PROJECT: Lake Pontchartrain, Louisiana, and Vicinity (Rurricane 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 Acts of 1974 and 1986.

REMAINING HENEFIT TO REMAINING COST RATIO: 9.9 to 1 at 3-1/8 percent.

INITIAL BENEFIT-COST RATIO: 17.6 to 1 at 3 1/8 percent (FY 1967). The benefit-cost ratio is based on the project functioning independently.

SUMMARIZED FINANCIAL DATA			STATUS: (1 January 1988) PERCENT COMPLETION COMPLETE SCHEDULE
Estimated Total Appropriation Requirement Scheduled Construction	519,133,000	521,000,000	Entire Project 76 Sep 2006 1/
Unscheduled Construction  Future Non-Federal Reinburgement	1,867,000	35,000,000	New Orleans East Unit 86 Dec 1993 New Orleans West Unit 0 Sep 2006 Mandeville Unit 0 Indefinite 2/
Scheduled Construction Unscheduled Construction	35,000,000 0	33,000,000	Chalmette Unit 95 Sep 1991
Estimated Federal Cost (Ultimate) Scheduled Construction Unscheduled Construction	484,133,000 1,867,000	486,000,000	<ul> <li>1/ Excludes Mandaville Unit which has an indefinite completion date.</li> <li>2/ Completion schedule indefinite until financial support is furnished by local interests.</li> </ul>
Estimated Non-Federal Cost Scheduled Construction Cash Contribution 115,402,000 Other Costs 56,733.000	207,135,000	208,000,000	Total Intelests.
Other Costs 56,733,000 Reinbursements: 35,000,000 Rurricane Protection 35,000,000		es <b>a</b> Linear	

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## SIMPARIZED FINANCIAL DATA (CONT.)

Unscheduled Construction Cash Contribution 865,000 Other Costs 0 Reinbursements 0 Total Estimated Scheduled Construction Cost Total Estimated Unscheduled Construction Cost Total Estimated Project Cost	691,268,000 2,732,000 694,000,000	Accum % of Est Fed Cost
Allocations to 30 September 1987 Conference Allowance for FY 1988 Allocation for FY 1988 Allocations through FY 1988 Allocation Requested for FY 1989 Scheduled Balance to Complete after FY 1989 Unecheduled Balance to Comp	194,971,000 17,000,000 14,070,000 1/ 209,041,000 40,400,000 269,692,000 1,867,000	40 48

1/ Reflects \$2,216,000 reduction assigned as Savings and Slippage and \$714,000 reprogrammed from the project.

## PHYSICAL DATA

Levees: Average height: 16 feet Length: 80 miles

Drainage Structures: 9

Floodwalls: 17.9 miles

Dam Closures: 2 Pumping Plant: 1

Floodgates: 2

Control Valve Structures: 3

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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 future years even though severe demages have resulted from several hurricanes in the past years. Rurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Pass and the Immer Barbor 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 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 much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane more severe than any of record are possible. In the event of the occurrence of such a severe hurricane protection against these threats to life and property. Hurricane Betsy, in September 1955, 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 will provide protection from the St. Charles Parish area. The Lake Pontchartrain hurricane protection project will provide protection against flooding fro

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FISCAL YEAR 1989: The requested amount of \$40,400,000 will be applied as follows:

NEW ORLEANS EAST UNIT Complete:	
Southpoint to GIWN Levee	2,260,000
Engineering and Design	2,000,000
Supervision and Administration	750,000
Subtotal	\$ 5,010,000
NEW CRIEANS WEST UNIT	
Initiate:	4
Alignment N. Airline Hwy 1st Lift	\$ 3,000,000
Continue:	6 E00 000
Jefferson Parish Return Levee	6,500,000
Jefferson Parish Lakefront Levee	19,400,000
The least of Dation	1,610,000
Engineering and Dasign	2,251,000
Supervision and Administration Subtotal	\$32,761,000

(Hurricane Protection)

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

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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 without cost to the United States all lands, easements, and right-of-ways, including borrow areas and spoil disposal areas.		
Acceptish alterations to roads, pipelines, cables, wherves, oil wells, and any other facilities necessary for construction of the project.	\$ 40,009,000	-
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 contruction schedules as required by the Chief of Engineers, excluding a reimburgement to the Federal Government for costs allocated due to the Water Resources Development	16,724,000	-
Act of 1974.  Reimburse the Federal Government for costs allocated due to the Water Resources	116,267,000 1/	-
Development Act of 1974.	35,000,000	
Bear all costs of operations, maintenance, and replacements of all features of the project works.		\$1,213,000
Total Non-Federal First Cost	\$208,000,000	

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 in FY 1977.

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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 \$25,366,000 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 Borgna 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 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.

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## 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. Portchartrain 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 Portchartrain 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 Portchartrain 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.

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COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$521,000,000 is an increase of \$11,000,000 from the latest estimate (\$510,000,000) submitted to Congress. This change includes the following items:

Price Escalation on Construction Features Post Contract Award and Other Estimating Adjustments \$16,153,000 -5,153,000

\$11,000,000

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 Flan 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.

STATUS OF COMPILIANCE WITH CLEAN WATER ACT: 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 West/Mandeville 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