

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

1988

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 and Water Resources Development Act of 1986.

BENEFIT TO COST RATIO: The remaining benefit-remaining cost ratio is 9.0 to 1 at 3-1/8 percent. The benefit-cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1967) was 17.6 to 1. The benefit-cost ratio is based on the project functioning independently.

STATUS: (1 January 1987)

SUMMARIZED FINANCIAL DATA

			PERCENT COMPLETE	COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		510,000,000	Entire Project	68 Sep 2006 1/
Scheduled Construction	508,174,000			
Unscheduled Construction	1,826,000			
Future Non-Federal Reimbursement		33,000,000	New Orleans East Unit	83 Dec 1993
Scheduled Construction	33,000,000		New Orleans West Unit	0 Sep 2006
Unscheduled Construction	0		Mandeville Unit	0 Indefinite 2/
			Chalmette Unit	89 Sep 1991
Estimated Federal Cost (Ultimate)		477,000,000	1/ Excludes Mandeville Unit which has an indefinite completion date.	
Scheduled Construction	475,174,000		2/ Completion schedule indefinite until financial support is furnished by local interests.	
Unscheduled Construction	1,826,000			
Estimated Non-Federal Cost		205,000,000		
Scheduled Construction		204,217,000		
Cash Contribution	107,687,000			
Other Costs	63,530,000			
Reimbursements:				
Hurricane Protection	33,000,000			

Division: Lower Mississippi Valley

District: New Orleans

Region: Lower Mississippi

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SUMMARIZED FINANCIAL DATA (Cont.)

Unscheduled Construction		783,000	
Cash Contribution	783,000		
Other Costs	0		
Reimbursements	0		
Total Estimated Scheduled Construction Cost		679,391,000	Accum % of
Total Estimated Unscheduled Construction Cost		2,609,000	Est Fed Cost
Total Estimated Project Cost		682,000,000	
Allocations to 30 September 1986		181,596,000	
Conference Allowance for FY 1987		16,000,000	
Allocation for FY 1987		15,375,000 1/	
Allocations through FY 1987		196,971,000	39
Allocation Requested for FY 1988		17,000,000	42
Scheduled Balance to Complete after FY 1988		293,420,000	
Unscheduled Balance to Complete After FY 1988		2,609,000	

1/ Reflects \$625,000 reduction assigned as savings and slippage.

PHYSICAL DATA

Levees: Average height: 16 feet	Drainage Structures: 9
Length: 80 miles	
Dam Closures: 2	Floodwalls: 17.9 miles
Pumping Plant: 1	Floodgates: 2
Control Valve Structures: 3	

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 Pass 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 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

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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 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 average annual benefits, all flood control, are \$210,306,000, based on 1 October 1986 prices.

FISCAL YEAR 1988: The requested amount of \$17,000,000 will be applied as follows:

New Orleans East Unit	
Initiate and Complete:	
New Orleans Lakefront Levee	
Floodwall at Seabrook	\$ 750,000
New Orleans Lakefront Levee	
Floodwall at West End	1,570,000
Complete:	
New Orleans East Bank Levee	810,000
Station 770 to 1007	
Initiate:	
New Orleans East Levee	
Southpoint to GIWW	60,000
Engineering and Design	2,000,000
Supervision and Administration	520,000
	<u>Subtotal</u>
	\$ 5,710,000
New Orleans West Unit	
Initiate:	
Jefferson Parish Return Levee	\$ 2,800,000
Jefferson Parish Lakefront Levee	5,000,000
Engineering and Design	2,000,000
Supervision and Administration	760,000
	<u>Subtotal</u>
	\$10,560,000

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Chalmette Unit	
Initiate and Complete:	
Station 945 to 1117 (Final Enlargement)	\$ 380,000
Surveys and Layouts	49,000
Engineering and Design	100,000
Supervision and Administration	201,000
	<u>Subtotal</u>
	\$ 730,000

Grand Total \$17,000,000

The funds requested will increase the degree of protection in the New Orleans East Unit, New Orleans West Unit and the Chalmette Unit.

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.

Lands and Damages	\$ 41,975,000
Relocations	21,555,000
Cash Contributions:	
Based on 30 percent of total project	107,687,000
Reimbursement:	
Hurricane Protection	33,000,000 ^{1/}
	<u>Total</u>
	\$204,217,000

Local interests are required to operate and maintain all features of the project works. The annual cost to local interests for operation and maintenance is estimated at \$1,153,000 including \$63,000 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 improve and maintain the hurricane protection system existing prior to project authorization. Available costs of record are as follow:

^{1/} The Water Resources Development Act of 1974, (PL 93-251), provided that local assuring agencies for this project could, if they so choose, repay their cash obligations using a deferred payment plan. New assurances have been executed by local interests incorporating a deferred payment plan. These assurances were approved by the Secretary of the Army on 7 December 1977. Local interests have been making payments under this plan, with first payments received in FY 1977.

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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 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 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 Water Resources Development Act of 1974 (PL 93-251) 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 Public Law 93-251 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 Public Law 93-251 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.

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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 Public Law 93-251 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. Amended assurances for the High Level Plan are being reviewed by the Pontchartrain Levee District for the St. Charles Parish portion of the project. The Levee District is seeking financial support from the State of Louisiana.

d. East Jefferson Levee District: Amended assurances for the High Level Plan are being reviewed by the East Jefferson Levee District for the Jefferson Parish portion of the project. The Levee District is seeking financial support from Jefferson Parish and/or the State of Louisiana. These levees were previously the responsibility of the Pontchartrain Levee District.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$510,000,000 is a decrease of \$1,000,000 from the latest estimate (\$511,000,000) submitted to Congress. This change includes decreases of \$3,920,000 for adjustments in the estimated inflation allowance through the construction period, \$1,984,000 due to favorable bids received, \$25,000 from savings on completed work and \$19,000 for adjustments in the allowance for contingencies. These decreases were partially offset by increases of \$925,000 based on more detailed planning of construction and \$4,023,000 due to a reanalysis of Federal and non-Federal cost sharing requirements.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT AND COMPLIANCE WITH CLEAN WATER ACT: 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 reevaluation report which documents the proposal to adopt that plan instead of the barrier plan was 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.

The provisions of Section 404 of the Clean Water Act have been met by a Statement of Findings signed by the District Engineer on 20 August 1975, for the majority of the project. The provisions of Section 404 of the Clean Water Act for work after 1 October 1981, have been met for the Chalmette Unit by a Supplemental Section 404(b)(1) Evaluation Report signed by the District Engineer on 15 November 1982; for the New Orleans East Unit by a Supplemental Section 404(b)(1) Evaluation Report signed by the District Engineer on 18 November 1983; and for the New Orleans

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West/Handeville Unit by a Supplemental Section 404(b)(1) Evaluation Report signed by the District Engineer on 18 November 1983. A Public Notice was issued for the High Level Plan on 28 March 1984, and certification from the State of Louisiana was received on 29 June 1984.

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

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

PROJECT: Larose to Golden Meadow, Louisiana (Hurricane Protection) (Continuing)

LOCATION: The project is located in Lafourche Parish, Louisiana, about 28 miles southwest of New Orleans and about 25 miles inland from the Gulf of Mexico along Bayou Lafourche, south of the Gulf Intracoastal Waterway, extending from Larose to Golden Meadow, a distance of about 16 miles.

AUTHORIZATION: Flood Control Act of 1965.

BENEFIT TO COST RATIO: The remaining benefit-cost ratio is 10.1 to 1 at 3-1/4 percent. The benefit-cost ratio for the fiscal year for which Congress appropriated initial construction funds (FY 1972) was 1.4 to 1. The benefit-cost ratio is based on the project functioning independently.

Accum % of Est Fed Cost STATUS: (1 January 1987)

SUMMARIZED FINANCIAL DATA
Estimated Federal Cost \$64,000,000
Estimated Non-Federal Cost 27,400,000
Cash Contribution \$13,578,000
Other 13,822,000

PERCENT COMPLETE 52
COMPLETION SCHEDULE Apr 2000
Entire Project

Total Estimated Project Cost \$91,400,000
Allocations to 30 September 1986 42,188,000
Conference Allowance for FY 1987 3,500,000
Allocation for FY 1987 3,363,000 1/
Allocations through FY 1987 45,551,000
Allocation Requested for FY 1988 3,800,000 71
Scheduled Balance to Complete after FY 1988 14,649,000 77
Unscheduled Balance to Complete after FY 1988 0

1/ Reflects \$137,000 reduction assigned as savings and slippage.

Division: Lower Mississippi Valley

District: New Orleans

Region: Lower Mississippi

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