APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control) 1972

PROJECT: Lake Pontchartrain and Vicinity, Louisiana (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. The project area comprises the lowland and water areas from the Mississippi River and west and north shores of Lake Borgne to the Pleistocence escarpment to the north and west.

AUTHORIZATION: 1965 Flood Control Act

BENEFIT-COST RATIO: 11.6 to 1

SUMMARIZED FINANCIAL DATA			Accumulated % of Est. Fed. Cost.
Estimated Federal Cost		$148,838,000	
Estimated Non-Federal Cost		67,162,000 1/2/	
Cash Contribution	$38,248,000 1/		
Other Costs	28,914,000		
Total Estimated Project Cost		$216,000,000	
Allocations to 30 June 1970		$20,543,000	
Allocation for FY 1971		11,250,000 3/	
Allocations to Date		$31,793,000	21
Appropriations Requested for FY 1972		$4,555,000	24
Balance to Complete After FY 1972		$112,490,000	

STATUS (1 January 1971)	PERCENT COMPLETE	COMPLETION SCHEDULE
Locks	0	June 1975
Roads	0	June 1974
Channels and Canals	0	June 1977
Levees and Floodwalls:		
New Orleans East Unit	15	Dec. 1981
New Orleans West Unit	0	June 1978
Mandeville Unit	0	June 1978
Chalmette Unit	11	June 1978
Flood Control & Diversion Structures	0	June 1976
Entire Project	15	Dec. 1981

1/ Includes $3,816,000 capitalized cost of O&M for Rigolets Lock.
2/ In addition, local interests, through the combined efforts of the State of Louisiana, local levee and drainage districts, and parish police juries have spent, through the years, an estimated $25,000,000 to effectuate and maintain the hurricane protection systems existing prior to project authorization.
3/ Includes $3,000,000 placed in budgetary reserve, this amount to be allocated in FY 1972.

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PHYSICAL DATA

Levees: Average Height - 13 feet
Length - 74 miles

Drainage Structures: St. Charles Parish - 8 Rectangular Flapgates
5.0 ft. by 9.0 ft. - 580 ft. long
St. Bernard Parish - 2 - 72 " culverts

Channels:	Size	Length (Mi)
Bayou Bienvenue Navigation Chann.	10 ft by 125 ft	0.5
Bayou Dupre Navigation Channel	10 ft by 125 ft	0.2

Channels:	Size	Length (Mi.)
GIWW Relocation	12 ft. by 125 ft.	7.0
Chef Menteur navigation channel	12 ft. by 125 ft.	2.3
Chef Menteur approach channel	Depth: -25 ft.@ structure Width: 400 ft.@ struct.	2.1
Rigolets Approach Channel:	Depth: -20 ft. @ structure Width: 1150 ft. @ structure	2.5
Rigolets Navigation Channel	14 ft. by 100 ft.	0.9

Floodgates: Chef Menteur - Sector-Gated - 56 ft. wide
Bayou Bienvenue - Sector-Gated - 56 ft. wide
Bayou Dupre - Sector-Gated - 56 ft. wide

Locks: Seabrook-84 ft. by 800 ft. Chamber, Sector-Gated
Rigolets-84 ft. by 800 ft. Chamber, Sector-Gated

Dam Closures: Bayou Bienvenue - Earthen - 500 ft. long
Bayou Dupre - Earthen - 500 ft. long
Bayou Villere - Earthen - 500 ft. long
Pipeline Canal - Earthen - 200 ft. long
Seabrook - Rock - 750 ft. long
Chef Menteur - Earthen - 1,600 ft. long
Rigolets - Earthen - 3,000 ft. long
GIWW - Earthen - 500 ft. long
GIWW - Earthen - 700 ft. long

Railroad Gate Structures:
Southern Railway at Seabrook, New Orleans East, IHNC West
Southern Railway at Seabrook, Citrus Area, IHNC East
Louisville and Nashville R.R., New Orleans East, IHNC West
Louisville and Nashville R.R., Citrus Area., IHNC East
Southern Railway at Florida Avenue, New Orleans East, IHNC West
Southern Railway at Florida Avenue, Chalmette, IHNC East
Southern Railway Entrance to Lincoln Beach, Citrus Area

Control Structure:
Chef Menteur - 8 Gate Bays, Vertical Lift Steel Gates, 14 ft. by 46 ft. each; 1,200 ft. total width structure; Sill el. -25 ft.
Rigolets - 23 Bays, Vertical Lift Steel Gates, 2 stacked per bay, 11.5 ft. by 46 ft. each; 1,450 feet total width; Sill el.-20 ft.

Floodwalls:
Rigolets - I or T type wall - 170 ft. long
Chef Menteur - I or T type wall - 590 ft. long
Bayou Dupre - I or T type wall - 320 ft. long
Bayou Bienvenue - I or T type wall - 375 ft. long
Verret Hwy No. 46 - I or T type wall - 255 ft. long
Caernarvon Hwy No. 39 I or T type wall- 275 ft. long
Inner Harbor Navigation Canal, Westside - I or T type wall - 5.8 miles
Inner Harbor Navigation Canal, Eastside - I or T type wall - 4.1 miles
Citrus Back Levee - I or T type wall - 3.2 miles

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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 near future 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 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 the lake. 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. Another and related problem exists in the area. The Mississippi River-Gulf Outlet provides a deep, direct route

for the inflow of saline currents from the Gulf of Mexico to the area along its channel and to Lake Pontchartrain, with resultant adverse effect on fishery resources in the area. The Gulf Outlet channel also will produce high velocity currents in the Inner Harbor Canal, creating a hazard to navigation and causing serious scour and damage, particularly in constricted areas at bridge crossings. These adverse effects will be greatly alleviated by construction of the lock for navigation and salinity control at the lake end of the Inner Harbor Navigation Canal (IHNC) at Seabrook.

The average annual benefits, all flood control, are estimated at $101,083,000.

FISCAL YEAR 1972: The requested amount of $4,555,000 will be applied to:

Initiate:

New Orleans East Unit	
IHNC - West (Vicinity Florida Ave, Station 206+23 to 237+80) Floodwall	$ 50,000
Rigolets Barrier (South of Rigolets) 1st lift levee	10,000
Chef Menteur Barrier Control Structure	10,000
Rigolets Barrier Control Structure	10,000

Continue:

New Orleans East Unit	
Citrus Back Levee (Station 582 to 665) Floodwall	500,000
Chef Menteur Barrier (East and West of Chef Menteur) 1st lift levee	140,000
New Orleans West Unit	
St. Charles Levee (Station 0+00 to 140+00) 1st lift levee	400,000
St. Charles Levee (Station 140+00 to 298+61) 1st lift levee	50,000

Complete:

New Orleans East Unit	
Chef Menteur Barrier - GIWW Relocation	270,000

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Chalmette Unit	
IHNC to Bayou Bienvenue (Station 65 to 355)	$ 200,000
Bayou Bienvenue Control Structure	200,000
Pipeline Closure, 1st lift - Bayou Villere Closure,	200,000
Bayou Dupre Control Structure	200,000
MRGO to Verret (Station 995 to 1119)	200,000
Verret to Caernarvon (Station 1121 to 1559) 1st lift levee	500,000
Engineering and Design	1,300,000
Supervision and Administration	315,000
Total	$4,555,000

The funds requested for Fiscal Year 1972 are required to meet the scheduled completion date.

NON-FEDERAL COSTS: Local interests are to bear 30% of the first cost to consist of the fair market value of all lands, easements, and rights-of-way, including borrow and spoil 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 1/2 the cost of 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:

Lands and Damages	$24,715,000
Relocations	4,199,000
Cash Contributions:	
Based on 30% of total project cost less Seabrook Lock	32,979,000
Based on 15/85 ratio for Seabrook Lock	1,453,000
Capitalization of O&M for Rigolets Lock	3,816,000
Total	$67,162,000

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 $299,000 and replacements $151,000, a total of $450,000.

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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 $25,000,000 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, 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 1/
Fourth Drainage District of Jefferson Parish	3,000,000 2/
Total	$25,366,000

1/ Cash contribution, furnishing rights-of-way, relocations and maintenance of FCMR&T Lake Pontchartrain, Louisiana project, which protects East Jefferson Parish from Lake Pontchartrain inundations.
2/ For interior drainage improvements required by the FCMR&T Lake Pontchartrain, Louisiana project.

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. Some of this work will conform to the project design criteria and alignment and will be accepted by the United States as work-in-kind in lieu of cash contribution, but some portions of work will not meet project requirements. The expenditures on the portion that will not meet project requirements will be, in effect, an additional amount spent by local interests prior to authorization. This amount could range upward to a million dollars or more.

Hurricane "Camille" occurred in the project area in August 1969 and flooded areas along the Inner Harbor Navigation Canal.

STATUS OF LOCAL COOPERATION: The Governor of Louisiana has appointed the State Department of Public Works to act as coordinator in resolving all questions that may arise and to expedite the furnishing of assurances. The Corps of Engineers is continually engaged with the State Department of Public Works in clarifying requirements of local cooperation, as necessary. Formal request for assurances for the Barrier Plan were requested on 27 July 1966 and furnished by the Board of Commissioners, Orleans Levee District, on 28 July 1966. Formal assurances for the Chalmette Area Plan and its modification were requested respectively on 8 February 1966 and 6 June 1967 and were furnished jointly by the St. Bernard Police Jury and the Board of Commissioners, Lake Borgne Levee District on 16 August 1966 and 6 July 1967. This completes all the assurances necessary for the construction of Lake Pontchartrain and Vicinity, Hurricane Protection.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $148,838,000 is an increase of $23,913,000 over the latest estimate ($124,925,000) submitted to Congress. This change includes increases of $12,494,000 for higher price levels, $8,458,000 based on more detailed planning of construction, $2,256,000 in Engineering and Design and $705,000 in Supervision and Administration based on a reanalysis of requirements.

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APPROPRIATION TITLE: CONSTRUCTION GENERAL — PROJECT: LAKE PONTCHARTRAIN AND VICINITY
CLASSIFICATION: LOCAL PROTECTION (FLOOD CONTROL PROJECTS) — (HURRICANE PROTECTION)

SUMMARY CONSTRUCTION PROGRAM (PB-1)
FISCAL YEARS 19 71 & 19 72

ITEM	PROJECT COST ESTIMATE	TOTAL TO 30 JUNE 19 70	CURRENT FISCAL YEAR 19 71	BUDGET FISCAL YEAR 19 72	BALANCE TO COMPLETE AFTER FY 19 72
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL PROJECT					
LANDS AND DAMAGES	24,715,000	10,262,000	1,889,000	8,441,000	4,123,000
RELOCATIONS	4,199,000	299,000	2,425,000	330,000	1,145,000
LOCKS	16,094,000				16,094,000
ROADS	515,000				515,000
CHANNELS AND CANALS	10,180,000		320,000	970,000	8,890,000
LEVEES AND FLOODWALLS	120,836,000	10,173,000	8,567,000	10,060,000	91,836,000
FLOOD CONTROL & DIVERSION STRUCTURES	15,390,000			20,000	15,260,000
PERMANENT OPERATING EQUIPMENT	4,000		3,000		1,000
ENGINEERING AND DESIGN	14,419,000	5,068,200	1,725,000	1,350,000	6,277,800
SUPERVISION AND ADMINISTRATION	9,738,000	1,052,000	660,000	809,400	7,196,600
TOTAL APPLIED COST (C of E & Non-Fed.) Undistributed Cost (None)	216,000,000	26,852,200	15,809,000	21,980,400	151,358,400
TOTAL PROJECT COST (C of E & Non-Fed.) Pending Adjustments (None)	216,000,000	26,852,200	15,809,000	21,980,400	151,358,400
TOTAL COST (C of E & Non-Fed.) Undelivered Orders	216,000,000	26,852,200 (1,093,000)	15,809,000 -1,093,000	21,980,400	151,358,400
TOTAL OBLIGATIONS 1/ Includes $11,100 for Real Estate Activities.		27,945,200	14,716,000	21,980,400	151,358,400
CORPS OF ENGINEERS FUNDS					
LANDS	9,874,000				9,874,000
ROADS	421,000				421,000
CHANNELS AND CANALS	8,324,000		320,000	970,000	7,034,000
LEVEES AND FLOODWALLS	98,004,000	6,111,700	8,517,000	10,010,000	73,365,300
FLOOD CONTROL AND DIVERSION STRUCTURES	12,510,000			20,000	12,490,000
PERMANENT OPERATING EQUIPMENT	3,000		3,000		
ENGINEERING AND DESIGN	11,780,000	4,965,600	1,700,000	1,300,000	3,814,400
SUPERVISION AND ADMINISTRATION	7,922,000	1,001,300	660,000	769,400	5,491,300
TOTAL APPLIED COST (C of E Funds Only) Undistributed Cost (None)	148,838,000	12,078,600	11,200,000	13,069,400	112,490,000
TOTAL PROJECT COST (C of E Funds Only) Pending Adjustments (None)	148,838,600	12,078,600	11,200,000	13,069,400	112,490,000

EFFECTIVE DATE: 1 JAN 1971 — DIVISION: LOWER MISSISSIPPI VALLEY — DISTRICT: NEW ORLEANS — REGION: LOWER MISSISSIPPI

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APPROPRIATION TITLE: CONSTRUCTION GENERAL
CLASSIFICATION: LOCAL PROTECTION (FLOOD CONTROL PROJECTS)

PROJECT: LAKE PONTCHARTRAIN AND VICINITY (HURRICANE PROTECTION)

SUMMARY CONSTRUCTION PROGRAM (PB-1)

FISCAL YEARS 19 71 & 19 72

ITEM	PROJECT COST ESTIMATE	TOTAL TO 30 JUNE 19 70	CURRENT FISCAL YEAR 19 71	BUDGET FISCAL YEAR 19 72	BALANCE TO COMPLETE AFTER FY 19 72
(1)	(2)	(3)	(4)	(5)	(6)
TOTAL COST (C of E Funds Only)	148,838,000	12,078,600	11,200,000	13,069,400	112,490,000
Undelivered Orders		+1,093,000	-1,093,000		
TOTAL OBLIGATIONS		13,071,600	10,107,000	13,069,400	112,490,000
NON-FEDERAL CONTRIBUTION					
LANDS AND DAMAGES	24,715,000	10,262,000	1,889,000	8,441,000	4,123,000
RELOCATIONS	4,199,000	299,000	2,425,000	330,000	1,145,000
LOCKS	6,220,000				6,220,000
ROADS	94,000				94,000
CHANNELS AND CANALS	1,856,000				1,856,000
LEVEES AND FLOODWALLS	22,832,000	4,061,300	250,000	50,000	18,470,700
FLOOD CONTROL AND DIVERSION STRUCTURES	2,790,000				2,790,000
PERMANENT OPERATING EQUIPMENT	1,000				1,000
ENGINEERING AND DESIGN	2,639,000	100,600	25,000	50,000	2,463,400
SUPERVISION AND ADMINISTRATION	1,816,000	50,700	20,000	40,000	1,705,300
TOTAL APPLIED COST (Non-Federal Only)	67,162,000	14,773,600	4,609,000	8,911,000	38,868,400
Undistributed Cost (None)					
TOTAL PROJECT COST (Non-Federal Only)	67,162,000	14,773,600	4,609,000	8,911,000	38,868,400
Pending Adjustments (None)					
TOTAL COST (Non-Federal Only)	67,162,000	14,773,600	4,609,000	8,911,000	38,868,400
Undelivered Orders (None)					
TOTAL OBLIGATIONS		14,773,600	4,609,000	8,911,000	38,868,400
METHOD OF FINANCING					
Corps of Engineers Funds					
Allocations		20,543,000	11,250,000		
Unobligated Carryover Prior Year			7,371,400	5,514,400 1/	
Total Funds Available for Obligation			18,621,400	13,069,400	
Appropriations Required				4,555,000	112,490,000
Non-Federal Contributions					
Contributions		14,773,600	4,609,000		
Unobligated Carryover from Prior Year					
Total Funds Available for Obligation			4,609,000	8,911,000	

EFFECTIVE DATE: 1 JAN 1971 | DIVISION: LOWER MISSISSIPPI VALLEY | DISTRICT: NEW ORLEANS | REGION: LOWER MISSISSIPPI

APPROPRIATION TITLE: CONSTRUCTION GENERAL
CLASSIFICATION: LOCAL PROTECTION (FLOOD CONTROL PROJECTS)

PROJECT: LAKE PONTCHARTRAIN AND VICINITY (HURRICANE PROTECTION)

SUMMARY CONSTRUCTION PROGRAM (PB-1)

FISCAL YEARS 1971 & 19 72

ITEM	PROJECT COST ESTIMATE	TOTAL TO 30 JUNE 1970	CURRENT FISCAL YEAR 19 71	BUDGET FISCAL YEAR 1972	BALANCE TO COMPLETE AFTER FY 19 72
(1)	(2)	(3)	(4)	(5)	(6)
Contributions Required				8,911,000	38,868,400

1/ Includes $3,000,000 placed in budgetary reserve, this amount to be allocated in FY 1972.

EFFECTIVE DATE: 1 JAN 1971 | DIVISION: LOWER MISSISSIPPI VALLEY | DISTRICT: NEW ORLEANS | REGION: LOWER MISSISSIPPI