15 September 1980
New Orleans District

DATA FOR TESTIFYING OFFICERS ON FY 1982 CIVIL WORKS BUDGET

LAKE PONTCHARTRAIN, LOUISIANA, AND VICINITY

WHITE SECTION

Data that is Updated and Changed Annually

Item	Page
BENEFIT COST RATIO	1
Comparison of B/C Ratio	1
Annual Benefits and Charges	1
ALLOCATION AND APPORTIONMENT OF FIRST COST	3
FINANCIAL DATA	4
Comparison of Fed. Cost Est.	4
Comp. of Non-Fed. Cost Est.	5
Comp. of Proj.	5
Contingencies	8
Firmness of Fed. Cost Est.	8
Appropriation History	9
Capability	9
Transfers	10
Unobligated & Unexpended Bal.	10
Comparison of Bids	11
Maintenance	11
STATUS AND SCHEDULE	11
Scheduled Completion Dates	11
Performance FY 1981	12
Construction Difficulties	14
PHYSICAL DATA CHANGES	14
OTHER DATA CHANGES	14
LOCAL COOPERATION	14
Rights-of-way Schedules	14
PROBLEMS	15
ADDITIONAL INFORMATION	15
Inner Harbor Nav. Canal Flooding	15
Florida Ave. Complex	16
St. Charles Parish Lake-front levee	17
Mandeville Seawall	17
Report of Significant Post-Authorization Changes	17
Save Our Wetlands Suit	17
ENVIRONMENTAL INFORMATION	19
Status of EIS	19
Changes in EIS Scheduling	20
Environmental Opposition	20
Other Environmental Opinions	22
Environmental Studies	23
Status of Impact of Compl. with Section 404	24

YELLOW SECTION

Data that is not changed or on which Minor Changes are made Annually

Item	Page
AUTHORIZATION	
Authorizing Documents	1
Monetary Authorization	1
NEED FOR THE PROJECT	1
PLAN OF IMPROVEMENT	3
CHANGE IN SCOPE	5
MAJOR CHANGES IN DESIGN	6
BENEFIT-COST RATIO	
Period of Economic Analysis	7
Derivation of B/C Ratio	7
Composite B/C Ratio	7
STATUS AND SCHEDULE, PLANNING	
Design Memorandums	8
Plans and Specifications	9
PHYSICAL DATA	
Land Requirements	10
Recreation Facilities	10
Disposal Areas	10
Operator's Quarters	10
JUSTIFICATION	
Flood Damages	10
Flood History	12
LOCAL COOPERATION	
Requirements	13
Modification to Authorizing Law	14
Requirements of PL 91-611 & 646	14
Current Status of Assurances	14
Action Taken by Local Interests	17
Status of Relocations	17
SUPPORT AND OPPOSITION	

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

DATA FOR TESTIFYING OFFICERS ON FY 1982 CIVIL WORKS BUDGET

LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY

BENEFIT-COST RATIO:

a. Comparison of Remaining B/C Ratios. - The B/C ratio of 12.9 to 1 is an increase of 1.1 from that last presented to Congress (11.8 to 1). The increase is based on a reanalysis of the remaining inundation reduction benefits. Remaining B/C ratios are based on comparison of the benefits remaining to be realized by completing construction of the project and the cost remaining as of the budget year.

b. Annual Benefits: The following tabulation is provided for the purpose of comparing the Benefits presented in the justification paragraph of the Justification Sheet.

	TOTAL BENEFITS		
Annual Benefits	Last Est. Submitted to Congress ($)	Current Estimate at Project Interest Rate ($)	Change From Last (+ or -$)
Flood Control	$264,610,000	$295,404,000	+29,225,000 3/
Inundation Reduction 1/	(254,148,000)	(283,373,000)	1,569,000 3/
Intensification 2/	(10,462,000)	(12,031,000)	161,000 3/
Area Redevelopment	3,740,000	3,901,000	
Total Annual Benefits	268,350,000	299,305,000	30,955,000
Interest Rate Used	3-1/8%	3-1/8%	

1/ Essentially complete protection will be provided to 151,580 acres, comprised or 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. The current value of all lands is $5,590,000 and of improvements is $11,400,000,000. 1970 population: 58,500.
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.
4/ Chalmette Unit to be reported separately, See WDTO - 19.

LAKE PONTCHARTRAIN, LA., AND VICINITY

BENEFIT-COST RATIO: (Continued)

b. Annual Benefits (Continued)

Annual Benefits	Benefits & Costs When 1st Funded for Construction In FY 1967 1/ ($)	Remaining Benefits/Cost: Last Presented to Congress ($)	Remaining Benefits/Cost: Current Estimate At Project Interest Rate ($)	Remaining Benefits/Cost: Change From Last (+ or -$)
Flood Control				
Inundation Reduction 2/	$51,389,400	$140,694,000	170,803,000	+30,109,000
Intensification 3/	344,000	9,426,000	10,708,000	+ 1,282,000
Area Redevelopment	-	2,919,000	2,960,000	+ 41,000
Total Annual Benefits	$51,733,400	$153,039,000	184,471,000	
Total Annual Charges	$ 2,945,500	$ 13,022,000	14,348,000	+ 1,326,000
B/C Ratio	17.6	11.8	12.9	+ 1.1
Interest Rate Used	3-1/8%	3-1/8% 4/	7-3/8%	

1/ Based on cost estimate effective 1 July 1975.
2/ 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-type development, 7,600 acres of open land, and 340,200 acres of woodland, swamp, and/or marsh. The current value of all lands is $5,590,000,000 and or improvements is $11,400,000,000. 1970 population 585,000.
3/ Intensification benefits will accrue to approximately 68,500 acres of uban-type land and 260 acres of protected swamp and marshland.
4/ Chalmette Unit to be reported separately, See WDTO - 19.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ALLOCATION AND APPORTIONMENT OF FIRST COSTS:

Purpose	Allocation of First Costs: Based on Last Estimate Presented to Congress	Allocation of First Costs: Current	Percent of Current Total
Flood Control	$653,955,000	$866,650,000	97
Navigation (Seabrook Lock)	27 045,000	25,350,000	3
TOTAL	$681,000,000	$892,000,000	100

Purpose	Based on Estimate Last Presented to Congress: Federal	Based on Estimate Last Presented to Congress: Non-Federal	Apportionment of First Cost Based on Current Estimate, Costs: Federal	Costs: Non-Federal	Percent of Total: Federal	Percent of Total: Non-Federal
Flood Control	445,070,000	208,885,000	589,650,000	277,000,000	66	31
Navigation (Seabrook Lock)	18,930,000	8,115,000	25,350,000	0	3	0
TOTAL	$464,000,000	$217,000,000	$615,000,000	$277,000,000	69	31

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.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ALLOCATION AND APPORTIONMENT OF FIRST COSTS: (Continued)

Apportionment of First Costs			
Last Estimate to Congress		Current Estimate	
Federal	Non-Federal	Federal	Non-Federal
$464,000,000	$217,000,000	$615,000,000	$277,000,000

Details of Apportionment	Project Costs to be Apportioned	Apportionment: Federal	Apportionment: Non-Federal
To be apportioned on 70/30 basis:	$863,255,000	$604,155,000	$259,100,000
70% of Project Costs:			
30% of Project Costs:			
One-Half the cost of Seabrook Lock that is allocated to the Navigation purpose:	25,350,000	25,350,000	
Cost of Beautification:	3,165,000	3,165,000	
Cost of Realinement at Florida Avenue Container Plant	230,000		230,000
Subtotal	$892,000,000	$632,670,000	$259,330,000 1/
Capitalized cost at 3-1/8% the annual cost OM&R of Rigolets Lock to be contributed by local interests and used by the Federal Government in construction		-17,670,000	+17,670,000 1/
Total Project	$892,000,000	$615,000,000	$277,000,000
Reimbursement		-46,000,000	46,000,000 1/
Total Current Estimate		$661,000,000	$231,000,000

1/ See YDTO - 13, Local Cooperation, paragraphs (a)(4) and (5).
2/ Local interest are required to reimburse the Federal Government for costs allocated due to the Water Resources Development Act of 1974. Section 92, which specifies that local interest may agree to pay the unpaid balance of their required cash payment due to annual installments in accordance with a specific formula. The reimbursement is presently estimated at $46,000,000 exclusive of interest.

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA:

a. Comparison of Federal Full Funding Cost Estimates: The current Federal cost estimate of $661,000,000 is an increase of $156,640,000 over the latest estimate ($504,360,000) submitted to Congress. This change includes increases of $150,701,000 based on higher price levels projected through the construction period, $12,716,000 based on design modifications; $274,000 based on actual cost of completed work, $1,553,000, based on an actual bid and $441,000 in Engineering and Design based on a reanalysis of requirements. These increases were partially offset by decreases of $178,000 due to a more detailed project cost estimate and $8,867,000 due to a reanalysis of Federal cost-sharing requirements.

b. Comparison of Non-Federal Full Funding Cost Estimate. - The current non-Federal cost estimate of $231,000,000 is an increase of $54,360,000 over the latest estimate ($176,640,000) submitted to Congress. This change includes increases of $40,431,000 based on higher price levels projected through the construction period; $1,829,000 for additional Lands and Damages and Relocations, $3,084,000 based on design modification, $41,000 based on actual cost of completed work, $442,000 based on actual bids, $81,000 in Engineering and Design, and $8,452,000 due to change in apportionment between Federal and Non-Federal funds on remaining work.

c. Comparison of Preconstruction Cost Estimate. - Not applicable.

d. Comparison of Project Full Funding Cost Estimate. -

Feature	Latest Estimate to Congress FY 1981 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
BARRIER UNIT					
Lands & Damages	$ 4,247,000	$ 4,684,000	$ +437,000	$ +437,000	
Relocations	285,000	320,000	+35,000	+35,000	
Locks	71,480,000	78,670,000	+7,190,000	+7,190,000	
Roads, Railroads & Bridges	655,000	1,425,000	+ 770,000	+770,000	
Channels & Canals	7,700,000	10,355,000	+2,655,000	+1,570,000	+1,085,000 2/
Breakwaters & Seawalls	4,600,000	4,860,000	+260,000	+260,000	
Levees & Floodwalls	90,335,000	136,790,000	+46,455,000	+46,539,000	-84,000 3/
Flood Control & Diversion Structure	99,190,000	137,147,000	+37,957,000	+23,242,000	+14,715,000 4/
Permanent Operating Equip.	13,000	14,000	+1,000	+1,000	

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA: (Continued)

d. Comparison of Project Full Funding Total Cost Estimate. - (Continued)

Feature	Latest Estimate to Congress FY 1981 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
BARRIER UNIT (Cont'd)					
Engineering & Design	$ 14,980,000	$ 16,340,000 1/	$ +1,360,000	$ +878,000	$ +482,000 5/
Supervision & Administration	13,810,000	18,730,000	+4,920,000	+4,920,000	
Subtotal - BARRIER UNIT	$307,295,000	$409,335,000	$+102,040,000	$+85,842,000	$+16,198,000

1/ Includes $5,000 for U.S. Fish and Wildlife Service.
2/ Increase due to change in size and depth of Rigolets and Chef Menteur Control Structure.
3/ Based on actual cost of completed work.
4/ Increase due to change in number and type of gates at Rigolets and Chef Menteur Control Structure.
5/ Increase due to tidal passes study.

NEW ORLEANS EAST UNIT					
Lands & Damages	$ 9,930,000	$ 12,375,000	$ +2,445,000	$ +505,000	+1,940,000 1/
Relocations	12,650,000	13,240,000	+590,000	+701,000	-111,000 2/
Levees & Floodwalls	96,540,000	102,945,000	+6,405,000	+4,410,000	+1,995,000 3/
Pumping Plants	18,220,000	18,220,000	0		
Engineering & Design	12,315,000	12,810,000 5/	+495,000	+475,000	+20,000 4/
Supervision & Administration	7,185,000	7,480,000	+295,000	+295,000	
Subtotal-NEW ORLEANS EAST UNIT	$156,840,000	$167,070,000	$+10,230,000	$+6,386,000	$+3,844,000

1/ Increase due to more detailed cost estimates.
2/ Based on actual cost of completed work.
3/ Based on actual cost of completed work and more detailed project cost estimate.
4/ Increase due to benefit reanalysis and environmental study.
5/ Includes $13,000 for US Fish and Wildlife Service.

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA: (Continued)

d. Comparison of Project Full Funding Total Cost Estimate. - (Continued)

Feature	Latest Estimate to Congress FY 1981 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
NEW ORLEANS WEST UNIT					
Lands & Damages	$ 1,140,000	$ 1,140,000	0		
Relocations	1,685,000	2,070,000	+385,000	+385,000	
Levees & Floodwalls	86,835,000	162,870,000	+76,035,000	+76,035,000	
Engineering & Design	5,370,000	8,060,000	+2,690,000	+2,670,000	+20,000 1/
Supervision & Administration	3,070,000	5,605,000	+2,535,000	+2,535,000	
Subtotal - NEW ORLEANS WEST UNIT	$98,100,000	$179,745,000	$+81,645,000	$+81,625,000	$ +20,000
MANDEVILLE UNIT					
Levees & Floodwalls	$ 945,000	$ 1,000,000	$ +55,000	$ +55,000	
Engineering & Design	77,000	77,000	0		
Supervision & Administration	73,000	78,000	+5,000	+5,000	
Subtotal-MANDEVILLE UNIT	$ 1,095,000	$ 1,155,000	$ +60,000	$ +60,000	
CHALMETTE UNIT					
Lands & Damages	$ 7,165,000	$ 7,180,000	$ +15,000	$ +15,000	
Relocations	3,835,000	3,920,000	+85,000	+85,000	
Levees & floodwalls	91,900,000	106,305,000	+14,405,000	+14,619,000	-214,000 1/
Permanent Operating Equip.	21,000	21,000			
Engineering & Design	7,875,000	9,080,000 2/	+1,205,000	+1,185,000	+20,000 3/
Supervision & Administration	6,874,000	8,189,000	+1,315,000	+1,315,000	
Subtotal-CHALMETTE UNIT	$117,670,000	$134,695,000	$+17,025,000	$ 17,219,000	$-194,000

1/ Increase due to benefit reanalysis and environmental study.

1/ Based on actual cost of completed work.
2/ Includes $3,000 for U.S. Fish and Wildlife Service.
3/ Increase due to benefit reanalysis and environmental study.

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA: (Continued)

d. Comparison of Project Full Funding Total Cost Estimate. - (Continued)

Feature	Latest Estimate to Congress FY 1981 Budget	Current Estimate	Change from Latest to Congress: Total	Price Level	Other
GRAND TOTAL (Federal & Non-Federal	$681,000,000 1/	$892,000,000 4/	$+211,000,000	$+191,132,000	$+19,868,000
Total Federal Cost	504,360,000 2/	661,000,000 5/7/	+ 156,640,000	+150,701,000	+ 5,939,000
Total Non-Federal Cost:	176,640,000 3/	231,000,000 6/8/	+54,360,000	+40,431,000	+13,929,000
Cash Contribution	135,703,000	186,071,000	+50,368,000	+38,268,000	+12,100,000
Other	40,937,000	44,929,000 9/	+ 3,992,000	+ 2,163,000	+ 1,829,000

1/ Includes $220,000,000 for an estimated inflation allowance from 1 October 1979 through the construction period.
2/ Includes $161,556,000 for an estimated inflation allowance from 1 October 1979 through the construciton period.
3/ Includes $58,444,000 for an estimated inflation allowance from 1 October 1979 through the construction period.
4/ Includes $411,132,000 for an estimated inflation allowance from 1 October 1979 through the construction period.
5/ Includes $312,257,000 for an estimated inflation allowance from 1 October 1979 through the construction period.
6/ Includes $98,875,000 for an estimated inflation allowance from 1 October 1979 through the construction period.
7/ Includes future non-federal reimbursement of $46,000,000; ultimate estimate Federal cost is $615,000,000.
8/ Excludes future non-Federal reimbursement of $46,000,000 ; ultimate estimate non-Federal cost is $277,000,000.
9/ Includes $25,379,000 for lands and damages and $19,550,000 for relocations.

E&D is 6.0% of the construction cost.
S&A is 5.0% of the construction and E&D costs.

e. Contingencies. - The estimate includes $116,469,000 for contingencies which is 18% of the uncompleted work.

The estimate last presented to Congress included $80,978,000 for contingencies which was 17% of the uncompleted work.

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA: (Continued)

f. Firmness of Federal Cost Estimate. - The current estimate is of Survey, GDM and Feature DM scope and reliability with costs adjusted to actual cost of completed work; 1 October 1980 price levels on remaining work; and an inflation allowance through the construction period. The total cost estimate is firm, except for adjustments which will be required upon completion of the remaining GDM's and Feature DM's.

g. Appropriation History. -

Appropriation History			FY 1981 Budget History		FY 1982 Budget Request
Total thru	FY 1976	$69,004,000 1/	LMVD Recommendation	$18,500,000	$15,400,000
Allowance for 1976			OCE Recommendation	12,300,000	15,400,000
	T-Quarter	5,135,000	OMB Allowance	10,800,000	
	FY 1977	10,575,000	House Allowance	13,000,000	
	FY 1978	7,500,000	Senate Allowance	10,800,000	
	FY 1979	230,000	Conferees Allowance		
	FY 1980	13,160,000	Work Allowance	10,000.000 3/	
	FY 1981	10,000,000 2/3/	Capability	10,800,000	
Total to Date		$115,604,000			

1/ Initial construction funds received in FY 1967.
2/ Includes $20,000 to be transferred to U.S. Fish and Wildlife Service.
3/ Reflects $800,000 reduction assigned as savings and slippages.

h. Capability.

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA: (Continued)

i. Transfers: -

FY 1980:

From	To	Month of Transfer	Amount	Reason
OCE	Lake Pontchartrain & Vicinity	May 80	$1,042,000	To cover greater expenditures than programmed for on-going contracts.
do	do	Jun 80	$1,097,000	do
do	do	Jun 80	$ 283,000	do
do	do	Jul 80	$1,238,000	do
Lake Pontchartrain, & Vicinity	Red River Waterway-Mississippi River to Shreveport	Sep 80		Funds are available due to $500,000 contract earnings being less than anticipated. Funds are required to fund ongoing contracts.

FY 1981: None.

Anticipated: None.

j. Unobligated and Unexpended Balances. -

	End of FY 1980	Estimated at End of FY 1981
Unobligated Balance	0	0
Undelivered Orders	0	0
Unexpended Balance	0	0

LAKE PONTCHARTRAIN, LA., AND VICINITY

FINANCIAL DATA: (Continued)

k. Comparison of Bids. - (Continued)

Item	No. of Bidders	Low Bid	High Bid	Government Estimate	Last Est. to Congress	Current Est. to Congress	Current Working Estimate
Chalmette-Sta. 370-682, 2nd Lift	4	$374,950 1/	$1,280,793	$1,074,805	$1,395,000	$790,000	$1,000,000

1/ Contractor has claimed an error in bid. It is anticipated that claim will be allowed and that the next low bid ($959,750) will be accepted.

1. Maintenance. -

Federal. Operation and maintenance of Seabroook 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 $469,000.

Non-Federal. The estimated annual Non-Federal cost for maintenance is $807,000 including $334,000 for replacements. (Refer to YDTO-13, Local Cooperation).

STATUS AND SCHEDULE:

a. Scheduled Completion Dates:

Feature	Last Presented to Congress	Present Schedule	Explanation of Change
NEW ORLEANS EAST UNIT			
Pumping Plants	Sep 85	Sep 84	Non-federal item. Schedule developed by local interests.

LAKE PONTCHARTRAIN, LA., AND VICINITY

STATUS AND SCHEDULE: (Continued)

b. Performance - FY 81:

Last Presented to Congress/Item	Present Schedule	Remarks
NEW ORLEANS EAST UNIT (Cont'd)		
Continue:		
New Orleans East Back Levee-Sta. 773-1006 (2nd Lift)	Initiate	Delayed 1 month due to local interests not providing rights-of-way as scheduled.
Not Presented:		
New Orleans East, South Point to G.I.W.W. L&N Railroad Gate	Initiate & Complete	Delayed 8 months due to design modifications.
CHALMETTE UNIT:		
Initiate:		
Station 945 to 1117 3d Lift and Pipeline Failure 2d Lift	Delayed	Delayed 8 months due to manpower limitations.
Complete:		
I.H.N.C., East Side-North of Florida Avenue (Levee and Floodwall) and Sta. 9+80 to 65+00, 2nd Lift	Initiate	Delayed 8 months due to local interests not providing right-of-way as scheduled and 7 months for local interest design modifications.
Not presented:		
Bayou Dupre Foreshore Protection	Initiate & Complete	New item added to correct design dificiency.

LAKE PONTCHARTRAIN, LA., AND VICINITY

STATUS AND SCHEDULE: (Continued)

c. Construction Difficulties: None.

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	Scheduled Award Date
NEW ORLEANS EAST UNIT				
Citrus Back Levee, sta. 203 to 219 and 272 to 280, Floodwall	Requested May 76	Oct 80 1/		Jan 81
New Orleans East, South Point to GIWW, L&N R/R Gate	Requested Jul 79		Jan 80 1/	Dec 80
New Orleans East Back Levee, Sta. 773 to 1006, 2nd Lift	Requested Apr 80	Sep 80 1/		Oct 80
New Orleans East Lakefront Levee, Paris Road to South Point, Gap Closures	To be requested Jan 81	Mar 81 1/		Jun 81
Citrus Back Levee Capping	To be requested Nov 80	Feb 81 1/		Apr 81
CHALMETTE UNIT				
IHNC East-North of Florida Ave., Levee and Floodwall and Sta. 9+80 to 65+00, 2nd Lift	Requested Feb 75 Requested Apr 80	Apr 81 Oct 80		Jun 81 Jan 81
Sta. 65 to 360, 2nd Lift, Vicinity of Paris Road Bridge (Floodwall)	Requested Apr 80	Oct 80 1/		Mar 81

LAKE PONTCHARTRAIN, LA., AND VICINITY

LOCAL COOPERATION: (Cont'd)

a. Rights-of-way (Cont'd)

Item of Work	Action Taken by District	Scheduled Date for Receipt of R/W	Date R/W Was Obtained	Scheduled Award Date
CHALMETTE UNIT - (Cont'd)				
Sta. 1121-1568, 1st Enlgt, Verret Floodwall	Requested Jun 75	Mar 81 1/		Sep 81
Sta. 945-1117 3rd Lift & Pipeline Failure, 2nd Lift	To be requested Nov 80	Sep 81 1/		Nov 81
Caernarvon Floodwall Capping	Requested Jul 80	Sep 80 1/		Oct 80
Bayou Dupre Foreshore Protection	Requested Jul 80		Aug 80 1/	Oct 80

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 industries 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 the late Congressman Hebert that consideration be given to providing protection to industries along the IHNC located on the floodside of the protection system.

(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 life gates to accomplish that control.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ADDITIONAL INFORMATION: (Continued)

a. Inner Harbor Navigation Canal Flooding. - (Continued)

(2) A study was performed to determine the feasibility of constructing a floodgate-type structure to prevent hurricane surges, occurring in the 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

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.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ADDITIONAL INFORMATION: (Continued)

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.

d. Mandeville Seawall. The Mandeville Unit portion of the project had previously been placed in an indefinite category due to local interests objections to the project. St. Tammany Parish Police Jury refused to furnish the financial assurances. (Refer to YDTO-14, Current Status of Assurances, Lake Pontchartrain Barrier Plan.) By virtue of a meeting on 6 July and a letter dated 8 August 1978, the mayor of Mandeville indicated interest in the seawall repairs. By letter dated 18 April 1979, local interests stated their intent to give assurances for the Mandeville Seawall subject to their approval of the proposed scope of work and the estimated cost. Consequently, the Mandeville Unit completion date has been established as September 1982.

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 was completed and a new report was submitted on 25 June 1976. This report, which covers the Rigolets Lock only, was approved by OCE on 21 September 1976, subject to agreement with the local sponsor, which has been subsequently received.

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 the 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 interchange provided under the Southern Railroad embankment.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ADDITIONAL INFORMATION: (Cont'd)

f. Save Our Wetlands Suit. - (Cont'd)

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. On 30 December 1977, Judge Charles Schwartz, of the Federal District Court in New Orleans, issued an order enjoining any further construction of the Chef Menteur and Rigolets Complexes, New Orleans East Area (East of Paris Road), and the Chalmette Area of the project until a new environmental statement is prepared. We are currently assessing the possible impacts of that order as they relate to the problem at hand.

On 8, 10, and 27 March 1978 Judge Charles Schwartz lifted the injunction on the New Orleans East Area (East of Paris Road) and on 10 March 1978 he lifted the injunction on the Chalmette Area Plan.

On 12 April 1977 an unincorporated association of citizens and property owners filed suit against the project in an effort to force construction of the St. Charles Parish Lakefront levee which is indefinitely deferred for environmental reasons or in the event the levee is not built, to force the Government to purchase lands in St. Charles Parish which may otherwise be subject to tidal flooding. The U.S. Attorney sought dismissal on the grounds that the plaintiffs lacked cause of action upon which relief could be granted by the court. At a 17 May 1978 hearing, Judge Charles Schwartz declared that the suit was premature and deferred further consideration until completion of the revised EIS.

g. St. Tammany Parish Police Jury Suit. This agency has also filed a lawsuit on 30 March 1977 attacking the project. Their suit was similar to the Save Our Wetlands suit and was combined with that suit.

h. St. Charles Parish Suit. A group of individuals in St. Charles Parish filed suit on 12 April 1977 seeking construction of the St. Charles portion of the project which has been indefinitely deferred. At a 17 May 1978 hearing, Judge Charles Schwartz declared the suit was premature and deferred further consideration until completion of the revised EIS.

i. 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. Initial cash payments were received from local interests in FY 1977 and they have expressed their appreciation of the plan.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ADDITIONAL INFORMATION: (Continued)

j. Larger Structures at Rigolets and Chef Menteur. The originally planned location for the Rigolets control structure was in a new, manmade cut through the Fort Pike peninsula. It was later determined that a siting of the new structure in the natural pass would be more economical. To insure that the flow and salinity regimens tested in the original model study of the project area would still be valid with the new location, a model of the Rigolets area with the new location was prepared and has been tested. Based on results of these model studies, a letter was sent to LMVD on 5 August 1977 recommending an increase in the cross sectional area for the Rigolets Control Structure from 25% to 35% of the cross sectional area of the existing channel and a shift in the structure 250 feet eastward to achieve the design goals.

Based on the results obtained from the Rigolets analytical studies, the Chef Menteur control structure was investigated for possible deficiency of discharge capacity and high velocities. The analytical studies indicated that the Chef Menteur control structure needed to be enlarged similarly. No shift in its location was needed. Both of these changes were approved by the Division Engineer, Lower Mississippi Valley Division, with the stipulation that a post-authorization change report be submitted. The post-authorization change was approved by LMVD on 16 December 1977.

k. Tainter Gate Study. The feasibility of providing tainter gates in lieu of vertical lift gates at both the Chef Menteur and Rigolets control structures has been investigated. The main advantage of tainter gates is the much shorter operating time of 45 minutes compared to 6 hours for the vertical lift gates. Also the tainter gates could be operated from a remote station, whereas vertical lift gates would have to be operated by people on the structures during bad weather conditions on the approach of a hurricane. A recommendation to use tainter gates instead of vertical lift gates was included in the 5 August 1977 letter to LMVD requesting the changes in the sizes of the Rigolets and Chef Menteur Control Structure. This was also approved by LMVD and is included in the Post-Authorization Change report approved by LMVD on 16 December 1977.

Because of the widespread interest which had been expressed with regard to the Barrier portion of the project, the Sub-Committee of Water Resources of the House Public Works and Transportation Committee held a hearing in New Orleans on 5 February 1978. The purpose of the hearing was to obtain information on the hurricane protection plan for the project and to give interested parties an opportunity to make their views known.

l. Chalmette Unit Economic Analysis. Since the Chalmette Unit is a separate entity from an engineering, hydrological and economic standpoint, the court has required that a separate economic reanalysis for this Unit be conducted separate and apart from the Lake Pontchartrain Hurricane Protection project economic reanalysis. This reanalysis will be performed jointly with the EIS revision which, whem completed, will reflect two benefit/cost ratios (one for the Chalmette Unit and one for the remainder of the project).

LAKE PONTCHARTRAIN, LA., AND VICINITY

ENVIRONMENTAL INFORMATION:

a. Status of Environmental Impact Statement. - The final statement was filed with CEQ on 9 January 1975. By court order dated 30 December 1977, a new environmental impact statement has been ordered. The revised draft environmental impact statement is scheduled to be submitted to the Environmental Protection Agency in May 1982 and the final statement in March 1983.

b. Changes in Environmental Impact Statement Scheduling. -

(1) FY 1981 Budget Submission. The revised final EIS was scheduled to be submitted to EPA in May 1982.

(2) FY 1982 Budget Submission. The delay from the FY 1981 Budget Submission is due to the great technical complexity of the physical, chemical and biological transport studies required at Seabrook, Chef Menteur Pass and Rigolets Pass and difficulty in finding qualified environmental contractors for the required studies. This has resulted in a slippage in the EIS schedule of approximately 10 months. Of the two contracts involved for the studies, one was awarded 27 December 1979 and the other was awarded on 13 February 1980.

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.

(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 rapidly 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.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ENVIRONMENTAL INFORMATION: (Continued)

c. Environmental Opposition. (Continued)

(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.

(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.

(8) The Environmental Defense Fund has expressed concern regarding the whole project, more specifically the New Orleans East Area. They consider the wetlands in the New Orleans East Area are still viable and could be restored to a high level of productivity given appropriate redesign of the levees, provision for tidal flows and water circulation and stringent regulation of dredge, fill and drainage activities in accordance with the Corps' regulations and wetland policy.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ENVIRONMENTAL INFORMATION: (Continued)

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 wildlife 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 Wild Life 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.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ENVIRONMENTAL INFORMATION: (Cont'd)

e. Environmental Studies.

(1) A contract has been entered into with L. Eugene Cronin, PhD. to develop an assessment of the environmental effects of the proposed barrier structures (Chef, Rigolets and Seabrook) and to recommend any modifications if needed 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.

(3) The EPA in their review of the 404 proceedings has requested us to study whether the drainage structures in the South Point to GIWW levee can be changed with regards to their operation. They would like to see the structures remain open during normal tidal conditions to nourish the marsh in New Orleans East with the lake water. The Louisiana Wildlife Federation and the US Fish and Wildlife Service are supportive of this recommendation. We are coordinating with the Orleans Levee District, the Sewerage and Water Board, the Mosquito Control Board and the City Planning Commission to obtain their views on this recommendation. A report on this matter will be presented in the revised EIS.

(4) The New Orleans City Planning Commission has requested us to study the possibility of purchasing wetlands outside the protected area to mitigate the loss of wetlands included in the project. This study will be initiated in the near future.

LAKE PONTCHARTRAIN, LA., AND VICINITY

ENVIRONMENTAL INFORMATION: (Cont'd)

f. Status and Impact of Compliance with Section 404, Federal Water Pollution Control act of 1971. - In response to a request from former 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. The provisions of Section 404 of the Clean Water Act, for those items not previously covered, will be followed as detailed plans for individual work items are developed. The only item in the FY 1982 budget requiring such action is the Mandeville Seawall. Compliance for the Mandeville Seawall is scheduled to be met by a Section 404 (b)(1) evaluation in the third quarter of Fiscal Year 1981, a Public Notice to be issued in the third quarter of FY 1981, a certification from the State of Louisiana in the fourth quarter of FY 1981 and the District Engineer's signature on the Section 404 Evaluation report in the fourth quarter of FY 1981.

15 September 1980
New Orleans District
Yellow Section

DATA FOR TESTIFYING OFFICERS ON FY 1982 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 89-298) (HD 231/89/1)	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 Development 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 percent 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. This prolonged inundation would cause enormous

NEED FOR PROJECT: (Cont'd)

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 caused by 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 construction of the Gulf Outlet project.

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. This plan is under review with the preparation of a revised EIS.

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. This is deferred indefinitely due to environmental problems.

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 are 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 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 are to be constructed along the east and west levees of the Inner Harbor Navigation Canal in New Orleans.

g. A new levee and floodwall are 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 2-1/2 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 are to be constructed. This will complete the protection provided in the Inner Harbor Navigation Canal System. (See above.)

CHANGE IN SCOPE:

Year	Change in Scope since Authoriztion	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 Orlean known as the Chalmette area. This change incorporated the need to increase levee heights to accomodate 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 12 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 structures 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 IS 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.

f. Tainter gates will be used instead of vertical lift gates at both the Chef Menteur and Rigolets control structures to provide a shorter operating time of 45 minutes compared to 6 hours.

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 Chalmette Area Plan and the Barrier Levee Plan function as two separable units. Preproject levees provide the area a degree of protection from headwater and tidal overflow and no benefits are claimed for this protection. Benefits credited to the total 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. - Although the Chalmette Area Plan will function as a separable unit, the B/C ratio is presented for the total project plan. The benefit-cost ratio was derived by measuring the total benefits credited to these hurricane barrier plan components against their total costs.

STATUS AND SCHEDULE, PLANNING:

a. Design Memorandums. -

Item	% Complete 15 Sep 80	Est % Complete 30 Sep 81	Actual (A) or Scheduled (S) Submission Date to LMVD
GDM - Supp. No. 5-Orleans Parish Lakefront Levees W. of IHNC to Orleans Marina	60	100	Sep 81 (S)
Supp. No. 5C-Orleans Parish Outfall Canals, West of IHNC	10	30	Dec 82 (S)
Supp. No. 7-St. Tammany Parish, Mandeville Seawall	10	100	Mar 81 (S)
Supp. No. 10-Jefferson Parish Lakefront Levees	0	30	Apr 82 (S)
GDM-4 IHNC Florida Avenue Complex	100	100	Jul 80 (A)
DDM-2 Seabrook Lock	100	100	Nov 80 (S)
DDM-6 Rigolets Control Structure & Closure	0	0	Indefinite 1/
DDM-7 Chef Menteur Pass Control Structure & Closure	0	0	Indefinite 1/
DDM-9 Chef Menteur Pass Navigation Structure	0	0	Indefinite 1/

1/ Indefinite due to court order delaying work until a new environmental impact statement has been prepared.

STATUS AND SCHEDULE, PLANNING: (Cont'd)

b. Plans and Specifications.

Item	% Complete 15 Sep 80	% Complete 30 Sep 81	Actual (A) or Scheduled (S) Submission Date to LMVD	Scheduled Award Date
BARRIER UNIT				
Seabrook Lock and Outlet Structure	20	50	Jun 82	Oct 82
NEW ORLEANS EAST UNIT				
Citrus Back Levee, Station 203 to 219 and 272 to 280, Floodwall	100	100	Sep 80 (S)	Jan 81
New Orleans East, South Point to GIWW Levee L&N Railroad gate	95	100	N/A	Dec 80
New Orleans East Lakefront Levee, Parish Road to South Point (Gap Closures)	5	100	N/A	Jun 81
New Orleans East Back Levee, Sta. 773 to 1006, 2d Lift	100	100	Jul 80 (A)	Oct 80
Citrus Back Levee - Capping Floodwalls	5	100	Feb 81 (S)	Apr 81
CHALMETTE UNIT				
IHNC East - North of Florida Ave, Levee and Floodwall	85	100	Approved Jun 75	Jun 81
Chalmette, Sta. 9+80 to 65+00, 2nd Lift Levee				
Chalmette, Sta. 65 to 360, 2nd Lift Levee	80	100	Oct 80 (S)	Jan 81
Chalmette, Vicinity of Parish Road Bridge Floodwall	20	100	N/A	Mar 81
Chalmette, Sta. 1121 to 1568, Verret Floodwall 1st Levee Enlgt. and Creedmore Canal Drainage Structure	100	100	Approved Oct 75	Sep 81
Caernarvon Floodwall Capping	100	100	N/A	Oct 80
Chalmette, Sta. 945 to 1117, 3rd Lift Levee and Pipeline Failure 2nd Lift	0	100	Aug 81 (S)	Nov 81

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.

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 project including barriers is designed to protect against a huricane 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.

JUSTIFICATION: (Cont'd)

a. Flood Damages. - (Cont'd)

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 and Improvements	($16,990,000,000) 2/	($16,990,000,000) 2/
Lands	5,590,000,000	5,590,000,000
Improvements	11,400,000,000	11,400,000,000
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 1980 price levels.

JUSTIFICATION:

b. Flood History. Legend: Actual Acres Flooded=(c)-(e); Actual $ Damages= (f)-(h); N.O.= Not Operable.

		Area (Acres)			Damages (Dollars)			
Flood Date	Natural Stage	Flooded Without Project	Protected With Project in Full Operation	Protected at Time of Flood	Without Project	Preventive at Time of Flooding With Project in Full Operation	Prevented at time of Flood	Preventable Under Present Condition with Project in Full Operation
					$	$	$	$
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i) 2/
(A) Past 5 Fiscal Years: None.								
(B) Major Floods Prior to 5 Fiscal Years:								
Aug 1969 (Camille)	1/	23,000	23,000	22,000	92,500,000	91,500,000	90,000,000	260,000,000
Sep 1965 (Betsy)	1/	23,000	23,000	N.O.	85,000,000	85,000,000	N.O.	340,000,000
Sep 1956 (Flossy)	1/	8,000	8,000	N.O.	750,000	750,000	N.O.	3,420,000
Sep 1947	1/	33,000	33,000	N.O.	5,300,000	5,300,000	N.O.	41,100,000

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 1980 price levels.

c. Power. Not applicable.

LOCAL COOPERATION: (October 1980 price levels)

a. Requirements. Prior to construction, local interests furnished 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, $892,000,000 reduced by the cost of two items of Federal costs, $25,350,000 (one-half the cost of Seabrook Lock), $3,165,000 (Beautification for St. Charles Parish Levees) and further reduced by $230,000 which is an all non-Federal cost for realinement of protective works at the Florida Avenue Containerization Plant. This leaves $863,255,000, which at 30% equals $259,100,000 plus $230,000 for realinement of Florida Avenue Containerization Plant equals $259,330,000 to be paid by local interests. This sum includes $44,929,000 for the fair market value of the items listed in subparagraphs (1) and (2) above and a cash contribution which is presently estimated at $185,101,000 for the Barrier Plan, to include the estimate shown in subparagraph (5) below, and $29,300,000 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 (see WDTO-4, Apportionment of First Costs);

(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 $17,670,000, 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;

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

a. Requirements. (Cont'd)

(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, the former 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 $86,000.

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.

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 1966. 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 and a deferred payment plan as authorized by PL 93-251 on 20 April 1976. These assurances were approved on behalf of the United States on 7 December 1977.

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 an 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 effect. 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. These assurances were approved on behalf of the United States on 7 December 1977.

C. Supplemental assurances providing for Public Law 91-646: The Louisiana Office 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 and a joint supplemental assurance dated 26 February 1975 was received from the agencies and approved on behalf of the United States on 17 March 1975.

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

A. 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 Louisiana Office 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 the assurers for the Barrier Plan. See B below.

B. Amended assurances to provide for an 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 assurances 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 effect. 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. These assurances were approved on behalf of the United States on 7 December 1977.

LOCAL COOPERATION: (Cont'd)

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

C. 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 Office of Public Works to lend financial assistance in connection with this project. 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; and to lend financial assistance after the Pontchartrain Levee District has contributed $100,000 in cash toward that portion of the Barrier Plan which is the responsibility of that levee district. These assurances were approved on behalf of the United States on / December 1977.

D. Supplemental assurances covering Public Law 91-646:

1. Supplemental assurances were executed by the Orleans Levee Distirct 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 requirements.

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 assurances were approved on behalf of the United States on 7 December 1977.

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. New assurances have been executed by local interests incorporating a deferred payment plan and these assurances were approved by the Secretary of the Army on 7 December 1977. Local interests have been making payments under this plan. First payments were received in FY 1977.

LOCAL COOPERATION: (Cont'd)

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; however, local interests have delayed granting of rights-of-way as scheduled on certain items. 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.

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. As a 1 January 1979, the State of Louisiana formed the Jefferson Levee District and assigned to it the responsibility for Jefferson Parish levees on the east bank of the Mississippi River. These levees were previously the responsibility of the Pontchartrain Levee District. Revised assurances are being sought from the Pontchartrain Levee District. Revised assurances are being sought from the Pontchartrain Levee District to cover the St. Charles portion of the project and new assurances are being sought from the Jefferson Levee District for the Jefferson Parish segment of the project.

SUPPORT AND OPPOSITION:

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

Senator J. Bennett Johnston - support
Senator Russell B. Long - support
Representative Lindy Boggs (2d Dist) - support

LOUISIANA

Representative Robert L. Livingston, Jr. (1st Dist) - not known 1/
Representative Henson W. Moore (6th Dist) - not known
Representative Billy Tauzin (3d Dist) - not known

1/ Has expressed support for hurricane protection but not necessarily the barrier plan.

SUPPORT AND OPPOSITION: (Cont'd)

b. Support or Opposition by Local Interests. The Louisiana Office of Public Works, the agency designated to act in such matters in 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 U.S. Fish and Wildlife Service has been consulted on all aspects of the project and will continue in coordinating future features of the project.

In addition, the following Louisiana State Senators and Representatives have expressed their support or oposition:

Senator Samuel B. Nunez, Jr., District 1 - support (for Chalmette Plan)
Senator Nat G. Kiefer, District 2 - support
Representative Edward C. Scogin, District 76 - opposition
Representative A. Charles Borrello, District 100 - support
Representative Joseph Accardo, Jr., District 57 - not known
Representative Theodore J. Marchand, District 102 - support

c. Attitude of Affected Property Owners. Most property owners support the plan of protection although some minor opposition to specific features of the plan has been encountered.

d. Adverse Effects. 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 Ponchartrain. 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 wetlands habitat slowly into a terrestrial environment.

The proposed project will induce the conversion of a portion of the 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.