Harrison Protection

1 January 1977
New Orleans District

~~M Hobbs~~ File

DATA FOR TESTIFYING OFFICERS ON FY 1978 CIVIL WORKS BUDGET

LAKE PONTCHARTRAIN, LA. AND VICINITY

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REFERENCE ER 11-2-240 WHICH STATES THAT BUDGETARY INFORMATION IS NOT TO BE RELEASED OUTSIDE THE DEPARTMENT OF THE ARMY

1 January 1977
New Orleans District

DATA FOR TESTIFYING OFFICERS ON FY 1978 CIVIL WORKS BUDGET

LAKE PONTCHARTRAIN, LA. AND VICINITY

BENEFIT-COST RATIO:

a. Comparison of B/C Ratio.- The current B/C ratio of 13.5 is an increase of 0.2 from that last presented to Congress. Annual costs increased due to higher first cost, higher price levels, increased land values, an increase in the economic rate of return on land, and an increase in the capitalized cost of operation and miantenance of The Rigolets Lock. Benefits increased due to higher price levels, added development in the project area, increased land values, and higher current normalized price levels for agricultural benefits.

b. Annual Benefits & Charges.

	Last Est. Submitted to Congress	Current Estimate	% of Current Total	Change From Last
Benefits:				
Flood Control				
Inundation Reduction 1/	$179,316,000	$200,833,000	95	$+21,517,000 3/
Intensification 2/	6,835,000	7,518,000	3	+683,000 4/
Area Redevelopment	3,004,000	3,304,000	2	+300,000 5/
Total Annual Benefits	$189,155,000	$211,655,000	100	$+22,500,000
Total Annual Costs	14,189,000	15,636,000		+1,447,000 6/
B/C Ratio	13.3	13.5		+0.2
Interest Rate Used	3-1/8%	3-1/8%		

BENEFIT-COST RATIO: (Cont'd)

1/ Essentially complete protection will be provided to 151,580 acres, comprised of 45,640 acres of urban type development, 10,970 acres of partially developed land, 21,160 acres of open land, and 73,810 acres of woodland, swamp and/or marsh. Protection in varying degrees will also be provided for an additional 350,200 acres comprised of 2,400 acres of urban development, 7,600 acres of open land, and 340,200 acres of woodland, swamp and/or marsh.
2/ Intensification benefits will accrue to approximately 68,500 acres of urban type land and 260 acres of protected swamp and marshland.
3/ Due to higher price levels, additional development in the project area, and higher current normalized price levels for agricultural benefits.
4/ Due to increase in land values.
5/ Employment benefits increased due to higher price levels. These benefits will be derived as a result of the project's impact on unemployment and the depressed economy of the area.
6/ Due to higher first costs, higher price levels, increased land values, an increase in the capitalized cost of operation and maintenance of Rigolets Lock and an increase in the economic rate of return on land from 6% to 8%.

ALLOCATION AND APPORTIONMENT OF FIRST COSTS:

Purpose	Allocation of First Costs Based on Last Estimate Presented to Congress	Current	% of Current Total
Flood Control	$336,870,000	$361,450,000	96
Navigation (Seabrook Lock)	15,130,000	16,550,000	4
TOTAL	$352,000,000	$378,000,000	100

The apportionment of cost is based on the cost sharing formula as outlined in House Document No. 231, 89th Congress and authorized by Flood Control Act of 1965. H.D. No. 231 specifies that local interests contribute in cash or equivalent work not less than 30 percent of the total project cost, said 30 percent to include the fair market value of lands, damages, and alterations (relocations) for the construction of the project.

One-half the cost of the Seabrook Lock is allocated to the hurricane protection purpose and these costs are apportioned in accordance with the 70/30 percent cost sharing formula. The other half of the cost of Seabrook Lock is allocated to the Navigation purpose and is Federal cost. In addition, local interests are required to contribute the capitalized cost of Operation, Maintenance and Repair of Rigolets Lock and these funds are to be used by the Federal Government in project construction.

ALLOCATION AND APPORTIONMENT OF FIRST COSTS: (Cont'd)

Apportionment of First Costs			
Last Estimate to Congress		Current Estimate	
Federal	Non-Federal	Federal	Non-Federal
$242,000,000	$110,000,000	$260,000,000	$118,000,000

Details of Apportionment

	Project Costs to be Apportioned	Apportionment	
		Federal	Non-Federal
To be apportioned on 70/30 basis:	$360,320,000		
70% of Project Costs :		$252,450,000	
30% of Project Costs :			$107,870,000
One-Half the cost of Seabrook Lock that is allocated to the Navigation purpose :	16,550,000	16,550,000	
Cost of Beautification :	900,000	900,000	
Cost of Realinement at Florida Avenue Container Plant	230,000		230,000
Capitalized cost at 3-1/8% the annual costs OM&R of Rigolets Lock to be contributed by local interests and used by the Federal Government in constuction		-9,900,000	+9,900,000
Total	$378,000,000	$260,000,000	$118,000,000

FINANCIAL DATA:

a. Comparison of Federal Cost Estimates. The current Federal cost estimate of $260,000,000 is an increase of $18,000,000 over the latest estimate ($242,000,000) submitted to Congress. This change includes increases of $17,953,000 for higher price levels, and $1,074,000 in Engineering and Design and Supervision and Administration based on a recent reanalysis of requirements. These increases were partially offset by a decrease of $1,027,000 based on a reanalysis of Federal cost-sharing requirements.

FINANCIAL DATA: (Cont'd)

b. Comparison of Non-Federal Cost Estimate. The current non-Federal cost estimate of $118,000,000 is an increase of $8,000,000 over the latest estimate ($110,000,000) submitted to Congress. This change includes increases of $8,212,000 for higher price levels, $29,000 based on actual costs of completed relocations and $70,000 in Lands and Damages due to the addition of The Rigolets Barrier Extension. These increases were offset by a decrease of $311,000 based on a reanalysis of non-Federal cost-sharing requirements.

c. Comparison of Project Cost Estimate.-

Feature	Latest Estimate To Congress FY 1977 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
BARRIER UNIT					
Lands & Damages	$ 1,900,000	$ 2,190,000	$ +290,000	$ +220,000	$ +70,000 1/
Relocations	125,000	140,000	+15,000	+15,000	-
Locks	35,995,000	39,600,000	+3,605,000	+3,605,000	-
Roads, Railroads & Bridges	135,000	150,000	+15,000	+15,000	-
Channels & Canals	3,735,000	4,030,000	+295,000	+295,000	-
Breakwater & Seawalls	2,585,000	2,840,000	+255,000	+255,000	-
Levees & Floodwalls	32,760,000	36,210,000	+3,450,000	+3,450,000	-
Flood Control & Diversion Structures	42,795,000	47,200,000	+4,405,000	+4,405,000	-
Permanent Operating Equip.	10,000	10,000	-	-	-
Engineering & Design 4%	9,190,000	9,890,000 4/	+700,000	+234,000	+466,000 2/
Supervision & Admin. 5%	6,520,000	6,920,000	+400,000	+316,000	+84,000 3/
Subtotal-Barrier Unit	$135,750,000	$149,180,000	$+13,430,000	$+12,810,000	$+620,000

1/ Increased $70,000 due to addition of The Rigolets Barrier Extension.
2/ Increased $16,000 due to addition of The Rigolets Barrier Extension and $450,000 due to addition of Water Quality & Stream Gaging program
3/ Increased $13,000 due to addition of The Rigolets Barrier Extension, and $71,000 due to addition of Water Quality & Stream Gaging program.
4/ Includes $5,000 for U.S. Fish and Wildlife Service.

FINANCIAL DATA: (Cont'd)

c. Comparison of Project Cost Estimate.

Feature	Latest Estimate to Congress FY 1977 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
NEW ORLEANS EAST UNIT					
Lands & Damages	$ 7,490,000	$ 7,760,000	$ +270,000	$ +270,000	$ -
Relocations	6,610,000	7,210,000	+600,000	+571,100	+28,900 1/
Levees & Floodwalls	65,720,000	68,260,000	+2,540,000	+4,232,800	-1,692,800 2/
Pumping Plants	8,510,000	9,360,000	+850,000	+850,000	-
Engineering & Design	10,040,000	10,480,000 5/	+440,000	+228,000	+212,000 3/
Supervision & Admin.	4,930,000	5,100,000	+170,000	+138,000	+32,000 4/
Subtotal-N.O. East Unit	$103,300,000	$108,170,000	$+4,870,000	$+6,289,900	-1,419,900

1/ Increase based on actual cost of relocations
2/ Decrease due to local interests not receiving credit for Citrus Lakefront Levee which was awarded prior to project authorization.
3/ Increased $212,000 due to addition of water quality and stream gaging program.
4/ Increased $32,000 due to addition of water quality and stream gaging program.
5/ Includes $12,000 for U.S. Fish and Wildlife Service.

NEW ORLEANS WEST UNIT					
Lands & Damages	$ 1,140,000	$ 1,140,000	$ -	$ -	$ -
Relocations	745,000	820,000	+75,000	+75,000	-
Levees & Floodwalls	27,590,000	30,350,000	+2,760,000	+2,760,000	-
Engineering & Design	2,055,000	2,460,000	+405,000	+69,000	+336,000 1/
Supervision & Admin.	1,150,000	1,260,000	+110,000	+55,000	+55,000 2/
Subtotal-N.O. West Unit	$32,680,000	$36,030,000	$+3,350,000	$+2,959,000	$+391,000

1/ Increased $336,000 due to addition of water quality and stream gaging program.
2/ Increased $55,000 due to addition of water quality and stream gaging program.

FINANCIAL DATA: (Cont'd)

c. Comparison of Project Cost Estimate.- (Cont'd)

Feature	Latest Estimate to Congress FY 1977 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
MANDEVILLE UNIT					
Levees & Floodwalls	$532,000	$588,000	$+56,000	$+56,000	-
Engineering & Design	60,000	62,000	+2,000	+2,000	-
Supervision & Admin.	48,000	50,000	+2,000	+2,000	-
Subtotal-Mandeville Unit	$640,000	$700,000	$+60,000	$+60,000	-
CHALMETTE UNIT					
Lands & Damages	$ 6,930,000	$ 6,960,000	$ +30,000	$ +30,000	-
Relocations	3,200,000	3,290,000	+90,000	+90,000	-
Levees & Floodwalls	59,720,000	63,350,000	+3,630,000	+3,630,000	-
Permanent Oper. Equipment	20,400	20,400	-	-	-
Engineering & Design	5,490,000	5,850,000 3/	+360,000	+148,000	$+212,000 1/
Supervision & Admin.	4,269,600	4,449,600	+180,000	+148,000	+32,000 2/
Subtotal Chalmette Unit	$79,630,000	$83,920,000	$+4,290,000	$+4,046,000	$+244,000
GRAND TOTAL	$352,000,000	$378,000,000	$+26,000,000	$+26,164,900	$-164,900

1/ Increased $212,000 due to addition of water quality and stream gaging program.
2/ Increased $32,000 due to addition of water quality and stream gaging program and $148,000 for salary increases
3/ Includes $3,000 for U.S. Fish and Wildlife Service.

FINANCIAL DATA: (Cont'd)

c. Comparison of Project Cost Estimate.- (Cont'd)

E&D is 9.5% of the construction cost.
S&A is 5.4% of the construction and E&D costs.

d. Contingencies. The estimate includes $41,409,000 for contingencies which is 19% of the uncompleted work.

The estimate last presented to Congress included $37,858,000 for contingencies which was 20% of the uncompleted work.

e. Firmness of Federal Cost Estimate. The current estimate is of Survey, GDM and Feature DM scope and reliability with cost adjusted to October 1976 price levels. The total cost estimate is firm, except for adjustments which will be required upon completion of the remaining GDM's and Feature DM's.

f. Appropriation History.

Appropriation History			FY 1977 Budget History		FY 1978 Budget Request
Total thru:	FY 1972	$42,739,000 1/	LMVD "No Delay" Recommendation	$18,500,000	$14,900,000
Allowance for	FY 1973	17,500,000	LMVD Recom. within Target Alloc.	8,200,000	9,000,000
	FY 1974	0	OCE "No Delay" Recommendation	18,500,000	14,900,000
	FY 1975	-2,080,000	OCE Recom. within Target Alloc.	7,000,000	12,400,000
	FY 1976	10,845,000	OMB Allowance	12,000,000	12,400,000
	1976 T-Qtr.	5,135,000	House Allowance	12,000,000	
*	FY 1977	10,575,000 2/	Senate Allowance	12,000,000	
* Total to Date		$84,714,000	Conferees Allowance	12,000,000	
*			Work Allowance	10,575,000 2/	
			Capability	15,400,000	15,600,000

1/ Initial construction funds received in FY 1967
* 2/ Excludes $1,300,000 assigned as Savings and Slippages and $125,000 transferred to Cooper Lake & Channels
* project in February 1977

g. Capability. $3,200,000 in addition to the budget allowance of $12,400,000 could be utilized economically in the budget fiscal year.

(1) Work to be Accomplished:

Item	Estimated Expenditures	Months Advanced
Barrier Unit: 1/		
Initiate-Rigolets Lock	$1,000,000	18
Initiate-Rigolets Barrier, North of Rigolets, 1st Lift	400,000	21
Initiate-Rigolets Barrier, South of Rigolets, 1st Lift	400,000	21
New Orleans East Unit:		
Advance-Citrus Lakefront Levee, Inner Harbor Navigation Canal to Paris Rd. Levee	200,000	3
Chalmette Unit:		
Initiate-Sta. 370 to 682, Levee Enlgt. & Pipeline Canal Closure, 2nd Lift	300,000	9
Initiate-Sta. 705 to 945, 1st Levee Enlargement	600,000	6
Advance-Sta. 1121 to 1568, 1st Levee Enlgt., Verret Floodwall, & Creedmore Canal Drainage Structure	300,000	4
Total	$3,200,000	

1/ Capability based on local interests furnishing rights-of-way and required contribution.

(2) Effect on Completion: The additional capability will not advance project completion; however, a high degree of interim protection will be provided to the Chalmette Area approximately 5 to 9 months earlier than scheduled.

LAKE PONTCHARTRAIN, LA. AND VICINITY

FINANCIAL DATA: (Cont'd)

h. Transfers. 1/

	From	To	Month of Transfer	Amount	Reason
FY 1976:					
	Lake Pontchartrain, La. & Vicinity	L&D No. 26 (St. Louis Dist)	Sep 75	$ 165,000	To prevent notice of exhaustion of funds.
	Lake Pontchartrain, La. & Vicinity	Miss. R., between Ohio & Miss. R.-Chain of Rocks (St. Louis Dist)	Sep 75	95,000	To prevent notice of exhaustion of funds.
	Lake Pontchartrain, La. & Vicinity	Harrisonville & Dry Landing L&D No. 2 (St. Louis Dist)	Sep 75	195,000	To prevent notice of exhaustion of funds.
	Lake Pontchartrain, La. & Vicinity	OCE	Feb 76	850,000	Revoked by OCE prior to receipt of work allowances to fund PL 99.
	Lake Pontchartrain, La. & Vicinity	Clarence Cannon Dam (St. Louis Dist.)	Apr 76	2,700,000	To fund overrun on reservoir contract
	OCE	Lake Pontchartrain, La. & Vicinity	Jun 76	160,000	Repayment of PL 99 funds loaned to OCE
"T" Quarter:					
	Lake Pontchartrain, La. & Vicinity	Clarence Cannon Dam (St. Louis Dist.)	Jul 76	160,000	To fund overrun on reservoir contract
FY 1977:					
*	Lake Pontchartrain, La. & Vicinity	Cooper Lake & Channel, Tex.	Feb 77	125,000	To fund additional E&D requirements for geological investigations, modifications to draft EIS and processing a plan selection report
Anticipated:					
*	Lake Pontchartrain, La. & Vicinity	Cooper Lake & Channel, Tex.	--	60,000	--do--
	Lake Pontchartrain, La. & Vicinity	Atch. River & Bys. Chene, Boeuf & Black, La.	--	678,000	To advance award of the Bayou Black to Bayou Chene contract.

1/ The primary reason for surplus of funds on this project is the failure of local interests to provide rights-of-way as scheduled.

FINANCIAL DATA: (Cont'd)

i. Unobligated and Unexpended Balances.

	End of FY 1976	End of T-Quarter	Estimated at End of FY 1977
Unobligated Balance	$ 100	$ 0	$ 0
* Undelivered Orders	1,006,400 1/	3,056,900 2/	257,000 3/
* Unexpended Balance	$1,006,500 1/	$3,056,900 2/	$257,000 3/

1/ The undelivered orders at the end of FY 1976 include $620,400 on construction contracts and $386,000 in E&D. Delays due to contractor claims and contracts on N.O. East Lakefront Levee, Paris Road to South Point and Chalmette Levee from Sta. 995 to 1119 being behind schedule. Delays in Engineering and Design were caused by A/E contracts for the Chef Menteur and Rigolets Complexes and A/E contracts for surveys in the N.O. East and Chalmette Units being behind schedule. Design of the barrier complexes was delayed due to additional time required for model studies. It is anticipated these funds will be expended in FY 1977.

2/ The undelivered orders at the end of the Transition Quarter are due to failure of local interests to provide rights-of-way for the Barrier Unit, delay of the Citrus Back Levee and Floodwall due to preparation and approval of Section 404 notice for foreshore protection, failure to settle 3 claims against completed contracts and delays in Engineering and Design and Supervision and Administration were caused by A/E contracts for the Chef Menteur and Rigolets Complexes and the Seabrook Complex which are being designed by the Rock Island District being behind schedule. Local interests are expected to provide right-of-way in the Barrier Complexes in FY 77, and $1,936,900 of the $3,056,900 undelivered order is expected to be expended in FY 77.

3/ The primary reason for the estimated undelivered orders at the end of FY 77 is the failure of local interests to provide rights-of-way and delays in Engineering and Design and Supervision and Administration by the A/E contractors for the Barrier Complexes. Local interests are expected to provide * right-of-way in the Barrier Complexes in FY 77 and the $257,000 undelivered order is estimated to be expended in FY 78. The PB-2A reflects undelivered orders of $1,120,000 since it was prepared prior * to identification of the actual and anticipated transfers in FY 1977 shown in paragraph h (WDTO, page 9). * In accordance with the PB-2A, an undelivered order of $1,120,000 would be required for FY 1978 * scheduled expenditures.

*(Rev. 9 Feb 77)

LAKE PONTCHARTRAIN, LA. AND VICINITY

FINANCIAL DATA: (Cont'd)

j. Comparison of Bids.

Item	No. of Bidders	Low Bid	High Bid	Government Estimate	Last Est. to Congress	Current Est. to Congress	Current Working Estimate
Chalmette, Sta 945-1117, 2nd lift & P/L failure area 1st lift	5	$5,460.0	$7,750.0	$4,747.0	$5,000.0 1/	$5,700.0	$5,700.0
N.O. East Back Levee, Sta. 874 to 879, Floodwall	11	393.0	898.0	549.0	420.0	410.0	410.0
* N.O. East Back Levee, Sta. * 879 to 1006 (Interim Lev. * Enlgt.)	10	76.0	225.0	89.0	2/	135.0	80.0

1/ Last presented as Sta. 705 to 1119, 2nd lift & P/L Failure Area, 1st lift.
* 2/ Item added to program. This item was awarded in July 1975 and contract was terminated with work
* partially complete.

k. Maintenance.-

Federal. Operation and maintenance of Seabrook Lock, and Rigolets Lock and navigation channel will be the responsibility of the United States. Seabrook Lock will be maintained as a feature of the Mississippi River-Gulf Outlet project. Rigolets Lock and navigation channel will be maintained and operated by the United States; the costs involved will, however, be borne by local interests who will provide a cash contribution equal to the capitalized value of the estimated annual maintenance charge for the lock. The estimated annual Federal maintenance cost is $324,300.

Non-Federal. The estimated annual Non-Federal cost for maintenance is $656,000 including $271,700 for replacements. (Refer to YDTO-13, Local Cooperation.)

LAKE PONTCHARTRAIN, LA. AND VICINITY

STATUS AND SCHEDULE:

A. Construction Projects.-

a. Construction.-

(1) Scheduled Completion Dates:

Feature	Last Presented to Congress	Present Schedule	Explanation of Change
BARRIER UNIT			
Locks	Mar 1982	Mar 1983	Chef Menteur Navigation Structure delayed 12 months due to evaluation of results of model study of Rigolets Control Structure and renegotiation of A/E contract
Roads, Railroads & Bridges	Sep 1991	Jul 1992	To be constructed with Chef Menteur Barrier Levee. (See Levees & Floodwalls feature)
Channels & Canals	Sep 1982	Mar 1983	See Locks feature
Levees & Floodwalls	Sep 1991	Jul 1992	Initiation of barrier levees delayed 10 months due to R/W problems. Chef Menteur Barrier Levees (East and West) have been divided into 2 contracts. The west levee has been delayed 10 months due to R/W problems. The east levee has been delayed 6 months due to R/W problems and 4 months due to FY 1978 funding.

STATUS AND SCHEDULE: (Cont'd)

A. Construction Projects.- (Cont'd)

a. Construction.- (Cont'd)

(1) Scheduled Completion Dates: (Cont'd)

Feature	Last Presented to Congress	Present Schedule	Explanation of Change
BARRIER UNIT (Cont'd)			
Flood Control & Diversion Structures	Sep 1982	Dec 1982	See Locks feature (WDTO, page 12)
Permanent Operating Equipment	Mar 1982	Oct 1982	To be constructed with Seabrook Lock which is scheduled for completion Sep 1982.
NEW ORLEANS EAST UNIT			
Levees & Floodwalls	Jun 1985	Sep 1985	New Orleans East Back Levee delayed 3 months due to termination of levee enlargement contract and new contract to be awarded for this item
ENTIRE PROJECT	Sep 1991 1/	Jul 1992 1/	Delay of 10 months due to Chef Menteur Barrier Levee (See Levees & Floodwalls Feature, Barrier Unit).

1/ Excludes the New Orleans West Unit which has been deferred indefinitely pending completion of additional environmental studies and due to inclusion of Bayous LaBranche and Trepagnier in the Louisiana Natural and Scenic River System and the Mandeville Unit which has been deferred due to objections by local interests.

NOTE: Although final completion is scheduled for July 1992, beneficial protection will be attained in March 1984. The "beneficial completion" date (March 1984) represents the date when the Chef Menteur, Rigolets, and Seabrook barrier complexes will be brought to approved grade for the first time. The barrier complexes will deny entrance of hurricane driven tidal surges into Lake Pontchartrain, which in conjunction with levees scheduled for completion prior to the barriers will provide a high degree of interim protection. Some settlement of levees will naturally occur because of poor foundation conditions but this can be corrected in years subsequent to fiscal year 1984 and prior to project completion. "Project Completion" represents that date (July 1992) when full protection has been provided excluding the St. Charles Parish levees and the Mandeville Unit, which have been deferred indefinitely.

LAKE PONTCHARTRIAN, LA. AND VICINITY

STATUS AND SCHEDULE: (Cont'd)

(2) Performance- FY 1977

Last Presented to Congress/Item	Present Schedule	Remarks
BARRIER UNIT		
Not Presented:		
Chef Menteur Barrier, West of Chef Menteur, 1st Lift Levee	Initiate	Originally scheduled to be awarded in FY 76 and funded in FY 77 with carry-over funds. Delayed until FY 77 due to R/W problems. Items previously reported as Chef Menteur Barrier, E&W of Chef Menteur, 1st Lift Levee, Chef Menteur East delayed until 2nd quarter FY 78.
NEW ORLEANS EAST UNIT		
Initiate:		
Citrus Back Levee, Sta. 624 to 665, Floodwall Capping	--	Deferred due to higher priority items. Rescheduled for FY 83. Currently reported as IHNC, East & West & Citrus Back Levee, floodwall capping.
IHNC, East Side Capping Floodwalls & raising Levees	--	-do-
IHNC, West Side Capping Floodwalls & raising Levees	--	-do-
Citrus Lakefront Levee, IHNC to Paris Road	--	Divided into 3 items, in order to expedite gap at New Orleans Lakefront airport. Floodwall portion to be initiated in FY 1977. Levee portion rescheduled for 3rd quarter of FY 1978; foreshore portion resheduled for 4th quarter of FY 1979.
Continue:		
Citrus Back Levee, Station 176 to 572, Floodwall & 2nd Lift	Initiate	Delayed 10 months due to preparation and approval of Sec. 404 notice for foreshore protection in portion of this reach which has to be complete before 2nd Lift levee is started. Currently reported as Sta. 176 to 574.

STATUS AND SCHEDULE: (Cont'd)

(2) Performance - FY 1977 (Cont'd)

Last Presented to Congress/Item	Present Schedule	Remarks
Not Presented:		
IHNC East Side-Dwyer Road to US 90 Floodwall	Complete	Contract physically complete. Contract claim pending.
Citrus Back Levee, Sta. 431 to 492, Levee & Floodwall	Complete	-do-
N.O. East Back Levee Levee, Sta. 879 to 1006 Interim Levee Enlgt.	Initiate & Complete	Item added to program. This item was awarded in Jul 75 and contract was terminated with work partially complete. New contract was awarded in Feb 77 to complete this item.
Citrus Back Levee, Sta. 509 to 531, foreshore protection	Initiate & Complete	High priority item added to program. To be done in conjunction with MR-GO project foreshore protection.
N.O. East South Point to GIWW Levee, Rehabilitation	Complete	Item added to program. Partially completed in spring of 1976. To be reseeded in spring of 1977.
CHALMETTE UNIT		
Initiate		
Sta. 9+80 to 65+00, 2nd Lift Levee	--	Delayed due to local interests evaluating a study of a realinement in this reach. Rescheduled for 1st quarter of FY 78.
IHNC East, North of Fla. Ave, Levee and Floodwall	--	-do-
Continue:		
Station 705 to 1119, 2nd Lift & Pipeline	--	Divided into 2 items due to Section 404 considerations. The section from Sta. 945 to 1117 is scheduled for completion in FY 1977. The section from Sta. 705 to 945 is rescheduled for 1st quarter of FY 1979.
Not Presented:		
Chalmette Sta. 995 to 1119, 1st lift levee	Complete	Contract physically complete. Contract claim pending.

STATUS AND SCHEDULE: (Cont'd)

(2) Performance - FY 1977 (Cont'd)

Last Presented to Congress/Item	Present Schedule	Remarks
CHALMETTE UNIT (Cont'd)		
Not Presented		
Bayou Bienvenue Control Structure. Modifications and Maintenance	Complete	Item added to program. Partially completed in FY 76. Scheduled for completion in FY 77.
Bayou Dupre Control Structure, Modification and Maintenance	Complete	-do-

PHYSICAL DATA CHANGES: Physical data are the same as last presented to Congress.

OTHER DATA CHANGES: None

LOCAL COOPERATION: (Refer to YDTO-13)

a. Rights-of-way Schedule for Items which could be Initiated in the Remainder of the Current Fiscal Year and in the Budget Fiscal Year.

Item of Work	Action Taken by District	Scheduled Date for Receipt of R/W	Date R/W was Obtained
Barrier Unit			
Chef Menteur Barrier,West of Chef Menteur, 1st lift levee	Requested May 71	Feb 77	
* Chef Menteur Barrier,East of Chef Menteur, 1st lift levee	Requested May 71	Dec 77	
Rigolets Lock	Requested Aug 74	Dec 77	
Rigolets Barrier North, 1st lift	Requested Aug 74	Dec 77	
Rigolets Barrier South, 1st lift	To be req'd Apr 77	Dec 77	

*(Rev 25 Jan 77)

LOCAL COOPERATION: (Refer to YDTO-13) (Cont'd)

a. Rights-of-way Schedule for Items which could be Initiated in the Remainder of the Current Fiscal Year and in the Budget Fiscal Year.

Item of Work	Action Taken by District	Scheduled Date for Receipt of R/W	Date R/W was Obtained
New Orleans East Unit			
IHNC West Side, Fla. Ave. Complex	To be req'd Apr 78	Jun 78	
Citrus Back Levee, Sta. 176 to 574, Floodwall & 2nd Lift	Requested May 76	Mar 77 1/	
Citrus Back Levee, Sta. 509 to 531, foreshore protection	Requested Mar 76		May 76
Citrus Lakefront Levee, IHNC to Paris Road, Floodwall	Requested Jan 77	Mar 77	
Citrus Lakefront Levee, IHNC to Paris Road, Levee	To be req'd Aug 77	Nov 77	
New Orleans East Back Levee, Sta. 874 to 879, Floodwall	Requested Aug 76		Aug 76 1/
New Orleans East Back Levee, Sta. 879 to 1006, interim levee enlargement	Requested Feb 75		Feb 75 1/
New Orleans East Back Levee, Sta. 773 to 1006, 2nd lift	To be req'd Mar 78	May 78 1/	
Chalmette Unit			
IHNC East, North of Fla. Ave., Levee and Floodwall	Requested Feb 75	Jul 77	
IHNC East-Fla. Ave. Complex Sta. 9+80 to 65+00, 2nd lift levee	To be req'd Apr 78	Jun 78	
Sta. 65 to 274, 2d lift levee and Old Paris Road Closure 1st lift	Requested Jul 75	Jul 77	
	Requested Dec 74	Jul 77	

(Rev. 9 Feb 77)

LOCAL COOPERATION: (Cont'd)

a. Rights-of-way Schedule for Items to be Initiated in the Remainder of the Current Fiscal Year, and in the Budget Fiscal Year. (Cont'd)

Item of Work	Action Taken by District	Scheduled Date For Receipt of R/W	Date R/W Was Obtained
Chalmette Unit (Cont'd)			
Sta. 370 to 682, Final levee enlgt. and P/L Can. Clos., 2nd lift	be req'd Jul 77	Oct 77 1/	
Sta. 705 to 945, 1st levee enlargement	To be req's Nov 77	Feb 78 1/	
Sta. 1121 to 1568, 1st levee enlgt. Verrett Floodwall and Creedmore Canal Drainage Structure	Requested Jun 75	Sep 77	

1/ Right of entry. Available within present R/W.

PROBLEMS: All questions were fully answered in last year's appropriation hearing.

ADDITIONAL INFORMATION:

a. Inner Harbor Navigation Canal Flooding.- Subsequent to project authorization, owners of industires located along the IHNC on the floodside of the hurricane protection complained that the authorized Seabrook Lock, located at the Lake Pontchartrain terminus of the IHNC, would increase the hurricane surge elevation in the IHNC by eliminating lakeward flow in the canal. Further, in the fall of 1967, owners requested from the late Senator Ellender, and Senator Russell Long and the Late Congressman Hale Boggs and Congressman Hebert that consideration be given to providing protection to industries along the IHNC located on the floodside of the protective system.

ADDITIONAL INFORMATION: (Cont'd)

a. Inner Harbor Navigation Canal Flooding.- (Cont'd)

(1) By letter Report, "Lake Pontchartrain La. and Vicinity - Report on Controlling Elevation of Seabrook Lock," the District Engineer recommended that the controlling elevation of the Seabrook Complex Rock Dike be reduced from 13.2 feet to 7.2 feet m.s.l. The reduction will decrease the surge elevation in the IHNC north of its junction with MR-GO for hurricanes on tracks critical to the canal by allowing lakeward flow, thus reducing flood damages to industries on the banks of the canal north of the MR-GO. The reduction of the controlling elevation of the Seabrook Rock Dike from 13.2 to 7.2 feet m.s.l. was approved by the Office of the Chief of Engineers on 12 January 1967. Further, the Seabrook Lock complex is being designed to include a flow structure on the east side of the lock to give greater flexibility in control of salinity, flood stages, excessive current velocities in the IHNC, and to satisfy riparian flow requirements. The general design memorandum provides for a control structure with vertical lift gates to accomplish that control.

(2) A study was performed to determine the feasibility of constructing a floodgate-type structure to prevent hurricane surges, occurring in Lake Borgne, from entering the IHNC. Insofar as possible, location of the structure considered conditions which would provide maximum benefits and be least detrimental to navigation. The three locations considered are:

(1) in the IHNC just north of its juncture with the MRGO,
(2) in the MRGO just east of its juncture with the IHNC, and
(3) in the MRGO in the vicinity of Paris Road bridge

ADDITIONAL INFORMATION: (Cont'd)

a. Inner Harbor Navigation Canal Flooding. (Cont'd)

A meeting was held on 17 March 1969 with representatives of local interests to discuss the results of our studies. It was explained that none of the plans considered were found to be economically justified. Further benefits claimed for the plan located in the MR-GO in the vicinity of the Paris Road bridge do not include any benefits that would result from construction of the proposed port development along the south bank of the MR-GO from the IHNC to Paris Road. Plans for the port development had not advanced to a stage where it could be determined what the plan of improvement was to consist of or when it was to be accomplished. Representatives of the Board of Commissioners of the Port of New Orleans indicated that they would furnish additional information concerning the proposed port development. In December 1969 the Dock Board announced the proposed "Centroport" concept which is the plan of development for the port to occupy both banks of the MR-GO from the IHNC to the GIWW. In conjunction with these plans, it has been proposed that a structure be placed in the MR-GO south of its juncture with the GIWW and connected by levee to another gated facility in the shallow draft waterway. The benefits of such a plan are based on construction savings due to lower floodwall and levee elevation requirements and increased operating efficiencies for Centroport. However, the slow pace of the port development in this area and the completion of the higher floodwalls and levees in the interim have largely negated any benefits which might have resulted from this plan.

b. Florida Avenue Complex.- The addition of a major pumping station has been approved for the Florida Avenue Complex along with other structural modifications, including elimination of vertical lift gates in the drainage canal. Local interests had requested consideration of the pumping station and are committed ultimately to its construction. Because of the large funding requirement for the pumping station, local interests have now requested that the vertical lift gates in the drainage canal be restored as part of the approved plan. These are the only gaps left in the Inner Harbor Navigation Canal levee system. Since several years will be required for financing and design of the pumping station, the Corps intends to build the gates. The current cost estimate includes the vertical lift gates and the pumping station.

c. St. Charles Parish Lakefront Levee.- In view of the need for further environmental studies as well as the inclusion of Bayous LaBranche and Trepagnier in the Louisiana Natural and Scenic River System, the construction of this levee has been deferred.

ADDITIONAL INFORMATION: (Cont'd)

d. Mandeville Seawall. The Mandeville Unit portion of the project has been placed in an indefinite category due to local interests objections to the project. St. Tammany Parish Police Jury has refused to furnish the financial assurances. (Refer to YDTO, page 14, Current Status of Assurances, Lake Pontchartrain Barrier Plan.)

e. Report of Significant Post-Authorization Changes. In compliance with OCE letter dated 21 November 1973, subject, Lake Pontchartrain, Louisiana and Vicinity, Lake Pontchartrain Barrier Plan - Report on size selection, Chef Menteur Navigation Structure and the Rigolets and Seabrook Locks, and LMVD 1st Ind thereto, a significant post-authorization change report was prepared and submitted by NOD for review and approval on 7 January 1974. The report was returned by OCE on 16 December 1974 for additional information. A Public Meeting was held on 22 February 1975, in which comments were received on the sizes of the navigation structures. Additional work on the report was delayed until a review of the previous sizing decisions could be made. This review has been completed and a new report was submitted on 25 June 1976. This report, which cover The Rigolet Lock only, was approved by OCE on 21 September 1976, subject to agreement with the local sponsor.

f. Save Our Wetlands Suit.- Save Our Wetlands, Inc., filed suit on 8 December 1975 in United States District Court for the Eastern District of Louisiana against the New Orleans District Engineer, the Secretary of the Army, the Administrator of the Environmental Protection Agency and the President of the Orleans Levee Board. The Clio Sportsman's League joined the suit on 21 June 1976. The suit alleges the following:

(1) that a regional cumulative Environmental Impact Statement should be accomplished prior to proceeding with the project;
(2) that the Corps has not complied with the conditions of final approval by the Environmental Protection Agency of Section 404 requirements of the Federal Water Pollution Control Act;
(3) that the Corps has not completely eliminated the St. Charles Parish lakefront levee as required by the Environmental Protection Agency. The suit also seeks to have the New Orleans East lakefront levee removed and to have three openings for tidal interchnage provided under the Southern Railroad embankment.

The response to the complaint denies wholly or in part each of the accusations. The suit is presently in the discovery stage of the legal proceedings and the hearing date is as yet unknown.

* The Government moved to dismiss the lawsuit based on laches and the contention that the allegations of the plaintiffs were not liable to trial in a court of justice under the National Environmental Policy Act. A hearing was held on 5 November 1976 and the court denied the motion on 7 December 1976. In addition a hearing was held on 15 December 1976 on the Orleans Levee District's (a co-defendant) motion to dismiss issues regarding assurances for the project. The court denied the motion. *

LAKE PONTCHARTRAIN, LA. AND VICINITY

ADDITIONAL INFORMATION: (Cont'd)

* g. Deferred Payment Plan. The modification authorized by the Water Resources Development Act of 1974 whereby local interests may agree to pay the unpaid balance of the cash payment due with interest in yearly installments has provided immediate relief to local interests. Cash payments were received from local interest in FY 1977 and they have expressed their appreciation of the plan. *

ENVIRONMENTAL INFORMATION:

a. Status of Environmental Impact Statement. The final statement was filed with CEQ on 9 January 1975.

b. Changes in Environmental Impact Statement Scheduling. None

c. Environmental Opposition.- The known environmental opposition to the Lake Pontchartrain, Louisiana and Vicinity Hurricane Protection project is summarized below:

(1) The Orleans Audubon Society opposes the disposal and ponding of dredged material in the marshes along the Chef and Rigolets Passes, along the MR-GO and in New Orleans East, and the proposed borrow area on Apple Pie Ridge along US Highway 90. They believe these disposal and borrow plans will destroy valuable marshland that Louisiana cannot afford to lose. They also recommend that levees be built around populated areas only and elimination of the barrier plan.

ENVIRONMENTAL INFORMATION (Cont'd)

c. Environmental Opposition. (Cont'd)

(2) The Louisiana Wildlife Federation recommends that the St. Charles Parish segment be eliminated from the project plan because it will instigate further encroachment and deterioration of a rapdily dwindling and fragile marsh ecosystem. They feel that the placing of the barrier structures as proposed on The Rigolets and Chef Menteur Pass may have severe, irreversible consequences on the delicate balance which differentiates between the fine line which constitutes a fresh and a saline marsh ecosystem.

(3) The Sierra Club, Delta Chapter believes that wetlands represent economic, environmental and recreational values which are far more important to the public interest than the claimed benefits from developing such lands for increased taxes. For this reason they recommend that the project should be used to protect existing settlement, and not to encourage intensive development in one of the large flood plains between the Mississippi River and the Gulf of Mexico.

(4) The Bonnet Carre Rod and Gun Club and the St. Charles Environmental Council oppose the St. Charles Parish levee segment as it is now proposed. They favor a hurricane protection levee generally along Airline Highway (US Hwy 61) in St. Charles Parish. They believe this alinement would be environmentally acceptable and would still protect the presently developed areas in St. Charles Parish.

(5) The Clio Sportsman's League of New Orleans' position is that they favor hurricane protection but oppose the "so called" policy of unnecessary private land enhancement at the expense of the public and the environment. They opine that the barriers with its borrow, disposal and ponding areas and accompanying future developments will play a leading role in the destruction of Lake Pontchartrain and, eventually, the entire Maurepas, Pontchartrain, Catherine and Borgne estuary system.

(6) The St. Tammany Environmental Council is of the opinion that the acknowledged and potential adverse environmental and economic impact of the Lake Pontchartrain, Louisiana and Vicinity hurricane protection plan far outweigh the benefits our population may receive in the form of hurricane protection.

ENVIRONMENTAL INFORMATION: (Cont'd)

c. Environmental Opposition. (Cont'd)

(7) The St. Tammany Sportsman's League is opposed to the "Floodgates" at the Rigolets because they say it will destroy the interplay between the lake and the marshes, which supplies 50 percent of all nutrients that feed the flora and fauna in Lake Pontchartrain. "The loss of these nutrients will result in the death of the lake," they opine.

d. Other Environmental Opinions.

(1) The US Fish and Wildlife Service and the National Marine Fisheries Service have fully cooperated in developing a plan for hurricane protection for the metropolitan area of New Orleans that will alleviate, to the fullest extent feasible, any project impacts on the fish and wildlfie resources in the area. Both have opposed the St. Charles Parish levee, as presently proposed, and have made specific recommendations in the other segments of the project to help minimize the destructive features of the project.

(2) The Environmental Protection Agency has also fully cooperated in helping us to develop an environmentally feasible plan. In their review of the statement of findings for the plans for placement of dredged material for this project they stated that tidal interchange should be allowed into the New Orleans East area until developed areas are threatened and that the Seabrook Lock should be constructed as soon as possible in order to reduce salt water intrusion into Lake Pontchartrain.

(3) The Louisiana Wildlife and Fisheries Commission expressed concern regarding damages to productive oyster beds near the Chef Menteur Barrier Structure. In the spirit of full cooperation, they have requested that the design of the ponding areas and wing walls for the Chef structure be coordinated with them and that a periodic review and evaluation regarding the effects of the other project works on fish and wildlife resources be scheduled during the entire construction period. This will insure the minimum destruction of the fish and wildlife resources. They have stated that the Seabrook Complex will provide the capability for managing salinities within the lake.

ENVIRONMENTAL INFORMATION: (Cont'd)

e. Summary of Environmental Impact Statement. Approximately 5,265 acres of marsh and swamp wetlands will be used for construction of the hurricane protection plan. The acreage of the total marsh which produces and releases detritus into Lake Pontchartrain will decrease. This action will possibly decrease the amount of secondary production of organic material in Lake Pontchartrain. Wildlife of significant value, primarily waterfowl and fur animals, will have significant project-occasioned losses.

Turbid water conditions with associated silting due to dredging, pumping, and levee construction, will occur only during construction periods. Temporary turbid water conditions during construction will decrease the amount of primary production in the disturbed area by decreasing the light available to phytoplankton and other aquatic plants. Restriction of tidal overflow from Lake Borgne, Lake Pontchartrain and the Mississippi River-Gulf Outlet will have an effect on the salinity of the open marshes. This will tend to change wetland habitat slowly into a terrestrial environment.

The proposed project will induce the conversion of marsh and swamplands in the project area to urban use. The project plan will hasten urbanization and industrialization of valuable marsh and swampland by providing basic features for further flood protection and reclamation.

* f. Environmental Studies.

(1) A contract has been entered into with L. Eugene Cronin, Ph D, Associate Director for Research Center for Environmental and Estuarine Studies in Cambridge, Md. to develop an assessment of the environmental effects of the proposed barrier structures (Chef, Rigolets and Seabrook) and to recommend any modifications to these structures to improve the environmental effectiveness of these structures.

(2) A contract has been entered into with Louisiana State University to prepare an inventory and analysis of the environmental components in Lake Pontchartrain and its surrounding wetlands. This will provide the base condition with which to compare the after condition. This will insure an adequate analysis of the effects of the project on salinity regimens within Lake Pontchartrain and on ingress and egress of marine and estuarine organism through Chef Menteur and The Rigolets Passes. It will also determine the value of the surrounding marshlands to the life systems within the lake and define the interactions between the lake and marsh and thus the effects of varied land use on both systems. *

* g. Status and Impact of Compliance with Section 404, Federal Water Pollution Control Act of 1972. In response to a request from then Congressman F. Edward Hebert, the New Orleans District conducted a public meeting to discuss the entire project on 22 February 1975. A portion of this meeting was dedicated to a presentation of methods for the disposal of dredged effluents for all portions of the project with the exception of the St. Charles lakefront levee, as required by Section 404 of the Federal Water Pollution Act of 1972. The Statement of Findings on the meeting was forwarded to the Environmental Protection Agency on 22 August 1975 for review and approval. Approval of the plan for the disposal of dredged material was granted on 1 October 1975 contingent upon the complete elimination of the St. Charles Parish portion of the project. On 15 October 1975, clarification of the status of the St. Charles Parish Lakefront Levee was provided to the Environmental Protection Agency to indicate compliance with the conditional approval. EPA has clarified their position by stating that deauthorization of the levee is not essential to meeting their condition. Furthermore, EPA stated that it was not their intent to require the elimination of hurricane protection studies in St. Charles Parish.

1 January 1977
New Orleans District
Yellow Section

DATA FOR TESTIFYING OFFICERS ON FY 1978 CIVIL WORKS BUDGET

LAKE PONTCHARTRAIN, LA. AND VICINITY

AUTHORIZATION:

Authorization Documents.-

Authorizations		Estimated Cost and Year of Price Level
FC Act of 1965 dated 27 October 1965 (PL 298-89) (HD231/89/1)	A program for protection from hurricane flood levels at New Orleans, La. and surrounding areas by means of levees, floodwalls, control structures, navigation structures, locks, dams and drainage structures.	$56,235,000 (1961) 1/
Water Resources Dev. Act of 1974 dated 7 March 1974 (PL 93-251) Section 92	A modification of the FC Act of 1965 (PL 89-298) to provide that non-Federal public bodies may agree to pay the unpaid balance of the cash payment due with interest, in yearly installments.	-

1/ This is net cost to the Federal Government. The gross cost is $60,185,000. The difference is $3,950,000 which is capitalized value at 3% interest over 100 years for O&M on Rigolets Lock which is to be contributed by local interests and used by the Federal Government for project construction.

Monetary Authorization.- Full monetary authorization was provided in the Flood Control Act of 27 October 1965.

NEED FOR THE PROJECT:

The project is located in southeastern Louisiana in the vicinity of Lake Pontchartrain and includes the City of New Orleans and surrounding areas. The project area is susceptible to flooding from wind-driven hurricane tides from Lake Pontchartrain, Lake Borgne, and the Gulf of Mexico. Historical hurricanes have produced recorded stages up to 13 feet on the southwest shore of the lake, 6.2 feet at the south shore, 7.1 feet at the southeast shore and 7.7 feet at the north shore. The protective works have been overtopped and developed areas flooded by surges from hurricanes several times in recent years.

NEED FOR THE PROJECT: (Cont'd)

In 1915, the 7.7 foot stage on the north shore and the 13 foot stage on the southwest shore caused considerable flooding.

The 1947 hurricane caused extensive flooding in Jefferson Parish when a lakeshore embankment proved inadequate to prevent overtopping, even though the stage was only about 5 feet. Considerable overtopping of the New Orleans seawall occurred during this storm and about 9 square miles of residential area were flooded.

In 1956 the New Orleans seawall was again overtopped, resulting in the flooding of about 2.5 square miles of residential and commercial area in the lakefront area.

Hurricane Betsy in September 1965 caused extensive flooding of urban areas of the New Orleans area to depths of up to 10 feet.

Hurricane Camille in August 1969 caused flooding of low lying areas adjacent to the IHNC.

Although Hurricane Carmen, in September 1974, caused little flooding in the project area, it was rated by the National Weather Service as more dangerous than Hurricane Betsy. Had Carmen continued its northerly course or shifted slightly to the east, it would have passed thru the vicinity of New Orleans and would have caused extensive flooding within the project area.

Wave action during moderate to high lake stages has undermined the existing seawall at Mandeville, causing it to become ineffective as a hurricane protective structure.

On several occasions, the area between Lake Pontchartrain and Lake Borgne has been flooded by stages up to 11 feet.

Much of the developed area in New Orleans and in Jefferson Parish is below normal lake level; some land being as low as 7 feet below mean sea level, with a considerable portion lower than 2 feet below mean sea level. Stages attending a standard project hurricane would cause overtopping of all existing protective works by several feet and ponding as deep as 16 feet in the developed areas and the pumping system on which removal of all flood waters is dependent would be inoperable for an extended period of time.

NEED FOR PROJECT: (Cont'd)

This prolonged inundation would cause enormous damage to private and public property, would create serious hazards to life and health, would disrupt business and community life, and would require an immense expenditure of public and private funds for evacuation and subsequent rehabilitation of local residents.

Prior to construction of the Mississippi River-Gulf Outlet navigation project, tidal flow between Lake Pontchartrain and Lake Borgne was interchanged through the Rigolets, Chef Menteur Pass, and the Gulf Intracoastal Waterway-Inner Harbor Navigation Canal channel. Salinities of the incoming tides from Lake Borgne were reduced primarily by fresh water flows from the Pearl River basin, and from the northern tributary inflow to Lake Pontchartrain. However, the Mississippi River-Gulf Outlet project now permits tidal flows from Breton Sound and the Gulf of Mexico to enter Lake Pontchartrain directly through the Inner Harbor Navigation Canal via its enlarged channel. As a result, salinities in the Lake have increased significantly. Also increased current velocities in the Inner Harbor Navigation Canal as a result of the Gulf Outlet navigation project have resulted in an increase in navigation difficulties and the creation of major scour problems along existing bridges and harbor developments. The restricted section through the Seabrook Bridge has enlarged greatly since the construction of the Gulf Outlet.

PLAN OF IMPROVEMENT:

The most suitable plan for protection from hurricane flood levels consists of the following:

a. A barrier is to be constructed generally along United States Highway 90 from the eastern most existing levee to high ground east of the Rigolets, together with a control structure and a navigation lock in the Rigolets and a control structure and navigation gates in Chef Menteur Pass. The purpose of the barrier is to limit hurricane tides from entering Lake Pontchartrain through the natural passes and over the low lying areas.

b. A new lakeside levee is to be constructed in St. Charles Parish extending from the Bonnet Carre Spillway east guide levee to the Jefferson Parish line.

c. Existing riprap slope protection is to be enlarged along the Jefferson Parish lakefront levee.

d. The New Orleans lakefront levee landward of the seawall is to be enlarged.

PLAN OF IMPROVEMENT: (Cont'd)

e. A lock, rock dike, and control structure is to be constructed at Seabrook. The Seabrook complex is to serve the purposes of (1) eliminating navigation difficulties due to current velocities in the Inner Harbor Navigation Canal, (2) reduction of hurricane stages along the lakefront by controlling the surge entrance into Lake Pontchartrain through the Mississippi River-Gulf Outlet and Inner Harbor Navigation Canal, (3) prevention of excessive salt water intrusion into Lake Pontchartrain, and (4) assuring satisfactory riparian flow requirements.

f. Enlargement of existing levees, construction of new levees, and a concrete-capped sheetpile wall is to be constructed along the east and west levees of the Inner Harbor Navigation Canal in New Orleans.

g. A new levee and floodwall is to be constructed along the lakefront extending from the floodwall at the New Orleans Airport to South Point.

h. The levee from South Point to the GIWW is to be enlarged.

i. The levee along and north of the Mississippi River-Gulf Outlet and Gulf Intracoastal Waterway from the Inner Harbor Navigation Canal to the beginning of the barrier is to be enlarged and floodwalls constructed where necessary.

j. A new levee is to be constructed to protect the area generally referred to as the Chalmette area and will extend from the Inner Harbor Navigation Canal levee along and on the south bank of the Mississippi River-Gulf Outlet to a point approximately $2\frac{1}{2}$ miles Northeast of Verret and then in a generally westerly direction to the Mississippi River Levee near Caernarvon.

k. The existing Mandeville seawall on the north shore will be strengthened at its present height.

l. A new pumping station and vertical lift gates for the Florida Avenue Complex. This will complete the protection provided in the Inner Harbor Navigation Canal System. (See above)

CHANGE IN SCOPE:

Year	Change in Scope since Authorization	Estimated Cost
1967	The authorized alinement of protective works in the vicinity of Chef Menteur Pass was modified and the New Orleans East Levee was extended to Chef Menteur Pass under the discretionary authority of the Chief of Engineers to provide protection for an additional 1,533 acres. The letter report recommending this modification was submitted to OCE 28 March 1967.	$4,775,600
1967	The project was also modified under the discretionary authority of the Chief of Engineers to delete from the Lake Pontchartrain project as a mitigating measure the costs of protecting a portion of the foreshore along the Mississippi River-Gulf Outlet project. Construction of the Mississippi River-Gulf Outlet project exposed levees of substantial size and the foreshore between them and the project channel along both banks of the project navigation canal in the City of New Orleans to direct attack with resultant damages from waves generated by seagoing vessels utilizing the waterway. The navigation project should have included adequate provisions for protecting these levees and their foreshore from damage. The new levees in this project located adjacent to the ship channel will also require protection. The costs deleted from this project have been added to the Mississippi River-Gulf Outlet project. (There are about 6 miles along the north bank and 18 miles along the south bank of the navigation project that require protection.) GDM No. 2, Supplement No. 4, Mississippi River-Gulf Outlet, La., Foreshore Protection was submitted to OCE 29 May 1968.	-3,495,000

CHANGE IN SCOPE: (Cont'd)

Year	Change in Scope since Authorization	Estimated Cost
1967	In accordance with the desires of local interests the project was again modified under the discretionary authority of the Chief of Engineers to provide protection to a larger area in the vicinity of New Orleans known as the Chalmette area. This change incorporated the need to increase levee heights to accommodate the new hurricane parameters. This modification will provide protection for an additional 18,800 acres. The letter report recommending this modification was submitted to OCE on 13 December 1966.	$12,938,700
	The director of Civil Works by letter of 27 November 1967 informed the Chairmen of the Committees on Appropriations of the House and Senate that the above changes in scope had been approved by the Chief of Engineers.	

The Office, Chief of Engineers, by letter report dated 17 December 1968 informed the Bureau of the Budget of an increase in cost from $136,200,000 to $166,000,000 in accordance with ER 1165-2-305 dated 25 Sep 68, "Significant Post-Authorization Changes in Corps of Engineers Projects." This change was approved by the Office of Management and Budget on 25 March 1969.

MAJOR CHANGES IN DESIGN:

a. The net grades of all the protective levees and structures except for the levees and structure adjacent to the Chef Menteur Pass and the Rigolets were revised upward by 1 to 2 feet in accordance with the results of tidal hydraulic studies utilizing more severe hurricane parameters developed by the U.S. Weather Bureau subsequent to project authorization.

b. The controlling elevation of the rock dikes at the Seabrook Complex was changed from elevation 13.2 feet to 7.2 feet MSL to provide a greater stage relief from surges in the Inner Harbor Navigation Canal. This was done to reduce flood damage to industrial developments along the Inner Harbor Navigation Canal on the floodside of the levees by permitting some lakeward flow in the canal to overtop the dikes.

c. The size of the Chef Menteur Complex navigation structure was increased from 56' wide by El.-12.0 M.L.G. (sill elevation) to 84' wide by El.-16.0 M.L.G. This change resulted from a reevaluation of marine user requirements and was based on information received from local shipbuilding and related industries in the project area.

MAJOR CHANGES IN DESIGN: (Cont'd)

d. The size of the Rigolets lock was increased from 84 feet wide to 110 feet wide. This change resulted from a reevaluation of marine user requirements and was based on information received from local shipbuilding and related industries in the project area and on a system analysis of the GIWW system.

e. A pumping plant was added to the Florida Avenue Complex to provide uninterrupted drainage relief during hurricane conditions.

BENEFIT-COST RATIO:

a. Period of Economic Analysis.- The economic life of the project excluding Seabrook Lock is 100 years based on our estimate that protection from hurricane tidal overflow to this area will be needed long beyond the life of the project. The economic life of Seabrook Lock is 50 years based on the navigation life of the lock.

b. Derivation of B/C Ratio.- The project functions independently. Existing levees already provide the area a degree of protection from headwater and tidal overflow and no benefits are claimed for this protection. Benefits credited to the project consist of reduction of flood damage from hurricane overflow including that damage caused by overtopping existing levees, intensified land use and area redevelopment of otherwise underemployed labor resources.

c. Composite B/C Ratio.- The contribution of each element to the overall plan is inseparably related to that made by the others; therefore, their benefits are inseparable and a composite B/C ratio is necessary. The benefit-cost ratio was derived by measuring the total benefits credited to these hurricane barrier plan components against their total costs.

LAKE PONTCHARTRAIN, LA. AND VICINITY,

1 January 1977

New Orleans District

STATUS AND SCHEDULE, PLANNING:

a. Design Memorandums.-

Item		% Complete 1 Jan 77	Est. % Complete 30 Sep 77	Actual (A) or Scheduled (S) Submission Date to LMVD
GDM-2	Supp. No. 5-Orleans Parish Lakefront Levees W. of IHNC	60	90	Jan 78 (S)
	Supp. No. 5A-Citrus Lakefront Levee, IHNC to Paris Road	100	100	Approved Jul 76
	Supp. No. 5C-Orleans Parish Outfall Canals, West of IHNC	0	20	Feb 79 (S)
GDM-4	IHNC Florida Avenue Complex	80	100	Jul 77 (S)
DDM-6	Rigolets Control Structure & Closure	95	95	Indefinite 1/
DDM-7	Chef Menteur Pass Control Structure & Closure	95	95	Indefinite 1/
DDM-9	Chef Menteur Pass Navigation Structure	5	5	Indefinite 1/
DDM-2	Seabrook Lock	65	100	Aug 77 (S)
DM-12	Source of Construction Materials (Revised)	0	0	Apr 78 (S)

1/ A model study was done to verify the hydraulic characteristics of the Rigolets Control Structure and modified design of these features may be required. Contracts with A/E firms preparing these reports will have to be renegotiated to include any changes that may be required.

LAKE PONTCHARTRAIN, LA. AND VICINITY

STATUS AND SCHEDULE, PLANNING: (Cont'd)

b. Plans and Specifications.

Item	% Complete 1 Jan 77	% Complete 30 Sep 77	Actual (A) or Scheduled (S) Submission Date to LMVD
Barrier Unit			
Rigolets Lock (A3)	100	100	Approved Jul 76
Seabrook Lock and Outlet Structure (B3)	0	40	Apr 78 (S)
Chef Menteur Barrier, West of Rigolets, 1st Lift levee	100	100	Approved May 73
Chef Menteur Barrier, East of Rigolets, 1st Lift levee	100	100	Approved May 73
Rigolets Barrier, North of Rigolets, 1st Lift levee	100	100	Approved Sep 74
Rigolets Barrier, South of Rigolets, 1st Lift levee	80	100	Jun 77 (S)
Rigolets Control Structure and Channel (C2)	0	0	Dec 78 (S)
Chef Menteur Control Structure	0	0	Jun 79 (S)
New Orleans East Unit			
IHNC West, Florida Avenue Complex	0	50	May 78 (S)
* Citrus Back Levee Station 176 to 574, floodwall & 2nd Lift levee	90	100	Apr 77 (S)
* Citrus Lakefront Levee, IHNC to Paris Road, Floodwall	50	100	Apr 77 (S)
Citrus Lakefront Levee, IHNC to Paris Road, Levee	10	100	Jul 77 (S)
Citrus Lakefront Levee, IHNC to Paris Road, Foreshore Protection	0	0	Sep 78 (S)
Citrus Back Levee, Sta. 509 to 531, Foreshore Protection	100	100	N/A
New Orleans East Back Levee, Sta. 879 to 1006, Interim Levee Enlgt.	100	100	N/A
New Orleans East Back Levee, Sta. 773 to 1006, 2d lift	0	20	Mar 78 (S)
New Orleans Lakefront Levee, West of IHNC	0	0	Oct 78 (S)

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STATUS AND SCHEDULE, PLANNING: (Cont'd)

b. Plans and Specifications. (Cont'd)

Item	% Complete 1 Jan 77	% Complete 30 Sep 77	Actual (A) or Scheduled (S) Submission Date to LMVD
Chalmette Unit			
IHNC East - Florida Avenue Complex	0	50	May 78 (S)
IHNC East - North of Florida Avenue, Levee & Floodwall	100	100	Approved Jun 75
Chalmette, Sta. 9+80 to 65+00, 2d lift levee	20	100	N/A
Chalmette, Sta. 65 to 274, 2d lift levee and Old Paris Road Closure, 1st lift levee	0	100	N/A (S)
Chalmette, Vicinity of Paris Road Bridge Floodwall	0	0	N/A
Chalmette, Sta. 370 to 682, Levee Enlgt. and Pipeline Canal Closure, 2d lift	20	100	Jul 77 (S)
Chalmette, Sta. 705 to 945, 1st Levee Enlgt.	0	90	Oct 77 (S)
Chalmette, Sta. 1121 to 1568, Verret Floodwall, 1st Levee Enlgt. and Creedmore Canal Drainage Structure	90	100	Jul 77 (S)
Chalmette, Sta. 945 to 1117, 3d lift & pipeline failure area (2d lift)	0	0	Apr 79 (S)

PHYSICAL DATA:

a. Land Requirements.

(1) Scope, Status and Schedule of Acquisition: Acquisition of lands, easements, R/W and disposal areas is the responsibility of local interests.

b. Recreation Facilities. Not applicable.

c. Disposal Areas. Easements for disposal areas are the responsibility of local interests.

d. Operator's Quarters. None.

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JUSTIFICATION:

a. Flood Damages. The duration of flooding within the project areas extends up to 2 weeks. Wind driven hurricane waters overtopping the levees become entrapped behind the levees. If the levee is seriously eroded, the water will slowly recede with the reduction in tides, but must also be pumped; if the levee remains intact, portions of it are degraded to facilitate removal of flood waters along with supplementary pumping. Depth of flooding caused by Hurricane Betsy of September 1965 varied to a maximum of approximately 10 feet in urban areas; this storm is also considered the flood of record.

The levees are designed for protection against a hurricane with a frequency of about once in 250 years. The 1965 hurricane approached the design hurricane in magnitude in part of the area. The high order protection was selected because of the urban character of much of the region and the hazard to life.

Description of Flood Area	Design Flood 1/	Protected by Authorized Works Against Design Flood
Number of Acres:	(501,780)	(501,780)
Residential	33,530	33,530
Commercial, Industrial	14,510	14,510
Open Land (Idle)	28,760	28,760
Woods, Swamp, Marsh	414,010	414,010
Other Developed Land	10,970	10,970
Value of Lands & Improvements	($11,651,300,000) 2/	($11,651,300,000) 2/
Lands	3,492,100,000	3,492,100,000
Improvements	8,159,200,000	8,159,200,000
Population (1970)		
Residing	585,000	585,000
Working (Addition to Residing)	80,000	80,000

1/ Based on theoretical design flood which has yet to be experienced.

2/ Escalated to October 1976 price levels.

JUSTIFICATION: (Cont'd)

b. Flood History.

Flood Date	AREA (Acres) Natural Flooded Stage (M.S.L)	Without Project	Protected With Project In Full Operation	Protected At Time Of Flood	DAMAGES Without Project	Preventable At Time Of Flood With Project in Full Operation	Prevented At Time Of Flood	Preventable Under Present Conditions With Project In Full Oper.
					$	$	$	$ 2/
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
(A) Past 5 Fiscal Years: None								
(B) Major Floods Prior to 5 Fiscal Years:								
Aug 1969 (Camille)	1/	23,000	22,000	22,000	99,300,000	91,500,000	90,000,000	181,350,000
Sep 1965 (Betsy)	1/	23,000	23,000	N.O.	85,000,000	85,000,000	N.O.	243,320,000
Sep 1956 (Flossy)	1/	8,000	8,000	N.O.	750,000	750,000	N.O.	2,427,000
Sep 1947	1/	33,000	33,000	N.O.	5,300,000	5,300,000	N.O.	29,161,000

1/ HIGHEST RECORDED STAGE (M.S.L.)

	Aug 1969	Sep 1965	Sep 1956	Sep 1947
Lake Pontchartrain at West End	5.2 ft.	7.6 ft.	5.5 ft.	5.46 ft.
Rigolets Pass near Lake Pontchartrain	9.0 ft.	7.0 ft.	6.49 ft.	7.18 ft.

2/ October 1976 price levels.

c. Power. Not applicable.

LOCAL COOPERATION: (October 1976 price levels)

a. Requirements.- Prior to construction local interests furnish assurances satisfactory to the Secretary of the Army that they will, without cost to the United States:

(1) Provide all lands, easements and rights-of-way, including borrow and spoil-disposal areas, necessary for construction of the project;

(2) Accomplish all necessary alterations and relocations to roads, railroads, pipelines, cables, wharves, drainage structures, and other facilities made necessary by the construction works;

(3) Hold and save the United States free from damages due to the construction works;

(4) Bear 30 percent of the first cost of the project, $378,000,000 diminished by the cost of two items of Federal costs, $16,550,000 (½ the cost of Seabrook Lock), $900,000 (beautification for St. Charles Parish Levees) and further diminished by $230,000 which is an all Non-Federal cost for realinement of protective works at the Florida Avenue Containerization Plant. This leaves $360,320,000 which at 30% = $107,870,000 plus $230,000 for realinement at Florida Avenue Containerization Plant = $108,100,000 to be paid by local interests. This sum includes the fair market value of the items listed in subparagraphs (1) and (2) above $29,510,000 and a cash contribution which is presently estimated at ($73,560,000) for the Barrier Plan, to include the estimate shown in subparagraph (5) below, and ($14,930,000) for the Chalmette Area Plan to be paid either in a lump sum prior to initiation of construction or in installments at least annually in proportion to the Federal appropriation prior to start of pertinent work items in accordance with construction schedules as required by the Chief of Engineers, or, as a substitute for any part of the cash contribution, accomplish in accordance with approved construction schedules items of work of equivalent value as determined by the Chief of Engineers, the final apportionment of costs to be made after actual costs and values have been determined,

(5) For the Barrier Plan, provide an additional cash contribution equivalent to the estimated capitalized value of operation and maintenance of the Rigolets navigation lock and channel to be undertaken by the United States, presently estimated at $9,900,000 said amount to be paid either in a lump sum prior to initiation of construction of the barrier or in installments at least annually in proportion to the Federal appropriation for the construction of the barrier;

LOCAL COOPERATION: (Cont'd)

a. Requirements.- (Cont'd)

(6) Provide all interior drainage and pumping plants required for reclamation and development of the protected areas;

(7) Maintain and operate all features of the works in accordance with regulations prescribed by the Secretary of the Army, including levees, floodgates and approach channels, drainage structures, drainage ditches or canals, floodwalls, seawalls, and stoplog structures, but excluding the Rigolets navigation lock and channel and modified dual-purpose Seabrook Lock; and

(8) Acquire adequate easements or other interest in land to prevent encroachment on existing ponding areas unless substitute storage capacity or equivalent pumping capacity is provided promptly.

Local interests are also required to comply with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646), in acquiring real property.

b. Modification to Authorizing Law. Recognizing the increasing burden of providing required matching local funds, Representative F. Edward Hebert sponsored Congressional legislation to defer required local payments over an extended period of time. This legislation was enacted in February 1974, as Section 92 of the Water Resources Development Act of 1974. This act modifies the authorizing law by providing that non-Federal public bodies may agree to pay the unpaid balance of their required cash payment due, with interest, in annual installments in accordance with a formula specified by the act.

c. Requirements of PL 91-611 and PL 91-646.

(1) PL 91-611 - Not applicable. Construction started prior to 1 January 1972.

(2) PL 91-646 - A Constitutional Amendment was provided by the Louisiana Legislature on 1 February 1972 allowing local interests to comply. The estimated cost to local interests is $68,000.

d. Current Status of Assurances.- Assurances are required for the two independently justified plans authorized by Congress. The Chalmette Area Plan and the Lake Pontchartrain Barrier Plan.

(I) Chalmette Area Plan: The basic assurances for this plan have been accepted.

A. Joint assurances of the St. Bernard Parish Police Jury and the Lake Borgne Basin Levee District were accepted on 28 September 1968. The Lake Borgne Basin Levee District and St. Bernard Parish Police Jury executed a new joint agreement of assurance covering all requirements of local cooperation an a deferred payment plan as authorized by PL 93-251 on 2 April 1976. This has not been accepted due to lack of supporting documents.

LOCAL COOPERATION: (Cont'd)

d. Current Status of Assurances. (Cont'd)

B. Assurances from the Board of Commissioners of the Orleans Levee District were accepted on 10 October 1966. The assurances were amended on 16 September 1971 to reflect increase in cost participation. These amended assurances, which supersede the 10 October 1966 assurances, were approved on behalf of the United States on 29 March 1974. Subsequent to this approval, it became evident that problems would exist in obtaining acceptable assurances from two agencies for the Barrier Plan. For this reason the original assurances from the Orleans Levee District dated 10 October 1966 are considered in full affect. This 1966 assurance (for Chalmette Plan only) was supplemented to include PL 91-646 on 29 May 1975 and approved on behalf of the United States on 8 July 1975. The Orleans Levee District executed a new agreement of assurances covering all requirements of local cooperation and a deferred payment plan as authorized by PL 93-251 on 30 March 1976.

C. Supplemental assurances providing for Public Law 91-646:

1. The State of Louisiana, Department of Public Works, coordinating agency under 5 March 1971 designation by the Governor, was requested to have the St. Bernard Parish Police Jury and the Lake Borgne Levee District execute such supplemental assurances on 2 June 1973. A joint supplemental assurance dated 26 February 1975 was received from the agencies and accepted on behalf of the United States on 17 March 1975.

(II). Lake Pontchartrain Barrier Plan.

A. Basic assurances for the plan were obtained from the Board of Commissioners of the Orleans Levee District and accepted on 10 October 1966.

B. The Orleans Levee District requested assistance in carrying out the assurances due to the rising non-Federal cost of participation and the widespread benefits to be derived by the surrounding parishes. The Governor of the State of Louisiana, by Executive Order (5 March 1971), designated the State of Louisiana, Department of Public Works, as the local coordinating agency. Through this procedure, the Pontchartrain Levee District, the St. Tammany Parish Police Jury, and the Orleans Levee District, are are the assurers for the Barrier Plan. See "C" below.

C. Amended assurances to provide for increase in cost participation were executed by the Orleans Levee District on 16 September 1971 and approved on behalf of the United States on 29 March 1974. The amended assurances supersede the 10 October 1966 assurances. Subsequent to the approval of the 1971 assurance it became evident that problems existed in obtaining acceptable assurance from two agencies for this plan. For this reason the original assurances from the Orleans Levee District dated 10 October 1966 are considered in full affect. The Orleans Levee District executed a new agreement of assurance covering all requirements of local cooperation and a deferred payment plan as authorized by PL 93-251 on 30 March 1976.

LOCAL COOPERATION:

d. Current Status of Assurances (Cont'd)

D. Assurances providing for participation pursuant to the action of the Governor have been obtained from the Pontchartrain Levee District. Assurances on behalf of the St. Tammany Parish Police Jury were executed by the Governor on 8 May 1972 under Section 81, Title 38, Louisiana Revised Statutes of 1950 as amended. Neither of the last-mentioned assurances has been accepted for lack of supporting documents. However, the Pontchartrain Levee District executed a new agreement of assurance covering all requirements of local cooperation and a deferred payment plan as authorized by PL 93-251 on 20 September 1976. On 19 October 1976, Governor Edwards executed an instrument designating, among other things, the Louisiana Department of Public Works to lend financial assistance in connection with this project. The Louisiana Department 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. On 8 November 1976, the Louisiana Department 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.

E. Supplemental assurances covering Public Law 91-646:

1. Supplemental assurances were executed by the Orleans Levee District on 21 September 1973.
2. Supplemental assurances were executed by Pontchartrain Levee District on 15 October 1973.
3. St. Tammany Parish Police Jury - the assurances executed by the Governor on 8 May 1972 included Public Law 91-646.

As to items 2 and 3 hereinabove, neither of these assurances has been approved on behalf of the United States because the required attorney's opinions have not been rendered, and, additionally in the case of the St. Tammany Parish Police Jury, that agency's latest financial statement has not been received.

(III) The Water Resources Development Act of 1974, PL 93-251 was enacted on 7 March 1974. This act provided, among other things, that local assuring agencies for this project (both plans) could, if they so choose, repay their cash obligation using a deferred payment plan. Since substitute assurances for this project were not complete, new assurances were prepared, incorporating a deferred payment plan therein, and were sent to the Director, Louisiana Department of Public Works, for coordination, on 28 November 1975.

e. Action Being Taken by Local Interests Toward Compliance. Local interests have cooperated in all efforts to date and have given assurance that all requests for additional cooperation will be expedited. They are constructing items of flood protection works at vulnerable locations as work-in-kind in lieu of cash contribution. Local interests will be given credit only for the portion meeting project requirements.

LOCAL COOPERATION: (Cont'd)

d. Current Status of Assurances (Cont'd)

E. Supplemental assurances covering Public Law 91-646:

1. Supplemental assurances were executed by the Orleans Levee District on 21 September 1973.
2. Supplemental assurances were executed by Pontchartrain Levee District on 15 October 1973.
3. St. Tammany Parish Police Jury - the assurances executed by the Governor on 8 May 1972 included Public Law 91-646

The assurances listed as items 2 and 3 above have not been accepted on behalf of the Government due to lack of supporting data, however, substitute assurances incorporating the deferred payment plan authorized by PL 93-251 and PL 91-646 have been executed by these levee districts. These substitute assurances will be accepted on behalf of the United States and forwarded for approval on behalf of the Secretary of the Army on 15 February 1977 together with all other agreements relating to the deferred payment plan.

(III) The Water Resources Development Act of 1974, PL 93-251 was enacted on 7 March 1974. This act provided, among other things, that local assuring agencies for this project (both plans) could, if they so choose, repay their cash obligation using a deferred payment plan. Since substitute assurances for this project were not complete, new assurances have been executed by local interests incorporating a deferred payment plan and these assurances will be accepted on behalf of the Government on 15 February
* 1977 upon receipt of a supporting document from the Pontchartrain Levee District. Local interests have
* been making payments under this plan. First payments were received in FY 1977.

e. Action Being Taken by Local Interests Toward Compliance. Local interests have cooperated in all efforts to date and have given assurance that all requests for additional cooperation will be expedited. They are constructing items of flood protection works at vulnerable locations as work-in-kind in lieu of cash contribution. Local interests will be given credit only for the portion meeting project requirements.

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LAKE PONTCHARTRAIN, LA. AND VICINITY

LOCAL COOPERATION:

f. Status of Clearances for Relocations or Other Negotiations Affecting Construction. All negotiations for relocations are the responsibility of local interests. All negotiations with local owners are on schedule.

g. Repayment Contracts. Not applicable

h. Other Current and Anticipated Difficulties, and Proposed Remedial Action. None

SUPPORT AND OPPOSITION:

a. Interested Senators and Representatives, and Nature and Extent of Support or Opposition.

Louisiana

Senator J. Bennett Johnston-support
Senator Russell B. Long-support

Representative Corrine C. (Lindy) Boggs (2nd District)-support
Representative Richard A. Tonry (1st District)- oppose
Representative Henson W. Moore, (6th District)-support
Representative David C. Treen (3rd District)-support

b. Support or Opposition by Local Interests. The Louisiana Department of Public Works, the agency designated to act in such matters on behalf of the Governor of the State of Louisiana, the Board of Levee Commissioners of the Orleans Levee District and the Board of Commissioners of the Port of New Orleans have concurred with the proposed plan of protection and are assisting in the implementation of the authorized plan. The US Fish and Wildlife Service has been consulted on all aspects of the project and will continue in coordinating future features of the project.