1992

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

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.

DESCRIPTION: The recommended plan consists of a new levee north of US HWY 61, from the Jefferson-St. Charles Parish boundary to the east Bonnet Carre' Spillway guide levee; a new levee along the Jefferson Parish lakefront; an enlarged New Orleans lakefront levee landward of the seawall; a new and enlarged levee and concrete-capped sheetpile wall along both sides of the Inner Harbor Navigation Canal (IHNC); a new levee and floodwall along the lakefront from the airport to South Point; an enlarged levee from South Point to the Gulf Intracoastal Waterway (GIWW); an enlarged levee and new floodwall along the north of the Mississippi River-Gulf Outlet (MR-GO) and GIWW from the IHNC to the barrier; a new levee in the Chalmette area from the IHNC levee along the south bank of the MR-GO to approximately 2-1/2 miles northwest of Verret and west to the Mississippi River levee near Caernavon; a strengthened Mandeville seawall on the north shore at present height; and a new pumping station and vertical lift gates for the Florida Avenue Complex. The only unprogrammed part of the project is the strengthening of the Mandeville seawall.

AUTHORIZATION: Flood Control Act of 1965 and Water Resources Development Acts of 1974, 1986, and 1990.

REMAINING BENEFIT TO REMAINING COST RATIO: 5.4 to 1 at 3-1/8 percent.

TOTAL BENEFIT - COST RATIO: 8.1 to 1 at 3-1/8 percent.

INITIAL BENEFIT-COST RATIO: 17.6 to 1 at 3-1/8 percent (FY 1967).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation dated December 1982 at 1981 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Total Appropriation Requirement			$435,000,000
Programmed Construction		$433,056,000	
Unprogrammed Construction		1,944,000	
Future Non-Federal Reimbursement			$8,000,000
Programmed Construction		8,000,000	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate)			427,000,000
Programmed Construction		425,056,000	
Unprogrammed Construction		1,944,000	
Estimated Non-Federal Cost			184,000,000
Programmed Construction		183,102,000	
Cash Contribution	$ 45,782,000		
Other Costs	129,320,000		
Reimbursements:	8,000,000		
Hurricane Protection	8,000,000		
Unprogrammed Construction		898,000	
Cash Contribution	898,000		
Other Costs	0		
Reimbursements	0		
Total Estimated Programmed Construction Cost			608,158,000

STATUS: (1 January 1991)	PERCENT COMPLETE	COMPLETION SCHEDULE
New Orleans East Unit	90	Jan 2000
New Orleans West Unit	10	Nov 2013
Mandeville Unit	0	Indefinite[1]
Chalmette Unit	97	Jan 1997
Entire Project	79	Nov 2013[2]

[1] Completion schedule indefinite until financial support is furnished by local interests.

[2] Excludes Mandeville Unit which has an indefinite completion date.

Total Estimated Unprogrammed Construction Cost	2,842,000	
Total Estimated Project Cost	611,000,000	
Allocations to 30 September 1990	250,207,000	ACCUM.
Conference Allowance for FY 1991	11,655,000	PCT. OF EST.
Allocation for FY 1991	0[1]	FED. COST
Allocations through FY 1991	250,207,000	58
Allocation Requested for FY 1992	21,491,000	62
Programmed Balance to Complete after FY 1992	161,358,000	
Unprogarmmed Balance to Complete After FY 1992	1,944,000	

PHYSICAL DATA

Levees: Average height: 16 feet
Length: 80 miles

Drainage Structures: 9

Dam Closures: 2

Floodwalls: 17.9 miles

Pumping Plant: 1

Floodgates: 2

Control Valve Structures: 3

[1] Reflects $1,131,000 reduction assigned as savings and slippage, $5,524,000 reduction for prior year unobligated balances, and $5,000,000 reprogrammed from the project. Project continuing with funds carried over from prior years.

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 past years. Hurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Passes and the Inner Harbor Navigation Canal. The surges are intensified by local wind effects and the combination of waves and surges causing overtopping of the preproject 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 then 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 are endangered, and hazards to health are 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. 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. Extensive flooding and overtopping of levees would have occurred in the project area in September 1974, if Hurricane Carmen had continued on its predicted course. In 1985, Hurricane Juan caused extensive flooding in the St. Charles Parish area. The Lake Pontchartrain hurricane protection project will provide protection from similar occurrences. However, flooding also occurred in St. John the Baptist Parish which will not be protected by the project. The project will provide protection against flooding from the Standard Project Hurricane. The average annual benefits, all flood control, are $179,856,000, based on 1 October 1981 prices.

FISCAL YEAR 1992: The requested amount will be applied as follows:

Not Broken into Sep Contracts at this time
Admin Position was not to do

NEW ORLEANS EAST UNIT		
Continue:		
New Orleans Lakefront Levee		
Outfall Canal at Orleans	$ 6,000,000	
Surveys & Layouts	30,000	
Complete:		
Southpoint to GIWW Levee	911,000	Sched Aug 93
Planning, Engineering and Design	330,000	
Construction Management	1,200,000	
Subtotal	8,471,000	

	NEW ORLEANS WEST UNIT		
	Initiate:		
I1127	Levee North of Airline Hwy Reach II 1st Lift	3,646,000	Actually was award Aug 91
I1165	Floodwalls at Sta 0-9	300,000	Awarded May 93
	Continue:		
	Surveys and Layouts	40,000	
I1127	Complete:		
	Levee North of Airline Hwy Reach IA, 1st Lift	1,300,000	Awd 21 Aug 91
I 1158	1st Enlargement 354-435 Reach 4	2,391,000	Awd Sep 91 Comp (Physical) 12/29/92
I 1159	1st Enlargement 438-550, Reach 5	322,000	Awd 10/90 Comp 2/21/92
	Planning Engineering and Design	2,090,000	
	Construction Management	1,700,000	
	Subtotal	$11,789,000	
	CHALMETTE UNIT		
	Initiate:		
	Pipeline Canal and Gap Closure, Final Enlargement	248,000	I Awarded 9/92
	Initiate & Complete:		
	Station 278-355 Final Enlargement	682,000	Awd 31 MAR 92 Comp 93
	Continue:		
	Surveys and Layouts	40,000	
	Planning, Engineering and Design	157,000	
	Construction Management	104,000	
	Subtotal	$1,231,000	
	Total	$21,491,000	

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and right-of-ways, including borrow areas and spoil disposal areas.	$ 41,529,000	-
Accomplish alternations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	17,047,000	-
Bear 30 percent of the total project cost, including the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers, excluding a reimbursement to the Federal Government for costs allocated due to the Water Resources Act of 1974.	109,424,000	-
Reimburse the Federal Government for costs allocated due to the Water Resources Development Act of 1974.	8,000,000	
Bear all costs of operations, maintenance, and replacements of all features of the project works.		$932,000
Total Non-Federal Costs	$176,000,000	$932,000

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 improve and maintain the hurricane protection system existing prior to project authorization. Available costs of record are as follows:

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	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 the 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, is considered as work-in-kind in lieu of a cash contribution.

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

1. Chalmette Area Plan:

a. Orleans Levee District: New agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974 were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

b. St. Bernard Parish Police Jury and Lake Borgne Basin Levee District: New joint agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 2 April 1976. These assurances were accepted on behalf of the United States on 7 December 1977.

2. High Level Plan:

a. Orleans Levee District: For the Barrier Plan, new agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 30 March 1976. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan were executed by the local sponsor on 29 May 1985, and accepted by the United States on 21 June 1985.

b. St. Tammany Parish: The Louisiana Office 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. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan are required; however, due to failure of the local sponsor to agree to the items of local cooperation, this portion of the project has an indefinite completion date.

c. Pontchartrain Levee District: New agreements of assurances covering all local cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 20 September 1976. On 8 November 1976, the Louisiana Office 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. These assurances were accepted on behalf of the United States on 7 December 1977. Supplemental assurances for the High Level Plan were executed by the Pontchartrain Levee District for the St. Charles Parish portion of the project on 20 April 1987, and accepted on behalf of the United States on 7 August 1987.

d. East Jefferson Levee District: Supplemental assurances for the High Level Plan were executed by the East Jefferson Levee District for the Jefferson Parish portion of the project on 16 January 1987. A financial plan was received on 25 November 1987, and accepted on behalf of the United States on 21 December 1987. These levees were previously the responsibility of the Pontchartrain Levee District.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of $435,000,000 is an increase of $12,000,000 from the latest estimate ($423,000,000) submitted to Congress (FY 1991). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$+21,379,000
Design Changes	-33,933,000
Post Contract Award and Other Estimating Adjustments	+24,554,000
Total	$+12,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 17 January 1975. By court order dated 30 December 1977, a revised Environmental Impact Statement was ordered. A draft revised Environmental Impact Statement for the High Level Plan and the Reevaluation Report, which documents the proposal to adopt that plan instead of the Barrier Plan, were released to the public and filed with the Environmental Protection Agency on 16 December 1983. The final revised Environmental Impact Statement was filed with the Environmental Protection Agency on 7 December 1984.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1966, and funds to initiate construction were appropriated in FY 1967.

The Water Resources Development Act of 1990 requires a study of the project benefits to the non-Federal sponsors to determine whether or not the sponsors have received the expected benefits and whether or not there should be a reallocation of costs as a result of any unrealized expected benefits from the project.