

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

1979

PROJECT: Lake Pontchartrain, Louisiana and Vicinity (Hurricane Protection) (Continuing)

LOCATION: The project is located in St. Charles, Jefferson, Orleans, St. Bernard, and St. Tammany Parishes in southeast Louisiana in the general vicinity of New Orleans adjacent to Lake Pontchartrain.

AUTHORIZATION: Flood Control Act of 1965 and Water Resources Development Act of 1974

BENEFIT-COST RATIO: 13.7 to 1

SUMMARIZED FINANCIAL DATA

		Accum. % of Estimated Appropriation Requirements
Estimated Total Appropriation Requirement	\$329,900,000	
Future Non-Federal Reimbursement	\$49,900,000	
Estimated Federal Cost (Ultimate)	\$280,000,000	
Estimated Non-Federal Cost	129,000,000	
Reimbursement	49,900,000	
Cash Contribution	46,415,000	
Other	32,685,000	
Total Estimated Project Cost	\$409,000,000	
Allocations to 30 September 1977	84,714,000	
Conference Allowance for FY 1978	11,300,000	
Allocation for FY 1978	10,000,000 ^{1/}	
Allocations to Date	94,714,000	29
Appropriation Requested for FY 1979	0	29
Balance to Complete After FY 1979	235,186,000	

PHYSICAL DATA

Levees: Average Height: 13 feet
Length: 80 miles

Drainage Structures: 7

Channels: 13.3 miles

Dam Closures: 9

Locks: Seabrook: 84 feet by 800 feet
Rigolets: 110 feet by 800 feet

Control Structures:
Chef Menteur: 1,200 feet wide
Rigolets: 1,100 feet wide
Seabrook: 116 feet wide

Floodwalls: 15.5 miles

Floodgates: 3

Pumping Plant: 1

^{1/} Reflects \$1,300,000 reduction assigned as Savings and Slippage.

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Division: Lower Mississippi Valley

District: New Orleans

Region: Lower Mississippi

Lake Pontchartrain, Louisiana and Vicinity (Hurricane Protection)

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STATUS: (1 January 1978)

	PERCENT COMPLETE	COMPLETION SCHEDULE		PERCENT COMPLETE	COMPLETION SCHEDULE
<u>Barrier Unit</u>	5		<u>New Orleans West Unit</u>	5	
Locks	0		Levees and Floodwalls	0	
Roads, Railroads and Bridges	0		<u>Mandeville Unit</u>	3	
Channels and Canals	18		Levees and Floodwalls	0	
Breakwaters and Seawalls	0		<u>Chalmette Unit</u>	48	
Levees and Floodwalls	3		Levees and Floodwalls	43	
Floodway Control and Diversion Structures	0		Permanent Operating Equipment	100	
Permanent Operating Equipment	0		<u>Entire Project</u>	26	Indefinite ^{1/}
<u>New Orleans East Unit</u>	45				
Levees and Floodwalls	50				
Pumping Plants	0				

^{1/} Pending determination of impact of court injunction.

JUSTIFICATION: The lowlands in the Lake Pontchartrain tidal basin are subject to tidal overflow. The Greater New Orleans Metropolitan area which lies in this basin will continue its rapid economic development in the future years even though severe damages have resulted from several hurricanes in the recent past. Hurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Pass and through improved channels of the Mississippi River-Gulf Outlet and Inner Harbor Navigation Canal. The surges are intensified by local wind effects and the combination of waves and surges causes overtopping of the protective works along the shores of Lake Pontchartrain. The eastern portion of the area is also subject to flooding by surges and waves that move directly from Lake Borgne and overtop the existing inadequate protective system seaward of the developed land areas. As a result, residences and industrial and commercial establishments suffer damage, business activities are disrupted, lives endangered, and hazards to health created. Hurricanes much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane, catastrophic property damage and loss of human life would be experienced. Local interests have requested protection against these threats to life and property. The Lake Pontchartrain hurricane protection project will provide the necessary protection. The Mississippi River-Gulf Outlet via the Inner Harbor Navigation Canal provides a direct tidal route from the Gulf of Mexico to Lake Pontchartrain. Consistent with the rationale that lake levels can be controlled by limiting tidal inflow to the lake, a lock and control structure complex is to be constructed at the junction of the Inner Harbor Navigation Canal and Lake Pontchartrain at Seabrook. The complex will provide the multipurpose of flood control, salinity control, and navigational benefits. The cost of the Seabrook Complex is allocated 50% to the hurricane protection project and 50% to the Mississippi River-Gulf Outlet project.

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Hurricane "Betsy," in September 1965, caused extensive damage and flooding of urban areas of the New Orleans Area to depths of up to 10 feet. Hurricane "Camille" occurred in the project area in August 1969 and flooded areas along the Inner Harbor Navigation Canal. In September 1974, if hurricane "Carmen" had continued on its predicted course, extensive flooding and overtopping of levees would have occurred in the project area.

The average annual benefits and designated redevelopment areas are as follows:

Benefits	Amount	Redevelopment Areas (PL 89-136)		
		Parish/County and State	Title	Subsection
Flood Control	\$227,177,000	Louisiana		
Area Redevelopment	3,426,000	Jefferson	IV	(8)
Total Annual Benefits	\$230,603,000	Orleans	IV	(8)
		St. Bernard	IV	(8)
		St. Charles	IV	(8)
		St. John the Baptist	IV	(8)
		St. Tammany	IV	(8)
		Tangipahoa	IV	(8)

FISCAL YEAR 1979: The \$8,545,000 available in the budget fiscal year will be applied as follows:

Barrier Unit	Amount	New Orleans East Unit (Continued)	Amount
Engineering and Design	\$ 715,000	Initiate and Complete	
Supervision and Administration	75,000	New Orleans East, South Point to Gulf Intracoastal Waterway Levee, Louisville and Nashville Railroad Gate	\$122,000
Subtotal	\$790,000	Complete: Citrus Back Levee, Station 176 to 574, 2d Lift Levee	890,000
New Orleans East Unit		Citrus Back Levee, Station 203 to 219 and 272 to 280, Floodwall	790,000
Initiate:			
Citrus Lakefront Levee			
Inner Harbor Navigation Canal to Paris Road, Levee	\$ 835,000		

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New Orleans East Unit	Amount	Chalmette Unit	Amount
Complete:		Initiate: Inner Harbor Navigation Canal East, North of Florida Avenue, Levee and Floodwall	\$365,000
New Orleans Lakefront Levee, West of Inner Harbor Navigation Canal, Floodwall at Marina	\$750,000	Station 65 to 274, 2d Lift and Old Paris Road Closure 1st Lift	250,000
Citrus Lakefront Levee, Inner Harbor Navigation Canal to Paris Road, Floodwall	1,848,000	Initiate and Complete:	
Engineering and Design	572,000	Station 9+80 to 65+00	
Supervision and Administration	401,000	2d lift	255,000
Total	\$6,208,000	Complete: Station 705 to 945 1st Levee Enlargement	180,000
New Orleans West Unit		Engineering and Design	279,000
Engineering and Design	\$91,000	Supervision and Administration	110,000
Supervision and Administration	13,000	Subtotal	\$1,439,000
Subtotal	\$104,000	Grand Total	\$8,545,000
Mandeville Unit			
Engineering and Design	\$4,000		
Subtotal	\$4,000		

NON-FEDERAL COST: Local interests are to bear 30 percent of the first cost to include the fair market value of all lands, easements, and rights-of-way, including borrow and disposal areas necessary for construction of the hurricane features and to accomplish all necessary alterations and relocations to roads, railroads, pipelines, cables, wharves, drainage structures, and other facilities made necessary by the construction works. They are required to share in only one-half the cost of the Seabrook Lock, the other half being constructed for navigation purposes at Federal expense. In addition, local interests are required to contribute the capitalized cost of operation and maintenance for Rigolets Lock. The current estimate of project costs to be borne by local interests follows:

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Lands and Damages	\$ 18,560,000
Relocations	14,125,000
Cash Contributions:	
Based on 30 percent of total project cost less Seabrook and reimbursement	29,345,000
Based on 15/85 ratio for Seabrook Lock	5,420,000
Capitalization of Operation and Maintenance for Rigolets Lock	11,650,000
Reimbursement	49,900,000
Total	\$129,000,000

Local interests are required to operate and maintain all features of the project works, excluding the Rigolets Navigation Lock and Channel and modified dual-purpose Seabrook Lock. The annual cost to local interests for maintenance and operation is estimated at \$715,000 including \$296,000 for material replacements.

In addition, local interests, through the combined efforts of the State of Louisiana, local levee and drainage districts, and parish police juries have spent an estimated \$25,366,000 between 1930-1963, based on the best cost records available, to effectuate and maintain the hurricane protection system existing prior to project authorization. Available costs of record are tabulated below:

Combination of State of Louisiana and Lake Borgne Levee District and Chalmette Back Levee District on the Chalmette Back Levee Protection Systems	\$ 4,410,000
Orleans Levee District Board	12,010,000
Port of New Orleans (Levees along Industrial Canal)	924,000
Pontchartrain Levee District	5,022,000
Fourth Drainage District of Jefferson Parish	3,000,000
Total	\$25,366,000

A very severe hurricane, "Betsy," occurred in the project area in September 1965, just prior to authorization of the project in October 1965. Considerable damage was done to many of the existing levees and local interests immediately instituted an accelerated rehabilitation program with the view of restoring and strengthening existing protection prior to succeeding hurricane seasons. Only work performed by local interests after project authorization which conforms to the project design criteria and alignment will be accepted by the United States as work-in-kind in lieu of cash contribution.

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STATUS OF LOCAL COOPERATION: Assurances are required for the two independently justified plans authorized by Congress.

1. Chalmette Area Plan:

- a. Orleans Levee District: Assurance dated 28 July 1966 accepted 10 October 1966. Supplemental assurances covering provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, Public Law 91-646, executed 29 May 1975, accepted on 8 July 1975. New agreements of assurance covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 executed 30 March 1976. This assurance was accepted on behalf of the United States on 7 December 1977.
- b. St. Bernard Parish Police Jury and Lake Borgne Basin Levee District: Joint assurances dated 16 August 1966, accepted 1 September 1966 and 16 June 1967, accepted 3 July 1967. Joint supplemental assurance covering provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, Public Law 91-646, executed 26 February 1975, accepted 17 March 1975. New joint agreement of assurance covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 executed 2 April 1976. This assurance was accepted on behalf of the United States on 7 December 1977.

2. Barrier Plan:

- a. Orleans Levee District: Assurance dated 28 July 1966, accepted 29 March 1974. New agreement of assurance covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 executed 30 March 1976. This assurance was accepted on behalf of the United States on 7 December 1977.
- b. Assurance executed by then Governor John J. McKeithen for and on behalf of the St. Tammany Parish Police Jury on 8 May 1972 was never accepted due to lack of supporting documents. On 19 October 1976, Governor Edwards executed an instrument designating, among other things, the Louisiana Department of Public Works to lend financial assistance in connection with this project. The Louisiana Department of Public Works executed an act of assurance dated 8 November 1976 agreeing to fulfill all local cooperation requirements for that portion of the project in St. Tammany Parish.
- c. Pontchartrain Levee District: Assurance dated 7 October 1971. Supplemental assurance covering the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act, Public Law 91-646, executed on 15 October 1973 were never accepted due to lack of supporting documents. New agreements of assurance covering all local cooperation requirements and a deferred payment plan as authorized by Public Law 93-251 were executed 20 September 1976. On 8 November 1976, the Louisiana Department of Public Works agreed to lend financial assistance above \$100,000 to the Pontchartrain Levee District for that portion of the Barrier Plan which is the responsibility of that levee district.

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COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$329,900,000 is an increase of \$69,900,000 over the latest estimate (\$260,000,000) submitted to Congress. This change includes increases of \$19,936,000 for higher price levels, \$4,358,000 based on more detailed planning for construction, \$496,000 in Engineering and Design and Supervision and Administration based on a reanalysis of requirements, and \$45,110,000 based on a reanalysis of Federal requirements as the result of the Water Resources Development Act of 1974.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 9 January 1975. By Court Order, dated 30 Dec 77, a revised Environmental Impact Statement has been ordered. Schedule for accomplishment has not as yet been established.

BENEFIT TO COST RATIO: The benefit to cost ratio last presented to Congress (FY 1978) was 13.5 to 1. The current benefit to cost ratio is 13.7 to 1. The benefit to cost ratio is based on the project functioning independently.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1966 and for construction in FY 1967.

Save Our Wetlands, Inc., filed suit on 8 December 1975 in United States District Court for the Eastern District of Louisiana against the New Orleans District Engineer, the Secretary of the Army, the Administrator of the Environmental Protection Agency and the President of the Orleans Levee Board. The Clio Sportsman's League joined the suit on 21 June 1976. The St. Tammany Parish Police Jury joined suit on 30 March 1977. The suit alleges the following: (1) that a regional cumulative Environmental Impact Statement should be accomplished prior to proceeding with the project; (2) that the Corps has not complied with the conditions of final approval by the Environmental Protection Agency of Section 404 requirements of the Federal Water Pollution Control Act; (3) that the Corps has not completely eliminated the St. Charles Parish lakefront levee as required by the Environmental Protection Agency. The suit also seeks to have the New Orleans East lakefront levee removed and to have three openings for tidal interchange provided under the Southern Railroad embankment.

The Government moved to dismiss the lawsuit based on an unexcusable delay in forwarding a claim and the contention that the allegations of the plaintiffs were not liable to trial in a court of justice under the National Environmental Policy Act. A hearing was held on 5 November 1976 and the court denied the motion on 7 December 1976. In addition, a hearing was held on 15 December 1976 on the Orleans Levee District's (a co-defendant) motion to dismiss issues regarding assurances for the project. The court then denied the motion.

On 30 December 1977, Judge Charles Schwartz, of the Federal District Court in New Orleans, issued an order enjoining any further construction of the Chef Menteur and Rigolets Complexes, New Orleans East Area, and the Chalmette Area of the project until a revised Environmental Impact Statement has been prepared.

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A group of individuals in St. Charles Parish filed suit on 12 April 1977 asking that the court direct the Corps to construct the St. Charles Parish portion of the project which has been deferred. This suit is presently in the discovery stage.

Because of the widespread interest which has been expressed with regard to the Barrier portion of the project, the Subcommittee of Water Resources of the House Public Works and Transportation Committee has scheduled a hearing in New Orleans on 5 January 1978. The purpose of the hearing is to obtain information on the hurricane protection plan for the project and to give interested parties an opportunity to make their views known.

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HISTORICAL CHANGES IN BASELINE FEDERAL COST ESTIMATE:

Division: Lower Mississippi Valley
 District: New Orleans

Project: Lake Pontchartrain, Louisiana and Vicinity
 (Hurricane Protection)

Item	Estimates Presented to Congress (\$1,000)			
	Original Baseline	Cumulative Changes	Last	Incremental Change
Federal Cost (Price Level)	65,784 (Oct 1965)		260,000 (Oct 1976)	329,900 (Oct 1977)
Reason for Change		(194,216)		(69,900)
a. Price Escalation		130,121		19,936
b. Design Changes		43,523		4,358
c. Additional Function Added Under General Authorization				
d. Authorized Modification		10,886		45,110 1/
e. Post-Contract Award and Other Estimating Adjustments		8,213		
f. Schedule Changes				
g. Sundry		1,473		496
h. Real Estate				

1/ Increase based on a reanalysis of Federal Appropriations as a result of the Water Resources Development Act of 1974.

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REPORTS CONTROL SYMBOL: DAEN-CWB-13

APPROPRIATION TITLE: CONSTRUCTION GENERAL		CLASSIFICATION: FLOOD CONTROL - LOCAL PROTECTION				
SUMMARY CONSTRUCTION PROGRAM (PB-1)						
FISCAL YEARS 1978 AND 1979						
LINE NO.	ITEM	PROJECT COST ESTIMATE	TOTAL TO 30 SEP 1977	CURRENT FY 1978	BUDGET FY 1979	BALANCE TO COMPLETE AFTER FY 1979
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	BARRIER UNIT					
2	LANDS AND DAMAGES	2,410,000	735,000			1,675,000
3	RELOCATIONS	150,000				150,000
4	LOCKS	43,170,000				43,170,000
5	ROADS	160,000				160,000
6	CHANNELS AND CANALS	4,320,000	765,000			3,555,000
7	BREAKWATERS AND SEAWALLS	3,100,000				3,100,000
8	LEVEES AND FLOODWALLS	39,480,000	118,000	1,750,000		37,612,000
9	FLOODWAY CONTROL AND DIVERSION STRUC.	51,660,000				51,660,000
10	PERMANENT OPERATING EQUIPMENT	10,000				10,000
11	ENGINEERING AND DESIGN	10,800,000	4,933,000	1,535,000	815,000	3,517,000
12	SUPERVISION AND ADMINISTRATION	7,285,000	412,000	105,000	75,000	6,693,000
13	SUBTOTAL - BARRIER UNIT	162,545,000	6,963,000	3,390,000	890,000	151,302,000
14						
15	NEW ORLEANS EAST UNIT					
16	LANDS AND DAMAGES	8,020,000	4,843,000	1,060,000		2,117,000
17	RELOCATIONS	9,700,000	1,675,000		11,000	8,014,000
18	LEVEES AND FLOODWALLS	75,330,000	37,250,000	1,457,000	5,535,000	31,088,000
19	PUMPING PLANTS	10,200,000				10,200,000
20	ENGINEERING AND DESIGN	10,520,000	6,755,000	662,000	572,000	2,531,000
21	SUPERVISION AND ADMINISTRATION	5,480,000	2,724,000	155,000	401,000	2,208,000
22	SUBTOTAL - NEW ORLEANS EAST UNIT	119,250,000	53,247,000	3,334,000	6,519,000	56,150,000
23						
24	NEW ORLEANS WEST UNIT					
25	LANDS AND DAMAGES	1,140,000	1,140,000			
26	RELOCATIONS	895,000				895,000
27	LEVEES AND FLOODWALLS	33,080,000				33,080,000
28	ENGINEERING AND DESIGN	2,560,000	719,000	78,000	91,000	1,672,000
29	SUPERVISION AND ADMINISTRATION	1,315,000	83,000	10,000	13,000	1,209,000
30	SUBTOTAL - NEW ORLEANS WEST UNIT	38,990,000	1,942,000	88,000	104,000	36,856,000
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33						
EFFECTIVE DATE	DIVISION	REGION	PROJECT			
1 Jan 78	LOWER MISSISSIPPI VALLEY	LOWER MISSISSIPPI	LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY (HURRICANE PROTECTION)			
	DISTRICT NEW ORLEANS	Basin COASTAL LOUISIANA				

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REPORTS CONTROL SYMBOL: DAEN-CWB-13

APPROPRIATION TITLE: CONSTRUCTION GENERAL		CLASSIFICATION: FLOOD CONTROL - LOCAL PROTECTION				
SUMMARY CONSTRUCTION PROGRAM (PB-1)						
FISCAL YEARS 1978 AND 1979						
LINE NO.	ITEM (a)	PROJECT COST ESTIMATE (b)	TOTAL TO 30 SEP 1977 (c)	CURRENT FY 1978 (d)	BUDGET FY 1979 (e)	BALANCE TO COMPLETE AFTER FY 1979 (f)
1	MANDVILLE UNIT					
2	LEVEES AND FLOODWALLS	640,000				640,000
3	ENGINEERING AND DESIGN	63,000	24,000	1,000	4,000	34,000
4	SUPERVISION AND ADMINISTRATION	52,000	2,000			50,000
5	SUBTOTAL - MANDVILLE UNIT	755,000	26,000	1,000	4,000	724,000
7	CHALMETTE UNIT					
8	LANDS AND DAMAGES	6,990,000	6,631,000			359,000
9	RELOCATIONS	3,380,000	2,426,000			954,000
10	LEVEES AND FLOODWALLS	66,460,000	28,259,000	795,000	1,120,000	36,286,000
11	PERMANENT OPERATING EQUIPMENT	21,000	21,000			
12	ENGINEERING AND DESIGN	6,010,000	3,025,000	326,000	279,000	2,380,000
13	SUPERVISION AND ADMINISTRATION	4,599,000	1,624,000	95,000	110,000	2,770,000
14	SUBTOTAL - CHALMETTE UNIT	87,460,000	41,986,000	1,216,000	1,509,000	42,749,000
16	TOTAL COST (Federal and Non-Federal)	409,000,000	104,164,000	8,029,000	9,026,000	287,781,000
17	TOTAL OBLIGATIONS		109,233,000	7,168,000	4,818,000	287,781,000
19	TOTAL COST (Federal Funds Only)	329,900,000	79,645,000	6,524,000	8,545,000	235,186,000
20	TOTAL OBLIGATIONS		84,714,000	5,663,000	4,337,000	235,186,000
22	TOTAL COST (Non-Federal Only)	79,100,000	24,519,000	1,505,000	481,000	52,595,000
23	TOTAL OBLIGATIONS		24,519,000	1,505,000	481,000	52,595,000
26	METHOD OF FINANCING					
27	(Corps of Engineers)					
28	Allocations		84,714,000	10,000,000		
29	Unobligated Carryover from Prior Year				4,337,000	
30	Total Available for Obligation			10,000,000	4,337,000	
31	Undelivered Orders from Prior Year			5,069,000	4,208,000	
32	Total Available for Expenditure			15,069,000	8,545,000	
33	Appropriations Required					235,186,000
34	Reflects \$1,300,000 assigned as Savings and Slippage.					
EFFECTIVE DATE	DIVISION LOWER MISSISSIPPI VALLEY	REGION LOWER MISSISSIPPI	PROJECT LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY (HURRICANE PROTECTION)			
1 Jan 78	DISTRICT NEW ORLEANS	Basin COASTAL LOUISIANA				

ENG FORM 2200 (ER 11-2-240) EDITION OF 1 NOV 74 IS OBSOLETE. 23 JAN 1978

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REPORTS CONTROL SYMBOL: DAEN-CWB-13

APPROPRIATION TITLE: CONSTRUCTION GENERAL		CLASSIFICATION: FLOOD CONTROL - LOCAL PROTECTION				
SUMMARY CONSTRUCTION PROGRAM (PB-1)						
FISCAL YEARS 1978 AND 1979						
LINE NO.	ITEM (a)	PROJECT COST ESTIMATE (b)	TOTAL TO 30 SEP 1977 (c)	CURRENT FY 1978 (d)	BUDGET FY 1979 (e)	BALANCE TO COMPLETE AFTER FY 1979 (f)
1	(Non-Federal Funds)					
2	Contributions		24,519,000	1,505,000		
3	Unobligated Carryover from Prior Year					
4	Total Available for Obligation					
5	Undelivered Orders from Prior Year					
6	Total Available for Expenditure					
7	Contributions Required				481,000	52,595,000
8	Cash			445,000	470,000	38,431,000
9	Equivalent Work			1,060,000	11,000	14,164,000
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EFFECTIVE DATE	DIVISION LOWER MISSISSIPPI VALLEY	REGION LOWER MISSISSIPPI	PROJECT LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY (HURRICANE PROTECTION)			
1 Jan 78	DISTRICT NEW ORLEANS	Basin COASTAL LOUISIANA				

ENG FORM 2200 (ER 11-2-240) EDITION OF 1 NOV 74 IS OBSOLETE. 23 JAN 1978

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