

1974

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

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.

AUTHORIZATION: 1965 Flood Control Act

BENEFIT/COST RATIO: 11.9 to 1

SUMMARIZED FINANCIAL DATA		Accumulated % of Est. Fed. Cost	STATUS: (1 January 1973)	PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Federal Cost	\$194,000,000		Locks	0	Mar. 1978
Estimated Non-Federal Cost	88,000,000 1/ 2/		Roads	0	Dec. 1981
Cash Contribution	\$65,409,000 1/		Channels and Canals	27	Jun. 1978
Other Costs	22,591,000		Breakwaters & Seawalls	0	Mar. 1978
Total Estimated Project Cost	\$282,000,000		Levees & Floodwalls		
Allocations to 30 June 1972	42,739,000		Barrier Unit	0	Dec. 1981
Allocation for FY 1973	17,500,000		New Orleans East Unit	28	Jun. 1982
Allocations to Date	\$60,239,000	31	New Orleans West Unit	0	Mar. 1982
→ Appropriations Requested for FY 1974	6,400,000 3/	34	Mandeville Unit	0	Jun. 1976
Balance to Complete after FY 1974	\$127,361,000		Chalmette Unit	30	Sep. 1982
			Flood Control & Diversion		
			Structures	0	Jun. 1978
			Permanent Operating Equip.	9	Mar. 1978
			Entire Project	21	Sep. 1982

1/ Includes \$6,900,000 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/ In addition, \$2,660,000 of programed carryover will be available in FY 1974.

DIVISION: LOWER MISSISSIPPI

DISTRICT: NEW ORLEANS

REGION: LOWER MISSISSIPPI
LAKE PONTCHARTRAIN & VICINITY, LOUISIANA

1175

PHYSICAL DATA

Levees: Average Height - 13 feet
Length - 74 miles

Drainage Structures: St. Charles Parish-544 ft. wide with
eight 5.0 ft. high by 9.0 ft. wide
combination flap vertical lift gates.
Sill Elevation -5.5 m.s.l.
St. Bernard Parish-two 72 in. dia. CMP
culverts with flap and vertical slide
gates.

<u>Channels:</u>	<u>Size</u>	<u>Length</u> <u>Mile</u>
Bayou Bienvenue Navigation Channel	10 ft. by 125 ft.	0.5
Bayou Dupre Navigation Channel	10 ft. by 125 ft.	0.2
GIWW Relocation	12 ft. by 125 ft.	7.0
Chef Menteur Navigation Channel	16 ft. by 125 ft.	2.3
Chef Menteur Approach Channel; Depth-25 ft. @ struct.	Width:400 ft. @ struct.	1.2
Rigolets Approach Channel	Depth:30 ft. @ struct.	1.0
Rigolets Navigation Channel	Width:800 ft. @ struct.	1.1
	14 ft. by 110 ft @ str.	1.1

Dem Closures: Bayou Bienvenue - Earthen - 500 ft. long
Bayou Dupre - Earthen - 500 ft. long
Bayou Villars - Earthen - 500 ft. long
Pipeline Canal - Earthen - 200 ft. long
Seabrook - Rock - 1040 ft. long
Chef Menteur - Earthen - 1600 ft. long
Rigolets - Earthen - 4700 ft. long
GIWW East - Earthen - 500 ft. long
GIWW West - Earthen - 700 ft. long

Control Structures:

Chef Menteur - 1,200 ft. total width structure; Sill El.
-25 ft., 8 Gate Bays, Vertical Lift Steel Gates, 2 stacked
per bay, 14 ft. by 46 ft. each.
Rigolets - 1,100 ft. total width structure; Sill El. -30 ft.
16 Gate Bays, Vertical Lift Steel Gates, 3 stacked per bay,
11.5 ft. by 46 ft. ea.
Seabrook - 116 ft. total width structure; Sill El. -15.8
ft., 3 Gate Bays, Vertical Lift Steel Gates, 20 ft. by
32 ft. each.

Floodwalls:

Rigolets - I and/or T type wall - 170 ft. long
Chef Menteur - I and/or T type wall - 590 ft. long
Bayou Dupre - I and/or T type wall - 320 ft. long
Bayou Bienvenue - I and/or T type wall - 375 ft. long
Varret Highway No. 46- I and/or T type wall - 255 ft. long
Caernarvon Hwy No. 39- I and/or T type wall - 275 ft. long
Inner Harbor Navigation
Canal Westside - I and/or T type wall - 5.8 miles
Inner Harbor Navigation
Canal Eastside - I and/or T type wall - 4.1 miles
Citrus Back Levee - I and/or T type wall - 3.2 miles
Floodgates: Chef Menteur - Sector Gated - 84 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 110 ft. by 800 ft. Chamber, Sector Gated

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 (MR-GO) via the Inner Harbor Navigation Canal (IHNC) 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 IHNC and Lake Pontchartrain at Seabrook. The complex will provide the multi-purpose of flood control, salinity control, and navigational benefit. The cost of the Seabrook Complex is allocated 50% to the hurricane protection project and 50% to the MR-GO project.

The average annual benefits, all flood control, are estimated at \$134,844,000.

FISCAL YEAR 1974: The requested amount of \$6,400,000 will be applied to:

<u>Initiate:</u>	
<u>Barrier Unit</u>	
Rigolets Barrier, South, 1st lift levee	\$940,000
Rigolets Control Structure	500,000
<u>New Orleans East Unit</u>	800,000
Citrus Lakefront Levee, IHNC to Paris Road	
<u>Continue:</u>	
<u>Barrier Unit</u>	
Chef Menteur Barrier (East & West of Chef Menteur) 1st lift levee	600,000
Rigolets Barrier, North, 1st lift levee	500,000
Engineering and Design	1,700,000
Supervision and Administration	1,360,000
Total	\$6,400,000

LAKE PONTCHARTRAIN & VICINITY, LOUISIANA

The funds requested for Fiscal Year 1974 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	\$17,209,000
Relocations	5,382,000
Cash Contributions:	
Based on 30% of total project cost	
Less Seabrook Lock	54,999,000
Based on 15/85 ratio for Seabrook Lock	3,510,000
Capitalization of O&M for Rigolets Lock	6,900,000
Total	\$88,000,000

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 \$315,100 and material replacements \$189,300; a total of \$504,400.

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 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

LAKE PONTCHARTRAIN & VICINITY, LOUISIANA

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.

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

STATUS OF LOCAL COOPERATION: Assurances are required for the two independently justified plans authorized by Congress.
Chalmette Area Plan: Full assurances have been accepted. Assurances from the St. Bernard Parish Police Jury and the Board of Commissioners of the Lake Borgne Basin Levee District were accepted on 28 September 1968. Assurances from the Board of Commissioners of the Orleans Levee District were accepted on 10 October 1966.

Lake Pontchartrain Barrier Plan: Assurances from the Board of Commissioners of the Orleans Levee District were accepted on 10 October 1966.

Because of the rising non-Federal cost of participation and the widespread benefits to be derived by surrounding Parishes, the Orleans Levee District has requested assistance in carrying out the assurances. On 5 March 1971, the Governor of the State of Louisiana, by executive order, designated the State of Louisiana, Department of Public Works as the local coordinating agency for the Lake Pontchartrain Barrier Plan. The U.S. Army Corps of Engineers on behalf of the United States Government, has contacted the Department of Public Works and requested that agency to obtain the necessary assurances for cooperation and cost sharing from local interests. To date, formal assurances have been received from the Board of Levee Commissioners of the Orleans Levee District, the Board of Commissioners of the Pontchartrain Levee District, the Lake Borgne Levee District, and the St. Bernard Parish Police Jury. The St. Tammany Parish Police Jury is reluctant to grant the assurances providing for its participation in the project. However, on 8 May 1972, Governor John J. McKeithen executed formal assurances on behalf of the Police Jury by virtue of his authority under Section 81 of title 38 of Louisiana Revised Statutes of 1950, as amended. Such assurances are binding on the St. Tammany Parish Police Jury. Acceptance of replacement assurances are pending receipt of pertinent supporting documents.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$194,000,000 is an increase of \$16,000,000 over the latest estimate (\$178,000,000) submitted to Congress. This change includes \$16,340,000 for higher price levels, and \$3,444,000 in Engineering and Design, and \$896,000 in Supervision and Administration based on a reanalysis of requirements. This increase was offset by an overall reduction of \$4,680,000 within the construction features resulting primarily from an adjustment in the allocated Federal cost because local interests are no longer given credit for lands under levee existing at project authorization.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The draft Environmental Statement was submitted to CEQ in August 1972. The final Statement is scheduled for submission to CEQ in the third quarter of FY 1973.

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

APPROPRIATION TITLE: CONSTRUCTION GENERAL		CLASSIFICATION: LOCAL PROTECTION (FLOOD CONTROL PROJECT)			
SUMMARY CONSTRUCTION PROGRAM (PB-1)					
FISCAL YEARS 1973 AND 1974					
ITEM	PROJECT COST ESTIMATE	TOTAL TO 30 JUNE 1972	CURRENT FISCAL YEAR 1973	BUDGET FISCAL YEAR 1974	BALANCE TO COMPLETE AFTER FY 1974
(1)	(2)	(3)	(4)	(5)	(6)
LANDS AND DAMAGES	17,209,000	11,596,000	3,026,000	2,014,000	573,000
RELOCATIONS	5,382,000	2,904,700	910,000	1,043,400	523,300
LOCKS	29,480,000				29,480,000
ROADS	105,000				105,000
CHANNELS AND CANALS	2,875,000	764,800			2,110,200
BREAKWATERS AND SEAWALLS	1,980,000				1,980,000
LEVEES AND FLOODWALLS	155,308,000	26,703,800	8,977,900	20,095,000	95,531,300
FLOOD CONTROL & DIVERSION STRUCTURES	33,040,000			500,000	32,540,000
PERMANENT OPERATION EQUIPMENT	28,000	2,500	17,500		8,000
ENGINEERING AND DESIGN	28,621,000	8,024,500	2,000,000	1,700,000	10,896,500
SUPERVISION ADMINISTRATION	13,972,000	2,411,000	794,700	1,360,000	9,406,300
TOTAL APPLIED COST (Fed. & Non-Fed.)	282,000,000	54,407,300	15,726,100	26,712,400	185,154,200
Undistributed Cost (None)					
TOTAL PROJECT COST (Fed. & Non-Fed.)	282,000,000	54,407,300	15,726,100	26,712,400	185,154,200
Pending Adjustments					
TOTAL COST (Fed. & Non-Fed.)	282,000,000	54,407,300	15,726,100	26,712,400	185,154,200
Undelivered Orders		+9,355,000	+4,200,000	-13,555,000	
TOTAL OBLIGATIONS		63,762,300	19,926,100	13,157,400	185,154,200
TOTAL APPLIED COST (Fed. Funds Only)	194,000,000	33,383,900	10,640,100	22,615,000	127,361,000
Undistributed Cost (None)					
TOTAL PROJECT COST (Fed. Funds Only)	194,000,000	33,383,900	10,640,100	22,615,000	127,361,000
Pending Adjustments					
TOTAL COST (Fed. Funds Only)	194,000,000	33,383,900	10,640,100	22,615,000	127,361,000
Undelivered Orders		+9,355,000	+4,200,000	-13,555,000	
TOTAL OBLIGATIONS		42,738,900	14,840,100	9,060,000	127,361,000
1/ Includes \$53,200 for Real Estate Activities.					
EFFECTIVE DATE: 1 Jan 73	DIVISION LOWER MISS. VALLEY	REGION LOWER MISSISSIPPI	PROJECT: LAKE FORTCHARTRAIN AND VICINITY, LA. (HURRICANE PROTECTION)		
	DISTRICT NEW ORLEANS	BAIN COASTAL LOUISIANA			

