given to employee benefits, maintenance, and contingency costs.

(8) During a recent prenegotiation meeting with the candidate contractor, it was determined that the duration of the study should be lengthened in order to accommodate the additional time necessary for field reconnaissance, equipment purchase and delivery, and both Corps of Engineers and contractor review of draft and final reports. This resulted in increasing the duration of the study by 8 months, with consequent increases in direct labor costs.

(9) A 10 percent wage rate inflation factor was used to calculate labor costs. This factor may be adjusted during contract negotiations and auditing procedures.

(10) A 10 percent inflation factor was used to calculate equipment costs.

The estimated costs to accomplish the environmental studies are as follows:

	S&A	E&D	Totals
FY 77	$20,000	$535,000	$555,000
FY 78	20,000	290,000	310,000
FY 79	10,000	150,000	160,000
TOTALS	$50,000	$975,000	$1,025,000

4. It is requested that the estimated $207,000 and $1,025,000 E&D and S&A costs be approved for inclusion in the next project cost estimate (PB-3) and for funding the completion of the benefit reanalysis and the accomplishment of the environmental study according to the schedules presented herein.

FOR THE DISTRICT ENGINEER:

FREDERIC M. CHATRY
Chief, Engineering Division

1 Incl
as

DAEN-CWE-B (LMVED-PP, 20 Jun 72) 2nd 1nd
SUBJECT: Lake Pontchartrain, Louisiana and Vicinity, Lake Pontchartrain Barrier Plan, General Design Memorandum No. 2, Supplement No. 5B, New Orleans East Lakefront Levee, Paris Road to South Point

DA, Office of the Chief of Engineers, Washington, D.C. 20314 5 December 1972

TO: Division Engineer, Lower Mississippi Valley, ATTN: LMVED-TD

1. Approved, subject to the comments of the Division Engineer and to the comments set down in the following paragraphs.

2. Paragraph 8c. Even though construction of the Lake Pontchartrain Project was commenced prior to 1 January 1972, it appears that Section 221 of Public Law 91-611 is applicable since the subject work is a new increment and paragraph 8a indicates that the State Department of Public Works was contacted about 5 March 1971 for the purpose of obtaining necessary assurances. The guidelines set forth in DAEN-CWO-C teletype, 12 January 1972, subject: "Applicability of Section 221, FCA of 1970, to Long Term Continuing Projects, DAEN-CWO-C" require compliance with Section 221 under circumstances described in the subject supplement.

3. Paragraph 60. An up-to-date letter should be obtained from the Environmental Protection Agency, prior to the preparation of plans and specifications, to insure that the project has been properly coordinated under current conditions.

4. Paragraph 69. The subject supplement does not present an economic analysis for the New Orleans East area, even by reference. Thus, there is no current information available for review of benefits, project formulation, or evaluation procedures. However, the authorizing document presented an economic analysis, including incremental costs and benefits for the New Orleans East area, that could have been expanded and updated for inclusion in the subject supplement. Although ER 1110-2-1150, dated 1 October 1971, need not be implemented in regard to combined Phase I/ Phase II General Design Memoranda which were substantially advanced, the subject supplement is unresponsive to the previous ER insofar as presentation of project economics is concerned, see paragraph 1m, Appendix I, ER 1110-2-1150, 19 June 1970. However, based on information in the survey report, there is no doubt that incremental economic justification can be demonstrated albeit based entirely on future development. The subject supplement would be strengthened by a discussion of the development that has taken place since the survey report was prepared 10 years ago, Then, a comparison of this observed development could be made with the projected development in the survey report studies and the subject economic analysis adjusted in accordance with those findings.

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DAEN-CWE-B (LMNED-PP, 20 Jun 72) 2nd Ind 5 December 1972
SUBJECT: Lake Pontchartrain, Louisiana and Vicinity, Lake Pontchartrain Barrier Plan, General Design Memorandum No. 2, Supplement No. 5B, New Orleans East Lakefront Levee, Paris Road to South Point

Accordingly, the subject supplement should be modified to include both an overall economic analysis for the Lake Pontchartrain barrier plan and an incremental analysis for the New Orleans East area.

5. Paragraph 18 of ER 1110-2-1150 states that one or more public meetings or workshops should be held during post authorization planning studies; no indication of such a meeting or meetings have been noted. Additional information on this aspect should be furnished.

FOR THE CHIEF OF ENGINEERS:

1 Incl
wd

C. E. Slayton
for JOSEPH M. CALDWELL
Chief, Engineering Division
Directorate of Civil Works

LMVED-TD (NOD 20 Jun 72) 3d Ind
SUBJECT: Lake Pontchartrain, Louisiana and Vicinity, Lake Pontchartrain Barrier Plan, General Design Memorandum No. 2, Supplement No. 5B, New Orleans East Lakefront Levee, Paris Road to South Point

DA, Lower Mississippi Valley Division, Corps of Engineers, Vicksburg, Miss. 39180 11 Jan 73

TO: HQDA (DAEN-CWE-B) WASH DC 20314

1. Subject correspondence is returned for reconsideration of instructions in para 2 and 4 of your 2d Ind as discussed below.

2. Para 2, 2d Ind. By separate letter, same subject as above dated 3 Jan 73, to DAEN-REA-P we requested that para 2 of 2d Ind this chain be withdrawn. (Cy furnished as Incl 2 for ready reference).

3. Para 4, 2d Ind. a. This para requests an incremental analysis of benefits and costs for the proposed work and refers to such an analysis in the authorizing document. We understand that an incremental analysis could be made on the New Orleans East Area, however, since this area concerns only one segment of the Lake Pontchartrain Barrier Plan, we consider that an incremental analysis to be inappropriate and request that the comment be withdrawn.

b. New Orleans District has been given authority to negotiate an A-E contract for Collection of Economic Field Data to be used in updating the economic analysis of the Lake Pontchartrain and Vicinity Hurricane Protection Project. The analysis that will be prepared based on these data will satisfy your requirement for an overall economic analysis, and approval of this DM should not be contingent on submission thereof.

FOR THE DIVISION ENGINEER:

Fred E. Anderson Jr.

FERD E. ANDERSON, JR.
Colonel, CE
Deputy

1 Incl
2. LMVRE-A ltr
dtd 3 Jan 73

CF:
LMNED-PP

DAEN-CWE-B (LMNED-PP, 20 Jun 72) 4th Ind
SUBJECT: Lake Pontchartrain, Louisiana and Vicinity, Lake Pontchartrain Barrier Plan, General Design Memorandum No. 2, Supplement No. 5B, New Orleans East Lakefront Levee, Paris Road to South Point

DA, Office of the Chief of Engineers, Washington, D.C. 20314 14 March 1973

TO: Division Engineer, Lower Mississippi Valley, ATTN: LMVED-TD

1. The information furnished in the correspondence referenced in paragraph 2 of the 3rd Indorsement is satisfactory; therefore, concur that the subject work is exempt from the requirements of Section 221 of Public Law 91-611. Accordingly, the comment in paragraph 2 of the 2nd Indorsement, this chain, is withdrawn.

2. 3rd Indorsement.

a. Paragraph 3a. Since the New Orleans East Area is to receive protection from the considered levee segment and since this area was separately justified in the survey report, there appears to be no basis for omitting an incremental justification. Accordingly, the incremental justification for the New Orleans East Area should be updated and presented, in the subject design memorandum or in a separate submittal.

b. Paragraph 3b. Approval of the subject design memorandum is not contingent on submission of the overall economic analysis. However, this analysis should be expeditiously pursued and submitted for approval as soon as practicable.

FOR THE CHIEF OF ENGINEERS:

Charles E. Edgar III

1 Incl
wd

CHARLES E. EDGAR III
LTC, Corps of Engineers
Assistant Director of Civil Works
for Mississippi Valley

S-4 Aug 76

LMVED-TD

Lake Pontchartrain, La., and Vicinity,
Justification of additional Engineering and Design (E&D) and Supervision and Administration (S&A) Funds

LMVPD-P

TO C/Eng Div FROM C/Plng Div DATE 4 Aug 76 CMT 2
Robbins/ea/383

1. Prior to approval of the requested funding and schedules, it would be desirable to meet with NOD to discuss the status and completion of the benefit reevaluation, and to discuss in some depth the need for and objectives of the proposed environmental studies, how they are to be accomplished, and time frames. The relationship between these proposals and the recently approved use of Dr. Eugene Cronin as a consultant should be clarified by the District.

2. It is suggested that a meeting in the Division office be scheduled as soon as possible. Planning Division will participate.

1 Incl
nc

FRED H. BAYLEY III

23 Aug 76

Lake Pontchartrain, Louisiana and Vicinity,
Justification of Additional Engineering & Design (E&D)
& Supervision & Administration (S&A) Funds

LMVPD-P

C/Econ & Soc Anal Br
C/Env Anal Br

C/Plng Div

28 Jul 76
Robbins/ea/383

3 August 1976.

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office. S-3 Aug 76

REFERENCE OR OFFICE SYMBOL	SUBJECT
LMVPD-P	Lake Pontchartrain, Louisiana and Vicinity, Justification of Additional Engineering & Design (E&D) & Supervision & Administration (S&A) Funds

TO C/Econ & Soc Anal Br
C/Env Anal Br

FROM C/Plng Div

DATE 28 Jul 76

CMT 1

Robbins/ea/383

Please review the subject document and furnish your comments by 3 August 1976.

Fred H. Bayley III

1 Incl
as

FRED H. BAYLEY III

Mr. Robbins
Mr. Tom Campbell

LMVPD-E

TO C/Plng Div FROM C/Econ & Soc Anal Br DATE 2 Aug 76 CMT 2

JOHNSON/jst/387 MEJ

1. The Economic and Social Analysis Branch agrees that funds are necessary for the completion of the benefit reanalysis. We recommend approval of the the $60,000 subject to NOD furnishing a cost estimate breakdown of the remaining work.

2. To date, progress on the benefit reanalysis has been unduly slow. In June of 1972, OCE in their 4th Indorsement to the Paris Road to South Point GDM Supplement, stated, "This analysis should be expeditiously pursued and submitted for approval as soon as practicable." To carry the benefit reanalysis into FY 78 is totally unreasonable; we recommend that NOD be directed to finish the reanalysis in FY 77.

Homer R. Gardner

1 Incl
wd

HOMER R. GARDNER

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office. 3-3 Aug 76

REFERENCE OR OFFICE SYMBOL	SUBJECT
LMVPD-P	Lake Pontchartrain, Louisiana and Vicinity, Justification of Additional Engineering & Design (E&D) & Supervision & Administration (S&A) Funds

TO C/Econ & Soc Anal Br ~~C/Env Anal Br~~ FROM C/Plng Div DATE 28 Jul 76 CMT 1
Robbins/ea/383

Please review the subject document and furnish your comments by 3 August 1976.

Fred H. Bayley III

FRED H. BAYLEY III

1 Incl
as

LMVPD-R

Mr. Tom Campbell
M. Robbins

TO C/Plng Div FROM C/Env Anal Br DATE 30 Jul 76 CMT 2
HOLLAND/lsp/6635

Although the NOD estimates for scope and costs of environmental studies appear reasonable, we have no detailed knowledge of these proposals. Prior to approval of funding it would be desirable to meet with NOD to discuss in some depth the need for and objectives of the proposed environmental studies, how they are to be accomplished, and time frames. The relationship between these proposals and the recently approved use of Dr. Eugene Cronin as a consultant should also be clarified.

C. H. Harris

CHARLES H. HARRIS

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