U.S. ARMY CORPS OF ENGINEERS
CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION
FISCAL YEAR 2005

MISSISSIPPI VALLEY DIVISION

Budgetary information will not be released outside the Department of the Army until 2 February 2004

Justification of Estimate for Civil Functions Activities
Department of the Army, Fiscal Year 2005

MISSISSIPPI VALLEY DIVISION
Corps of Engineers

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SUMMARY MISSISSIPPI VALLEY DIVISION

	FY 2004 Allocation	FY 2005 Request		Increase or Decrease	
General Investigations	$ 14,091,000	$18,125,000		+ 4,034,000	
Survey	11,722,000	16,684,000		+ 4,962,000	
Preconstruction Engineering and Design	2,369,000	1,441,000		- 928,000	
Construction, General	$183,302,000	$171,695,000	1/	- 11,607,000	
Operation and Maintenance, General	$ 338,170,000	$372,640,000	2/	+ 34,470,000	3/
GRAND TOTAL, MISSISSIPPI VALLEY DIVISION	$535,563,000	$562,460,000		+26,897,000	

1/ Includes $11,800,000 allocated from the Inland Waterways Trust Fund.

2/ No breakout of Operations and Maintenance in Fiscal Year 2005.

3/ Fiscal Year 2004 reduced by $16,000,000 to fund Homeland Security.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
1. SURVEYS – NEW:					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: None.					
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Ecosystem Restoration Studies: The amount of $225,000 is requested to initiate a feasibility study in Fiscal Year 2005.					
LOUISIANA					
Mississippi River Gulf Outlet Ecosystem Restoration, LA New Orleans District	300,000	0	0	225,000	75,000

The study area is located in southeastern Louisiana and includes Orleans and St. Bernard Parishes. Problems experienced by the Mississippi River Gulf Outlet or attributed to it are bank erosion and loss of wetlands. The purpose of the study is ecosystem restoration. A study committee co-chaired by representatives of the Environmental Protection Agency and Louisiana Department of Natural Resources and composed of stakeholders representing the Corps of Engineers, Orleans Parish, St. Bernard Parish, the Port of New Orleans, the New Orleans Steamship Association, the Save our Lake Foundation and other Federal and governmental agencies has strongly expressed its desire that the ecosystem problems associated with the Mississippi River Gulf Outlet be addressed. Strategies to address ecosystem restoration may include bank stabilization, reduction in salinity, and marsh creation.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Mississippi River Gulf Outlet Ecosystem Restoration, LA (Continued)					

Upon identification of a sponsor, $50,000 will be used to prepare the project management plan and negotiate and execute a feasibility cost sharing agreement. Remaining Fiscal Year 2005 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $500,000, which will be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$550,000
Reconnaissance Phase (Federal)	50,000
Feasibility Phase (Federal)	250,000
Feasibility Phase (Non-Federal)	250,000

The feasibility study completion date is being determined.

Total – Ecosystem Restoration - New	300,000	0	0	225,000	75,000

f. Watershed/Comprehensive Studies: None.

TOTAL SURVEYS - NEW	300,000	0	0	225,000	75,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
2. SURVEYS – CONTINUING:					
a. Navigation Studies: The amount of $950,000 is requested to continue four feasibility studies in Fiscal Year 2005.					
LOUISIANA					
Atchafalaya River and Bayous Chene, Boeuf and Black, LA New Orleans District	2,397,000	785,000	747,000	350,000	515,000

The Atchafalaya River and Bayous Chene, Boeuf, and Black are located in Assumption, Iberville, and St. Mary Parishes in south-central Louisiana in the vicinity of Morgan City, Louisiana. The existing Atchafalaya River and Bayous Chene, Boeuf, and Black, Louisiana, navigation project provides a 20- by 400- foot access channel between the Gulf of Mexico and oil and gas rig fabrication yards and offshore oil and gas service facilities located west of Morgan City and incidentally to facitilies located on the Atchafalaya River in the Morgan City-Berwick area. The existing channel has a problem with fluff, a flocculant clay material that flows into the Atchafalaya Bar Channel immediately after maintenance dredging. Local interests request that the existing channel be enlarged to a project depth of 35 feet, including allowances for the effects of fluff. The study is addressing the feasibility of providing deeper access channels to facilities along the Atchafalaya River and Bayous Chene, Boeuf, and Black. The study purpose is commercial navigation, which is in accord with Administration policy. The local sponsor is the Morgan City Harbor and Terminal District. The feasibility cost sharing agreement was signed on 6 May 2002.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $4,400,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,597,000
Reconnaissance Phase (Federal)	197,000
Feasibility Phase (Federal)	2,200,000
Feasibility Phase (Non-Federal)	2,200,000

The reconnaissance phase was completed in May 2002. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Calcasieu Lock, LA New Orleans District	3,190,000	1,503,000	65,000	200,000	1,422,000

Calcasieu Lock is a feature of the Gulf Intracoastal Waterway between Apalachee Bay, Florida, and the Mexican Border (Gulf Intracoastal Waterway) Project. The lock is located east of the Calcasieu River, approximately 10 miles south of Lake Charles, Louisiana, in Calcasieu Parish. The lock prevents saltwater intrusion from the Gulf of Mexico via the Calcasieu River into the Mermentau River Basin, a major rice producing area. Calcasieu Lock, which was completed in 1950, has dimensions of 13 by 75 by 1,206 feet and is structurally sound. The lock is congested due to increasing traffic. Studies of the Gulf Intracoastal Waterway system conducted in 1992 determined that there is an immediate need for capacity increases at Bayou Sorrel and Calcasieu Locks. Feasibility studies of Bayou Sorrel Lock are underway in the Intracoastal Waterway Locks, Louisiana, study. Movements through Calcasieu Lock totaled 39.3 million tons in 2002; delays at the lock averaged 2.2 hours per tow and are projected to increase.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study.

Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $3,100,000. Calcasieu Lock is a feature of the Gulf Intracoastal Waterway, which is listed in Section 206 of Public Law 95-502 as an inland waterway; therefore, the feasibility study is at full Federal expense.

The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Calcasieu River Pass Ship Channel Enlargement, LA New Orleans District	1,600,000	5,000	97,000	50,000	1,448,000

The study area is located in southwestern Louisiana in Calcasieu and Cameron Parishes. The existing Calcasieu River and Pass project provides for a 40- by 400-foot wide channel from the Gulf of Mexico to the wharves of the Port of Lake Charles (mile 34.1); a turning basin at mile 29.6; and a 35- by 250-foot deep channel from Mile 34.1 to Mile 36. Tonnage has increased from 40.9 million tons in 1990 to 50.7 million tons in 1999. A significant portion of the tonnage is crude oil, refined petroleum products, industrial chemicals, and other bulk cargo that would benefit from a deeper channel, which would provide for the movement of larger ships with their inherent economies of scale. Deep-draft ships would also benefit from a wider channel because larger ships cannot meet in the existing 400-foot wide channel and suffer significant delays waiting for ships moving in the opposite direction to clear the channel. One alternative to be considered would be widening a reach of the channel for a passing lane or anchorage area to allow vessels to meet half-way along the channel, instead of at their docks or in the gulf, while they wait for one-way traffic moving in the opposite direction to clear. The Lake Charles Harbor and Terminal District is the potential sponsor for the feasibility study.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the remaining FY 2004 funds will be used to continue into feasibility. Fiscal Year 2005 funds will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is $3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,500,000
Feasibility Phase (Non-Federal)	1,500,000

The reconnaissance phase is scheduled for completion in May 2004. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Port of Iberia, LA New Orleans District	2,367,000	881,000	747,000	350,000	389,000

The Port of Iberia is located at the inland terminus of the Commercial Canal in Iberia Parish in south-central Louisiana. There are a number of oil and gas rig fabrication yards and offshore oil and gas supply facilities located in the Port of Iberia. The Commercial Canal is 12 feet deep and 150 feet wide and extends from the Port of Iberia near New Iberia, Louisiana, to the Gulf Intracoastal Waterway. Vessel traffic can then cross Vermilion Bay via the 9- by 150-foot Acadiana Navigation Channel through Southwest Pass to the Gulf of Mexico, or follow the Gulf Intracoastal Waterway, which is 12 feet deep and 125 feet wide, and Freshwater Bayou and the 84-foot wide Freshwater Bayou Lock to access the gulf. Oversize loads, such as offshore rig components must move to the gulf via the Freshwater Lock By-Pass, a 125 foot wide lock structure constructed by local interests in 1985, which is operated by alternatively floating and sinking barges. A single operation of the by-pass can cost over $300,000. Vessels with drafts less than 9 feet cross the Vermilion Bay to the gulf, which reduces the transportation cost significantly relative to the alternate route via the Gulf Intracoastal Waterway. The study is addressing the feasibility of providing a deeper and wider access channel to the Port of Iberia through enlargement of the existing access channels. The Port of Iberia is the cost-sharing sponsor for the feasibility phase. The feasibility cost sharing agreement was signed on 4 September 2002.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $4,454,000 which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of cost sharing is as follows:

Total Estimated Study Cost	$4,594,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	2,227,000
Feasibility Phase (Non-Federal)	2,227,000

The reconnaissance phase was completed in September 2002. The feasibility study completion date is being determined.

Total - Navigation Studies	9,554,000	3,174,000	1,656,000	950,000	3,774,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $

b. Flood Damage Prevention Studies: The amount of $2,113,000 is requested to complete one reconnaissance study and complete one and continue eight feasibility studies in Fiscal Year 2005.

ILLINOIS

Illinois River at Beardstown, IL Rock Island District	925,000	68,000	66,000	32,000	759,000

The City of Beardstown, Illinois, is located on the left bank of the Illinois Waterway in Cass County, 88 miles from the mouth of the Illinois River. The community of Beardstown is protected by an existing Federal levee and flood wall. The city has requested that the Corps of Engineers investigate modifying the existing structure with a form of protection that would not limit the river access, while also maintaining the current level of protection. The city is also interested in reopening its harbor facilities to renew access to the Illinois River. The access to the harbor would require a high level of maintenance due to excessive silt deposition from the Sangamon River. It is anticipated that annual dredging would be required to maintain access to the harbor. The study will investigate alternatives to dredging such as wing dams, training structures, or alternative harbor locations, all of which could reduce Federal costs. The City of Beardstown has indicated a willingness to share equality in the feasibility phase cost that may follow the reconnaissance study.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase at full Federal expense, and if the reconnaissance report is certified to be in accord with policy, continue into the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $1,650,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,750,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	825,000
Feasibility Phase (Non-Federal)	825,000

The reconnaissance phase is scheduled for completion in August 2004. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Keith Creek, Rockford, Illinois Rock Island District	100,000	68,000	0	32,000	0

Keith Creek is located in Winnebago County, Illinois, and has a drainage area of approximately 14.6 square miles. Keith Creek is located almost entirely within the City of Rockford and includes Alpine Dam, a small earthfill flood control dam constructed by the Works Project Administration (WPA) in 1942. Keith Creek is a tributary of the Rock River. Keith Creek has been significantly impacted by urbanization since construction of Alpine Dam in 1942. The city is concerned that the dam may not provide adequate flood protection for downstream residents. Alpine Dam is classified as a high hazard dam. It is in poor condition due to its age and does not meet current Federal design standards. At the request of the city, the Corps of Engineers prepared an assessment report for Alpine Dam in 1999. The report indicated that major repairs to the spillway and improved maintenance procedures were needed to ensure safe operation of the dam. In addition, the dam may not have adequate capacity to effectively prevent flooding or spillway capacity to safely handle large flood events. The reconnaissance phase is examining the level of flood damage reduction required, potential dam repairs, and modifications. The City of Rockford is a potential cost-share partner. The reconnaissance phase is scheduled to be completed February 2005, which is 22 months after initiation of the study. If determined to be a viable project, the subsequent feasibility phase would be cost-shared on a 50-50 percent basis by Federal and non-Federal interests.

Funds requested for Fiscal Year 2005 will be used to complete the reconnaissance phase.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
IOWA					
Des Moines and Raccoon Rivers, IA Rock Island District	1,790,000	1,165,000	368,000	150,000	107,000

The City of Des Moines, located in Polk County, Iowa, has several rivers and waterways that traverse the urban and fringe areas including the Des Moines River, Raccoon River, and numerous small tributaries. These areas continually sustain flood damages. During the 1993 flood, Polk County suffered more than $152,000,000 in flood damages. In addition, the county was without water and sewer for approximately a week causing the closure of most of the businesses and industry in the county. More than 3,000 properties were inundated. The City of Des Moines has had a long-standing cooperative relationship with the Corps of Engineers culminating with the recent completion of the Valley Gardens levee system and near completion of the Walnut Creek/Raccoon River levee system. However, evaluation of the city's entire flood damage prevention system identified a number of areas deemed to be deficient. Continuing flooding and bank erosion on the Des Moines River and Raccoon River have produced strong local support for additions to, or modifications of, the flood damage prevention and water resources projects within the City of Des Moines. The feasibility study will develop and evaluate alternative plans and recommend a plan to address the identified problems and opportunities. The feasibility cost sharing agreement was executed with the City of Des Moines in September 1999.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $3,380,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,480,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,690,000
Feasibility Phase (Non-Federal)	1,690,000

The reconnaissance phase was completed in September 1999. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2005 Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
LOUISIANA					
Amite River and Tributaries, Bayou Manchac, LA New Orleans District	2,025,000	206,000	130,000	100,000	1,589,000

The study area is located in southeastern Louisiana and includes Iberville, East Baton Rouge, and Ascension Parishes. The three parishes were included in the Amite River and Tributaries reconnaissance report completed in November 1984. The study is investigating methods to provide flood damage reduction and ecosystem restoration benefits for the Bayou Manchac/Spanish Lake watershed. Flood control improvements are needed to reduce flood damages to residential and commercial development, which is consistent with Administration policy. The Corps and the Pontchartrain Levee District, the non-Federal sponsor, entered into a feasibility cost sharing agreement on November 29, 2001.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $4,000,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,025,000
Reconnaissance Phase (Federal)	25,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase was completed in November 2001. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Calcasieu River Basin, LA New Orleans District	1,085,000	160,000	33,000	350,000	542,000

The study area is located in southwestern Louisiana and includes Calcasieu Parish and the Coushatta Tribal Reservation located in the City of Kinder, Louisiana in Allen Parish. Development in the study area is subject to repetitive flooding particularly in the southwest portion of the Lake Charles area in the southern portion of the Calcasieu Basin. Headwater flooding and backwater flooding from the Calcasieu River is a major problem in the study area. Fish and wildlife habitat has been lost to development in the upper basin and to erosion, subsidence, saltwater intrusion, and development in the estuarine areas of the lower basin. The study will address the feasibility of measures to reduce flooding and restore fish and wildlife habitat in the study area. Negotiations for the cost sharing agreement continue with the non-Federal sponsors, Louisiana Department of Transportation and Development, City of Lake Charles, Calcasieu Parish Jury, and the Coushatta Tribal Council. The anticipated outputs of flood damage prevention and environmental restoration are in accord with Administration policy.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase and continue into the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $1,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$1,985,000
Reconnaissance Phase (Federal)	185,000
Feasibility Phase (Federal)	900,000
Feasibility Phase (Non-Federal)	900,000

The reconnaissance phase is scheduled for completion in March 2004. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2005 Mississippi Valley Division

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Plaquemines Parish Urban Flood Control, LA New Orleans District	1,561,000	431,000	65,000	300,000	765,000

Plaquemines Parish is located along both banks of the Mississippi River from New Orleans, Louisiana, to the river's mouth, a distance of about 80 miles. The July 1999 population of the parish was about 25,700. All of the development in the parish is located along the alluvial ridges of the Mississippi River and is protected from river flooding by the Mississippi River Levees feature of the Mississippi River and Tributaries Project. The rapidly growing New Orleans suburb of Belle Chasse and the Alvin Callender Naval Air Station are located in the northern end of the parish contiguous to New Orleans. Other communities include Braithwaite and Pointe a la Hache on the east bank of the river and Buras, Port Sulphur and Venice on the west bank. The Westwego to Harvey Canal Hurricane Protection Project, which is under construction, will provide hurricane protection to the Belle Chasse area and the Alvin Callender Naval Air Station. The New Orleans to Venice Hurricane Protection Project, which is nearing completion, provides hurricane protection to the more developed areas in the southern reaches of the parish. Flooding in developed areas in the parish, particularly the rapidly developing Belle Chasse area, is increasing. Flood control improvements are needed to reduce flood damages to residential development, which is consistent with Administration policy. Plaquemines Parish Government is the cost-sharing sponsor. The feasibility cost sharing agreement was signed on 8 November 2001.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $2,946,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	$3,034,000
Reconnaissance Phase (Federal)	88,000
Feasibility Phase (Federal)	1,473,000
Feasibility Phase (Non-Federal)	1,473,000

The reconnaissance phase was completed in November 2001. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
St. Bernard Parish Urban Flood Control, LA New Orleans District	1,703,000	742,000	65,000	300,000	596,000

St. Bernard Parish is located on the east bank of the Mississippi River south of, and contiguous to, the City of New Orleans, Louisiana. The July 1998 Census Bureau estimated population of the parish was approximately 66,100. The area is protected from Mississippi River and hurricane flooding by a levee loop called the Chalmette area loop that is formed by the west bank river levee and the Chalmette area feature of the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection project. Most of the parish's population lives within a smaller, internal levee loop adjacent to the Mississippi River formed by the river levee and local levee. Major floods caused by heavy rainfall have occurred in 1978, 1980, 1982, 1983, and 1995. Damages during the 1978 flood were approximately $22,000,000 and St. Bernard Parish was declared a disaster area. Estimated damages for the 1983 flood were $2,500,000 to 400 homes, and for the 1995 flood, $5,700,000 to about 700 homes. Flood control improvements are needed to reduce repetitive damages to residential development, which is consistent with Administration policy. The St. Bernard Parish Government and the Lake Borgne Levee District are the cost-sharing sponsors for the feasibility phase. The feasibility cost sharing agreement was signed on 23 February 2001.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $3,200,000 which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	$3,303,000
Reconnaissance Phase (Federal)	103,000
Feasibility Phase (Federal)	1,600,000
Feasibility Phase (Non-Federal)	1,600,000

The reconnaissance phase was completed in February 2001. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
St. Charles Parish Urban Flood Control, LA New Orleans District	2,275,000	150,000	65,000	300,000	1,760,000

St. Charles Parish is located on the east and west banks of the Mississippi River west of, but not contiguous to the City of New Orleans, Louisiana. The July 1998 Census Bureau estimated population of the parish was approximately 48,300. The east bank area is protected from flooding from Mississippi River and hurricane flooding by a levee loop formed by the Mississippi River east bank levee and the under-construction St. Charles Parish feature of the Lake Pontchartrain, Louisiana, and Vicinity Hurricane Protection project. The west bank area is protected by the Mississippi River west bank levee and, to some extent, by local (non-Federal) hurricane protection levees. Major floods caused by heavy rainfall have occurred in 1978, 1980, 1982, 1983, and 1995. For the 1995 flood, damages totaled $66,800,000 to about 2,300 homes. Flood control improvements are needed to reduce repetitive damages to residential development, which is consistent with Administration policy. By letter of August 12, 2002, the St. Charles Parish Council stated its intent to act as the cost sharing sponsor for the feasibility phase.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase and continue into the feasibility phase. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $4,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,375,000
Reconnaissance Phase (Federal)	175,000
Feasibility Phase (Federal)	2,100,000
Feasibility Phase (Non-Federal)	2,100,000

The reconnaissance phase is scheduled for completion in June 2004. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
MINNESOTA					
Roseau, MN (Red River of the North Basin, MN, ND, SD and Manitoba, Canada) St. Paul District	450,000	1,000	300,000	149,000	0

The City of Roseau is located in the northwestern corner of Minnesota, 10 miles south of the United States border with Canada. The Roseau River runs directly through the town. On 9-11 June 2002, intense rainfall over the river basin dumped an extraordinary amount of water into the sub-basin area. This water quickly collected and drained into the Roseau River and overflowed Roseau's temporary levee system causing major flooding. Most of the City is located in the regulatory floodplain and is very flat, so once the river flowed out of its banks, it flowed through almost the entire City. Flood damages were widespread resulting in significant damage to downtown businesses and private residences and causing over 50 homes and businesses to be demolished due to flood damages. The reconnaissance study was approved 9 September 2003 and a feasibility cost sharing agreement was executed on 22 September 2003. Potential flood reduction features that will be considered during the feasibility study include buyouts, floodproofing, channel modifications/diversion ditches, upstream reservoir storage, permanent levees/floodwalls, and bridge modifications.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is $900,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Feasibility Study Cost	$900,000
Reconnaissance Phase (Federal)	N/A[1]
Feasibility Phase (Federal)	450,000
Feasibility Phase (Non-Federal)	450,000

The reconnaissance phase was completed in September 2003. The feasibility study is scheduled for completion in June 2005.

[1] Reconnaissance phase funded under overall study authority for Red River of the North Basin, MN, ND, SD and Manitoba, Canada.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
MISSISSIPPI					
Pearl River Watershed, MS Vicksburg District	3,343,000	2,056,000	358,000	400,000	529,000

Jackson, Mississippi, is the state capitol and a primary regional economic center which has major flood problems caused by the Pearl River. Annual flood damages are approximately $12,000,000. The flood of record occurred in April 1979 causing an estimated $300,000,000 in damages. The Pearl River Basin Watershed, Mississippi, feasibility phase was suspended in 1998 due to the sponsor's inability to secure their cost share for project design and construction. The recommended plan documented in a draft January 1996 report was a comprehensive levee system to provide protection from a flood event of 1979's magnitude. Local interests are now interested in resuming the feasibility study and have proposed the Lefleur Lakes Plan, consisting of upper and lower lakes along the Pearl River south of the Ross Barnett Reservoir as an alternative to the comprehensive levee plan. The lakes would extend from the Ross Barnett Reservoir, outlet downstream along the Pearl River to approximately 1 mile southwest of Interstate 20. In order to create the lakes and adjoining flood-free land for commercial development, the plan proposes performing cut and fill operations on the Pearl River. The Lefleur Lakes Plan has garnered some local support from community and business leaders due to its commercial development aspects. The feasibility study is in accordance with Administration policy. The feasibility cost sharing agreement necessary to resume feasibility studies was executed 6 October 2003 with the Rankin-Hinds Pearl River Flood and Drainage Control District. Studies will include updating the previously proposed levee plan and an evaluation of the Lefleur Lakes Plan as an additional alternative..

Fiscal Year 2004 funds are being used to resume cost-shared feasibility studies. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $5,668,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,177,000
Reconnaissance Phase (Federal)	509,000
Feasibility Phase (Federal)	2,834,000
Feasibility Phase (Non-Federal)	2,834,000

The reconnaissance phase was completed in October 2003. The feasibility study completion date is being determined.

Total - Flood Damage Prevention Studies	15,257,000	5,047,000	1,450,000	2,113,000	6,647,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Ecosystem Restoration Studies: The amount of $9,320,000 is requested to continue six feasibility studies in Fiscal Year 2005.					
ILLINOIS					
Illinois River Basin Restoration, IL Rock Island District	6,162,000	1,788,000	390,000	400,000	3,584,000

The Illinois River Basin Restoration study encompasses the entire Illinois River watershed within the State of Illinois. The purpose of the Illinois River Restoration study includes the development of a comprehensive plan for the restoration of the Illinois River watershed, evaluation of critical restoration projects, and initiation of long-term resource monitoring. The plan will address habitat, water quality, navigation, and economic opportunities. Components will include fish and wildlife conservation and rehabilitation measures; land and water resources enhancement; sediment transport; sediment removal and disposal measures; long-term resource monitoring; and a computerized inventory and analysis. Critical restoration projects and resource monitoring measures are recommended for implementation concurrently with the preparation of the comprehensive plan using Construction, General funds. These projects will be selected based on continued assessment of restoration needs as determined by the involved Federal and non-Federal partners. Seven critical restoration projects have been identified to date. The feasibility cost sharing agreement with the State of Illinois was signed on 31 July 2002.

Fiscal Year 2004 funds are being used to continue the feasibility phase and prepare the draft comprehensive plan. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $8,710,000, which is to be shared on a 65-35 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$9,210,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	5,662,000
Feasibility Phase (Non-Federal)	3,048,000

The reconnaissance phase was completed in July 2002. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Illinois River Ecosystem Restoration, IL Rock Island District	2,865,000	1,827,000	96,000	200,000	742,000

The Illinois River and Waterway is a major tributary of the Upper Mississippi River System. The Upper Mississippi River System is designated a nationally significant ecosystem by the Fiscal Year 1985 Supplemental Appropriations Act and the Water Resources Development Act of 1986, which mandated that the rivers be managed to balance competing interests in this natural resource. The Illinois River Basin encompasses 30,000 square miles, covering 44 percent of the land area of the State of Illinois. The principal problems impeding the restoration of habitat in the Illinois River Basin are sedimentation of backwaters and side channels, degradation of tributary streams, fluctuations in hydrologic regimes and water levels, and other adverse impacts caused by human activity. The study focuses on identifying restoration needs with particular emphasis placed on restoration activities that are delineated in the State of Illinois' "Integrated Management Plan for the Illinois River Watershed" report. Ongoing efforts include system hydrologic modeling and findings and multi-agency restoration needs assessment. Potential recommendations include activities within the river corridors such as island creation, side channel restoration, protection and creation of wetlands, improved water level management, and floodplain function. In addition, efforts will be focused on potential restoration of the smaller tributaries and watersheds through stream and wetlands restoration, water retention, and riparian buffers. The study and any potential recommendations will be developed integrally with the Upper Mississippi River – Illinois Waterway System Navigation Study. The feasibility cost sharing agreement with the State of Illinois was signed on 4 August 2000.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $5,530,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$5,630,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,765,000
Feasibility Phase (Non-Federal)	2,765,000

The reconnaissance phase was completed in August 2000. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Rock River, IL and WI Rock Island District	1,020,000	470,000	31,000	200,000	319,000

The Rock River originates in the lake region of southeastern Wisconsin and flows southward to join the Mississippi River just below Rock Island, Illinois. The watershed includes all or parts of 13 counties in Wisconsin and 15 in Illinois. Major tributaries of the Rock River are Green River, Rock Creek, Elkhorn Creek, Kishwaukee River, Pecatonica River, Sugar River, Turtle Creek, and Yahara River. The Illinois Department of Natural Resources is the local sponsor. The Wisconsin Department of Natural Resources was also interested in co-sponsoring the study and may participate in the feasibility study in future years. The study is addressing ecosystem restoration opportunities throughout the Illinois portion of the drainage basin and will evaluate the overall degradation of the Rock River. Ecosystem restoration activities could include stream restoration, wetland creation, wildlife habitat restoration, fish passage, land surface restoration, recommendations for maintaining viable populations of native species, and other engineering solutions to environmental problems in the watershed. A holistic review of ecosystem management practices will be conducted in partnership with state and Federal agencies to restore fish and wildlife habitat and in the development of a system-wide management plan. Particular emphasis will be placed on restoration of wetlands and Federal and state significant species. The feasibility cost sharing agreement was executed 14 May 2001.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility study phase. The estimated cost of the feasibility phase is $1,840,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost-sharing is as follows:

Total Estimated Study Cost	$1,940,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	920,000
Feasibility Phase (Non-Federal)	920,000

The reconnaissance phase was completed in May 2001. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
LOUISIANA					
Amite River and Tributaries Ecosystem Restoration, LA New Orleans District	2,125,000	100,000	33,000	250,000	1,742,000

The study area includes the 2,000-square-mile Amite River drainage basin in southeastern Louisiana and southwestern Mississippi. Approximately 30 miles of the Amite River corridor have directly experienced degradation of fish and wildlife habitat with potentially many more miles indirectly impacted. Bottomland habitats continue to decrease in area and diversity as vegetation is removed. Approximately 10,690 acres have been directly disturbed in the study area and the potential exists for a total degradation of 24,000 acres. The degradation includes a reduction in wildlife habitat, stream and floodplain environment, and aggravation of existing flooding problems. Problems can be attributed to wider floodplain and shallower water depths, reduction in river length and the resulting steepened river gradient, reduction of the sinuosity through meander cut-offs, increased turbidity, increased temperature, and an increase in the unvegetated areas and man-made changes within the river corridor. River length from 1940 to 1981 has been reduced as much as 10 percent. Preliminary analyses indicated that a 20 percent reduction in river length would produce a stage increase of 6 to 9 inches inducing structural flooding. The steeper gradient of the river increases scour forces, and bridge collapses have been attributed to this force. Removal of riparian vegetation and mining of point bars reduce the resistance of riverbanks to erosion during floods. The elimination of streambank vegetation and mining operations produces a turbid stream negatively impacting many fish species. The Amite River has three to four times the number of exceedances of turbidity than comparable streams in the vicinity. As the habitat deteriorates, wildlife that uses the river and floodplain ecosystem decreases in quantity and diversity. The Amite River, which once flooded a densely vegetated valley bottom, now spreads across bare sand areas and tailings piles at mining sites allowing a multitude of geomorphic changes during flood events. The study will determine the feasibility of restoring the Amite River ecosystem to a condition similar to its natural state. This effort will consider the physical and limnological aspects of the site, and its broader landscape or watershed setting, to address all related issues and constraints. Alternatives will be developed to reduce turbidity, lower temperature, and reduce the extent of the physical changes within the river corridor in an effort to achieve fish and wildlife restoration, and restore outdoor recreation opportunities. This effort will significantly contribute to the watershed management objectives of the State of Louisiana. The Heel Splitter Clam, an endangered species, exists in the basin and is threatened by the degraded stream conditions. Negotiations of the feasibility cost sharing agreement continue with the potential local sponsor, the Louisiana Department of Environmental Quality.

Fiscal Year 2004 funds are being used to prepare a project management plan, negotiate and execute a feasibility cost sharing agreement, and continue into the feasibility phase of the study. Funds requested for Fiscal Year 2004 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$4,125,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase is scheduled for completion in August 2004. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Louisiana Coastal Area -- Ecosystem Restoration, LA New Orleans District	65,000,000	10,736,000	1,625,000	8,000,000	44,639,000

Louisiana's coastal wetlands account for about 90 percent of the Nation's wetland loss even though they comprise only about 30 percent of the Nation's wetlands. Over 1 million acres of Louisiana's coastal lands have been lost since the 1930's, and 50-year projections indicate that another one-third of a million acres could be lost unless large-scale corrective actions are taken. The decline of this complex ecosystem is having a serious adverse impact on land and sea life. Disruption of natural processes by development in the study area is the primary cause of the coastal land loss through subsidence, salt-water intrusion, and other problems.

This budget request refocuses and advances planning and scientific and restoration efforts that are already underway. The Louisiana Coastal Area Ecosystem Restoration Study, initiated several years ago, completed its reconnaissance study in 2000. A feasibility cost sharing agreement was executed between the federal government and the State of Louisiana, the non-Federal sponsor, and was amended in March 2002. Study efforts are being refocused to address critical ecosystem needs that require immediate attention, to improve the scientific and technology base needed to effectively provide for the protection and restoration of coastal ecosystems, and to ensure the best possible use of available funds. The Near-Term Plan to Restore the Coastal Louisiana Ecosystem (Near-Term Plan) will guide the restoration effort for the next ten or so years. It will evaluate the current and likely future conditions and activities that could affect critical ecological areas; describe a sequenced program composed of prioritized, highly cost-effective restoration projects that will address critical needs; develop programs to address the key long-term scientific and technological uncertainties and challenges with planning, designing, implementing, and operating and maintaining coastal restoration projects; advance our understanding of the dynamics of the ecosystem; and identify proposals for studies that should be undertaken now to explore long-term, potentially promising coastal restoration options and concepts. The studies and projects will be developed through a public involvement process, and working closely with other Federal Agencies and the State of Louisiana. Small-scale demonstration projects will be a vital part of the scientific and technology programs. All other projects will be developed through follow-on feasibility studies and be submitted to Congress for authorization.

Fiscal Year 2004 funds are being used to continue the Near-Term Plan and related feasibility studies. Funds requested for FY 2005 will be used to complete the Near-Term Plan, perform feasibility studies for the most critical projects identified in the Plan, and continue to develop the science and technology programs. Of the $8.0 million requested for the overall FY 2005 effort, $3 million is for studies of potentially promising, long-term coastal restoration concepts with the objective of determining whether they would provide a cost-effective way to create coastal wetlands.

The estimated cost of the Near-Term Plan and its follow-on feasibility studies is $130,000,000. The completion date is being determined. Study cost will be shared on a 50-50 percent basis as follows:

Total Estimated Study Cost	$130,000,000
Reconnaissance Phase (Federal)	N/A
Feasibility Phase (Federal)	65,000,000
Feasibility Phase (Non-Federal)	65,000,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
WISCONSIN					
Baraboo River, WI St. Paul District	3,296,000	260,000	300,000	270,000	2,466,000

The scope of the Baraboo River reconnaissance study was expanded to include the entire Wisconsin River Basin. The Wisconsin River Basin is located in central Wisconsin, and flows into the Mississippi River near Prairie du Chien, Wisconsin. The reconnaissance study, which was approved on 31 October 2003, established a Federal interest in proceeding with a feasibility study to address ecosystem restoration projects such as fish passage; restoration of aquatic and riparian habitats; erosion and sediment control; wetland restorations for reducing flood damage and improving water quality, fisheries, populations of endangered and threatened species, and natural river equilibrium; and basin-wide water quality. It is expected that a combination of structural and nonstructural solutions will be necessary to achieve the objectives for the long term. Fully addressing the deteriorated state of the river system will require a holistic assessment of the watershed, implementation of numerous ecosystem restoration projects, and preparation of a management plan for the long-term vitality of the river system. The study will take full advantage of historical data on the environment, water quality, aquatic habitat, and hydrologic data and models. The feasibility cost sharing agreement is scheduled for execution with the Wisconsin Department of Natural Resources in March 2004. Other supporters and potential partners are the Sand County Foundation, local watershed boards, and the City of Baraboo and other communities in the watershed.

Fiscal Year 2004 funds are being used to complete the project management plan and negotiate and execute the feasibility cost sharing agreement for the Caledonia Levee area. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study for the Caledonia Levee area. The estimated cost of the feasibility phase is $5,990,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$6,291,000
Reconnaissance Phase (Federal)	301,000
Feasibility Phase (Federal)	2,995,000
Feasibility Phase (Non-Federal)	2,995,000

The reconnaissance phase is scheduled for completion in March 2004. The feasibility study completion date is being determined.

Total – Ecosystem Restoration Studies	80,468,000	15,181,000	2,475,000	9,320,000	53,492,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $

f. Watershed/Comprehensive Studies: The amount of $4,076,000 is requested to complete one reconnaissance study and complete one and continue six feasibility studies in Fiscal Year 2005.

ARKANSAS

White River Basin Comprehensive, AR and MO Memphis District	4,460,000	814,000	650,000`	1,000,000	1,996,000

The White River Basin comprises approximately 27,765 square miles of which 10,622 square miles are in the southern part of Missouri and the remaining 17,143 square miles are in the northern and eastern portion of Arkansas. The basin contains five large Corps multi-purpose lakes: Beaver, Table Rock, Bull Shoals, Norfork, and Greers Ferry. Clearwater Lake, primarily for flood control, is also in the upper basin. This comprehensive basin study will investigate water resource related problems such as navigation, restoration and protection of environmental resources, water quality, hydropower, flood damage reduction, and water supply. Local interests, local industries, and beneficiaries in adjacent areas desire navigation improvements. The area is deemed significant as a migratory waterfowl wintering area and includes several Federal and state wildlife refuges. Releases from Corps lakes sometime fail to meet state water quality standards for dissolved oxygen and adversely affect the ecosystem below the dams. Land use practices result in nutrient runoff (both point and non-point sources), sediment, and other water quality factors that affect water supply reserves, hydropower capability, recreational opportunities, and fish and wildlife habitat in the entire basin. Federal, state, and private natural resource agencies and organizations are highly supportive of conducting a comprehensive study. The project sponsors are the Arkansas Game and Fish Commission, Arkansas Soil and Water Conservation Commission, Arkansas Natural Heritage Commission, Arkansas Waterways Commission, Missouri Department of Natural Resources, Missouri Department of Conservation, and Nature Conservancy. A feasibility cost sharing agreement was executed on 22 May 2002.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue basin-wide studies. The estimated cost of the feasibility study is $8,600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. Up to 25 percent of the non-Federal share may be in-kind services. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$8,760,000
Reconnaissance Phase (Federal)	160,000
Feasibility Phase (Federal Cost)	4,300,000
Feasibility Phase (Non-Federal Cost)	4,300,000

The study is authorized by Section 729 of the Water Resources Development Act of 1986, as amended by Section 202 of the Water Resources Development Act of 2000. The reconnaissance phase was completed in May 2002. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
ILLINOIS					
Upper Mississippi River Comprehensive Plan, IL, IA, MO, MN and WI Rock Island District	5,900,000	2,417,000	1,300,000	944,000	1,239,000

The Great Flood of 1993 affected much of the Upper Mississippi River Basin. While existing flood protection works reduced or prevented damages to many properties, these measures often proved inadequate to withstand the magnitude of flooding experienced in 1993. This natural disaster killed 47 people and damaged or destroyed an estimated 72,000 homes and over 35,000 commercial structures. The flood interrupted virtually all forms of transportation on and across the Mississippi River and many of its tributaries. It is estimated that the total monetary damages from the flood were between $15 and $20 billion. The study area includes the Upper Mississippi and Illinois Rivers and their floodplains. The Comprehensive Plan will develop an integrated strategy and implementation plan for economically justified, environmentally sustainable flood damage reduction by means of 1) structural and nonstructural floodplain management strategies, 2) continued maintenance of the navigation project, 3) management of bank caving and erosion, 4) watershed nutrient and sediment management, 5) habitat management, and 6) other related purposes. The Comprehensive Plan will be developed integrally with the Upper Mississippi River - Illinois Waterway System Navigation Study. The study would be fully responsive to national interests and the needs of the citizens of the Upper Mississippi River basin. It will identify opportunities to increase environmental outputs, improve floodplain management, and reduce flood risk to existing economic development. The plan will be a collaborative effort among three Corps Districts, other Federal agencies, the states of Illinois, Iowa, Missouri, Minnesota, and Wisconsin, and appropriate non-Federal organizations. The plan will identify future management actions and make recommendations for systemic, multiple-benefit, improvements within the floodplains of the two rivers.

Fiscal Year 2004 funds are being used to continue the plan at full Federal expense. Funds requested for Fiscal Year 2005 will be used to continue the plan.

The study was authorized in Section 459(e) of WRDA 1999, as amended by Section 404 of WRDA 2000.

The plan completion date is being determined.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
MINNESOTA					
Minnehaha Creek Watershed, MN (Upper Mississippi River, Watershed Management, Lake Itasca to Lock and Dam 2, MN) St. Paul District	545,000	82,000	163,000	300,000	0

A reconnaissance study was completed in June 2001 for the Upper Mississippi River from the headwaters at Lake Itasca to Lock and Dam No. 2 at Hastings, Minnesota. The study was consistent with a resolution of the U.S. House of Representatives Committee on Transportation and Infrastructure, dated April 15, 1999, and evaluated the water resource problems, needs, and Federal interest in this important reach of the Mississippi River. The study area continues to shape the life of the region, fostering commerce, transportation, and city development, and enriching the region and the Nation with natural, recreational, and cultural amenities. On the basis of preliminary Federal interest documentation presented in the reconnaissance report, the high priority of likely outputs, and the strong non-Federal sponsorship expressed for future cost-shared studies, a recommended study included watershed-scale planning for the Minnehaha Creek Watershed District in the Twin Cities Metropolitan area.

The Minnehaha Creek Watershed feasibility study will identify problems related to flooding and loss of habitat related to changed hydrologic regimes, water fluctuations, and other impacts on the system caused by human activity. The study will evaluate flood and erosion control, lake restoration, wetland management, storm water management and water quality protection. The Minnehaha Creek Watershed covers approximately 181 square miles, which drains into Minnehaha Creek, which enters the Mississippi River. The watershed includes natural treasures such as Minnehaha Creek, Lake Minnetonka, the Minneapolis Chain of Lakes and Minnehaha Falls. There are eight major creeks, 129 lakes and thousands of wetlands within the watershed. The local sponsor is the Minnehaha Creek Watershed District. The feasibility cost sharing agreement was signed in January 2003.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to complete the feasibility study. The estimated cost of the feasibility phase is $1,090,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Feasibility Study Cost	$1,090,000
Reconnaissance Phase (Federal)	N/A [1]
Feasibility Phase (Federal)	545,000
Feasibility Phase (Non-Federal)	545,000

The reconnaissance phase was completed in January 2003. The feasibility study is scheduled for completion in September 2005.

[1] Upper Mississippi River, Watershed Management, Lake Itasca to Lock and Dam 2, MN, reconnaissance study was completed at a cost of $250,000.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Minnesota River Basin, MN and SD St. Paul District	200,000	71,000	86,000	43,000	0

The Minnesota River in southwestern Minnesota originates at the Minnesota-South Dakota border, flows 335 miles through some of the richest agricultural land in Minnesota and joins the Mississippi River at Minneapolis and St. Paul, Minnesota. The river drains 16,770 square miles, of which 14,840 are in Minnesota, 1,610 in South Dakota, and the remainder in North Dakota and Iowa. The reconnaissance study is assessing flood damage reduction, ecosystem restoration, navigation, and watershed planning needs in the entire Minnesota River Basin. Since settlement, the native prairie has been replaced by agriculture with constructed drainage systems; over ninety percent of the prairie wetlands that existed pre-settlement have been drained. Several dams in the basin prevent natural fish migrations. A navigation channel in the lower fifteen miles of the river passes through the Minnesota Valley National Wildlife Refuge. The Minnesota River carries substantial sediment and nutrient loads that degrade the aquatic ecosystems in the Minnesota and Mississippi Rivers. The magnitude and frequency of flooding in the Minnesota River Basin have increased dramatically in recent years, causing extensive damages and requiring emergency actions. In 1993, there were three independent flood events, each exceeding the largest peak in the previous 24 years. Four floods have occurred since 1993, and the 1997 peak exceeded any in the 24 years from 1969 to 1993. This reconnaissance study will establish the Federal interest in proceeding with multi-purpose projects that reduce flood damages, restore aquatic habitat, and reduce erosion and sediment. Feasibility studies will follow for projects that have a Federal interest. Resulting feasibility studies will take advantage of advanced watershed modeling techniques to understand the relationship of hydrologic and water quality parameters and the relative impacts and benefits of alternative measures for flood damage reduction and ecosystem restoration. Studies will complement the outputs from other Federal, state, and local initiatives and will be cooperative efforts with local watershed districts, state resource agencies, non-government organizations, and other Federal agencies, including the Natural Resources Conservation Service and the Fish and Wildlife Service. This reconnaissance study supports the State's high priority initiative to preserve and restore the Minnesota River. Potential feasibility sponsors include Blue Earth County, the Metropolitan Council, Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, Area II - Minnesota River Basin Projects, Inc., Redwood-Cottonwood Rivers Control Area, and other local watershed management organizations or their member counties. It is expected that the reconnaissance study will identify several projects for study and implementation.

Fiscal Year 2004 funds are being used to continue the reconnaissance phase of the study. Funds requested for Fiscal Year 2005 will be used to complete the reconnaissance phase of the study in December 2004.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
South Washington County Watershed, MN (Upper Mississippi River, Watershed Management, Lake Itasca to Lock and Dam 2, MN) St. Paul District	890,000	89,000	163,000	300,000	338,000

A reconnaissance study was completed in June 2001 for the Upper Mississippi River from the headwaters at Lake Itasca to Lock and Dam No. 2 at Hastings, Minnesota. The study evaluated the water resource problems, needs, and Federal interest in this important reach of the Mississippi River. The study area continues to shape the life of the region, fostering commerce, transportation, and city development, and enriching the region and the Nation with natural, recreational, and cultural amenities. On the basis of preliminary Federal interest documentation presented in the reconnaissance report, the high priority of likely outputs, and the strong non-Federal sponsorship expressed for future cost-shared studies, a recommended study included watershed-scale planning for the South Washington Watershed in the Twin Cities Metropolitan area.

The South Washington County Watershed feasibility study will identify problems related to flooding and loss of habitat related to changed hydrologic regimes, water fluctuations, and other impacts on the system caused by human activity. The system and site-specific evaluations will investigate restoration opportunities falling into four focus areas; watershed stabilization, ravine system, land locked basin water level management, and floodplain restoration and protection. The local sponsor is the South Washington Watershed District. The feasibility cost sharing agreement was signed in September 2002.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to evaluate alternatives for providing an emergency watershed overflow route and outlet to the Mississippi River. The estimated cost of the feasibility phase is $1,780,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Feasibility Study Cost	$1,780,000
Reconnaissance Phase (Federal)	N/A [1]
Feasibility Phase (Federal)	890,000
Feasibility Phase (Non-Federal)	890,000

The reconnaissance phase was completed in September 2002. The feasibility study completion date is being determined.

[1] Upper Mississippi River, Watershed Management, Lake Itasca to Lock and Dam 2, MN, reconnaissance study was completed at a cost of $250,000.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Wild Rice River, MN (Red River of the North Basin, MN, ND, SD and Manitoba, Canada) St. Paul District	1,200,000	193,000	380,000	400,000	227,000

The Wild Rice River is a tributary of the Red River of the North in northwestern Minnesota, about 250 miles northwest of Minneapolis. Agriculture dominates the watershed economy and land use and has been the prime motivator for extensive channel straightening, ditching, and drainage. The topography contributes to flood problems. The Wild Rice River's fast moving flow from relatively steep upland and beach ridges from glacial Lake Agassiz discharges onto the flat glacial lakebed where channel capacity is inadequate. Flooding has become more frequent and severe in recent years. For example, the June 2002 flood was the flood of record at Ada, Minnesota (Norman County seat) and exceeded the 500-year event in portions of the watershed. In collaboration with Federal and state agencies, environmental organizations, landowners, and other stakeholders, the Wild Rice Watershed District, non-Federal sponsor for the Wild Rice River feasibility study, conducted an assessment of water resource problems, needs, and opportunities. That assessment determined that priority should be given to flood damage reduction and environmental restoration in the lower portion of the watershed, recommended further investigation of a number of corrective measures, and concluded that high implementation costs necessitated Federal participation. Based on those findings, the Wild Rice Watershed District and Corps executed a feasibility cost sharing agreement 10 January 2003 and are partnering the study to address floodwater storage and diversion alternatives with a strong emphasis on ecosystem restoration. The feasibility study will collect baseline data, develop analytical models, and conduct preliminary screenings of storage and diversion measures to determine the likelihood of Corps participation.

Fiscal Year 2004 funds are being used to continue the feasibility study. Funds requested for Fiscal Year 2005 will be used to continue the study. The estimated cost of the feasibility phase is $2,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Feasibility Study Cost	$2,400,000
Reconnaissance Phase (Federal)	N/A[1]
Feasibility Phase (Federal)	1,200,000
Feasibility Phase (Non-Federal)	1,200,000

The reconnaissance phase was completed in January 2003. The feasibility study completion date is being determined.

[1] Reconnaissance phase funded under overall study authority for Red River of the North Basin, MN, ND, SD and Manitoba, Canada.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Red River of the North Basin, MN, ND, SD and Manitoba, Canada St. Paul District	7,810,000	434,000	100,000	751,000	6,525,000

The Red River of the North, a northward flowing stream, originates at the convergence of the Ottertail, Minnesota, and Bois de Sioux Rivers, Minnesota and North Dakota and ends at Lake Winnipeg in Manitoba, Canada. Within the United States, the Red River drains portions of South Dakota, Minnesota, and North Dakota and forms the border between the latter two. The basin has lost much of the natural environment that existed in early settlement times, and flooding has repeatedly caused economic and human hardship. Major flood events totaling billions of dollars in damages have occurred in 1826, 1852, 1893, 1897, 1914, 1919, 1950, 1974, 1975, 1978, 1979, 1985, 1989, 1996, and 1997. Significant floods with substantial documented damages occurred on tributaries in other years. Drainage, river modifications, and land use changes (including those for enhancement of agriculture) adversely affected the natural ecosystems. The basin's water resources issues have been the focus of several watershed planning and management initiatives. The study will address flood damage reduction and ecosystem restoration. Federal agencies, state agencies in Minnesota, North Dakota, and South Dakota, local units of government, non-profit environmental organizations, Canadian interests, business and agricultural representatives, and citizens participating in support of these initiatives see this study as critical to continued basin planning and implementation. Willing cost-share sponsors include regional entities such as the Wild Rice Watershed District, and local units of government such as the Cities of Fargo, Moorhead, and Roseau. In addition, a number of stakeholders have committed to support this effort, e.g., the North Dakota State Water Commission, Minnesota Department of Natural Resources, Minnesota Center for Environmental Advocacy, etc. The reconnaissance study approved in September 2002 identified three priority areas to proceed into the feasibility phase.

Fiscal Year 2004 funds are being used to produce reconnaissance supplements identifying additional feasibility studies and to continue into two spin-off feasibility studies, Pembina River, ND; and Fargo, ND-Moorhead, MN and Upstream. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of these two feasibility studies, as well as produce reconnaissance supplements identifying additional feasibility studies. The preliminary estimated cost of the feasibility phase is $13,500,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$14,560,000	1/
Reconnaissance Phase (Federal)	1,060,000	
Feasibility Phase (Federal)	6,750,000	
Feasibility Phase (Non-Federal)	6,750,000	

The completion schedule for each feasibility study will be established during negotiations with sponsors to determine the scope of study. The completion dates for the various feasibility studies are being determined.

1/ Excludes costs for Wild Rice River, MN and Roseau, MN feasibility studies.

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
MISSOURI					
St. Louis Riverfront, MO & IL St. Louis District	1,400,000	363,000	130,000	338,000	569,000

The study area, approximately 3,011 square miles, is located in St. Louis City, St. Louis County and Jefferson County, in Missouri, and St. Clair, Madison, and Monroe Counties in Illinois. The primary focus of the study will address flood damage reduction, aquatic habitat restoration, and harbor safety issues. Secondary focus will be on public access to the river, regional greenways and bike trails, and other recreational/economic development opportunities. Flood damage reduction investigations will concentrate on Reach 5 of the St. Louis Flood Protection project, which was never constructed. During the 1993 flood, this area experienced severe flooding which led to the evacuation of 11,800 people and 400 businesses due to 51 propane tanks floating off of their concrete supports at the Phillips Petroleum facility. Aquatic habitat restoration investigations will focus on the St. Louis Riverfront from downtown to the Chain of Rocks Park, the Meramec River, and the River des Peres watershed. The St. Louis waterfront area is a major interchange for reconfiguring tows due to the change from open river to pooled river. (The last lock on the Mississippi is Locks 27 in Granite City, Illinois.) Because of this, many fleeting areas exist along both banks of the river within the study boundary. Under normal river stages, the fleeting is an efficient operation; however, as demonstrated during high water in 1993 and drought conditions in 1989, safety becomes a huge concern, particularly with all of the bridge crossings in the metropolitan area. The study will address these safety issues. Investigations into greenways, bike trails, and public access to the river will focus primarily on linkages to the existing Confluence Greenway network through flood control rights-of-way and drainage areas. Potential sponsors include the City of St. Louis, St. Louis County, Jefferson County, Madison County, Monroe County, St. Clair County, Metropolitan St. Louis Sewer District, Confluence Greenway, the states of Missouri and Illinois, and various port authorities located within the study area.

Fiscal Year 2004 funds are being used to complete the reconnaissance phase, and if the report is certified to be in accord with policy, continue into the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $1,800,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$2,300,000
Reconnaissance Phase (Federal)	500,000
Feasibility Phase (Federal)	900,000
Feasibility Phase (Non-Federal)	900,000

The reconnaissance phase is scheduled for completion in July 2004. The feasibility study completion date is being determined.

Total – Watershed/Comprehensive Studies	22,405,000	4,463,000	2,972,000	4,076,000	10,894,000
TOTAL – SURVEYS – CONTINUING	127,684,000	27,865,000	8,553,000	16,459,000	74,807,000
TOTAL - SURVEYS	127,984,000	27,856,000	8,553,000	16,684,000	74,882,000

Project	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – NEW: None.

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – CONTINUING:

a. Ecosystem Restoration: The amount of $100,000 is requested to continue one PED activity in Fiscal Year 2005.

ILLINOIS

Peoria Riverfront Development, IL Rock Island District	1,380,000	32,000	394,000	100,000	854,000

Peoria, Illinois, is located on the Illinois River in Peoria County. The study area includes the portion of the Illinois River and its tributaries that flows next to, or directly impacts, the downtown Peoria Riverfront Development project. This stretch of river, a riverine lake called Peoria Lake, has lost roughly 70 percent of its volume with depths reduced from approximately 8 feet to 2.5 feet since 1903. This loss of depth has seriously impacted fish and wildlife. Contributing to the filling is sediment deposition from creeks draining into the Illinois River. The recommended plan is estimated to cost $15,182,000, with an estimated Federal cost of $9,868,000 and an estimated non-Federal cost of $5,314,000. The plan includes dredging of approximately 200 acres with the creation of three islands in Peoria Lake and wetland restoration along Farm Creek. The project is estimated to provide 866 average annual habitat units of environmental benefit. PED will ultimately be cost shared with the State of Illinois, Department of Natural Resources, and/or other willing sponsors, at the rate for the project to be constructed but is being financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$1,840,000	Total Estimated Preconstruction Engineering and Design Costs	$1,840,000
Initial Federal Share	1,380,000	Ultimate Federal Share	1,196,000
Initial Non-Federal Share	460,000	Ultimate Non-Federal Share	644,000

The project is not authorized for construction. Cost sharing will be 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1986, as amended by the Water Resources Development Act of 1996. Fiscal Year 2004 funds are being used to continue PED. Funds requested for Fiscal Year 2005 funds will be used to continue PED. The PED completion date is being determined.

Total - Ecosystem Restoration	1,380,000	32,000	394,000	100,000	854,000

Project	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
b. Navigation: The amount of $100,000 is requested to continue one PED activity in Fiscal Year 2005.					
LOUISIANA					
Bayou Sorrel Lock, LA New Orleans District	1,500,000	0	354,000	550,000	596,000

Bayou Sorrel Lock is a feature of the Atchafalaya Basin project, which is a feature of the Flood Control, Mississippi River and Tributaries project. The project flood flow line for the Atchafalaya Basin was modified in 1986 to the current elevation of 28.7. The lock must be modified or replaced. The need to modify Bayou Sorrel Lock presents an opportunity to address increasing navigation concerns at this lock. Planning, engineering, and design of the modification or replacement for flood reduction benefits were delayed until the optimum navigation plan could be studied. The tentative plan, at an estimated cost of $82,400,000, is the replacement of the existing lock with a new 75 by 1,200 foot concrete chamber lock immediately adjacent to the existing lock. The benefit-cost ratio is 14 to 1 based on the latest economic analysis dated September 2002. Preconstruction engineering and design cost would be all Federal.

Total Estimated Preconstruction Engineering and Design Costs	$1,500,000	Total Estimated Preconstruction Engineering and Design Costs	$1,500,000
Initial Federal Share	1,500,000	Ultimate Federal Share	1,500,000
Initial Non-Federal Share	0	Ultimate Non-Federal Share	0

The project is not authorized for construction. Fiscal Year 2004 funds are being used to complete the feasibility phase and initiate PED. Funds requested for Fiscal Year 2005 will be used to continue PED. The PED completion date is being determined.

Total - Navigation	1,500,000	0	354,000	550,000	596,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
c. Watershed/Comprehensive: None.					
d. Beach Erosion Control: None.					
e. Flood Control: The amount of $595,000 is requested to continue two and complete two PED activities in Fiscal Year 2005.					
ILLINOIS					
Wood River Levee, IL St. Louis District	1,200,000	884,000	131,000	185,000	0

The project area is located in the Mississippi River flood plain of Madison County, Illinois, just upstream of the City of St. Louis. The area is protected by an urban design levee, authorized in 1938 and constructed in the 1950's. Based on the Reconnaissance Report dated April 1999, preconstruction engineering and design was resumed to prepare a cost-shared reconstruction evaluation to address the aging infrastructure and determine its applicability as a Federal interest. The recommended project, estimated to cost $25,000,000, with an estimated Federal cost of $18,750,000 and an estimated non-Federal cost of $6,250,000, includes rehabilitation of the levee system to bring it into original performance compliance. The reevaluation is investigating the reconstruction or replacement of 7 pump stations, 37 gravity drains, 147 relief wells, and over 21 miles of levee. In response to a system failure during the flood of 1993, only swift action by Wood River Drainage and Levee District prevented major damages. The failure of this levee would produce tremendous economic loss and create an unprecedented environmental disaster as the levee system protects a large petroleum refinery and chemical manufacturing area. The benefit-to-cost ratio is 2.7 to 1 based on the latest economic analysis dated October 2002. On 6 April 2000, a Design Agreement was executed with the Wood River Drainage and Levee District. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$1,600,000	Total Estimated Preconstruction Engineering and Design Costs	$1,600,000
Initial Federal Share	1,200,000	Ultimate Federal Share	1,200,000
Initial Non-Federal Share	400,000	Ultimate Non-Federal Share	400,000

The project was authorized for construction by the Flood Control Act of 1938. Correction of performance problems determined to be the result of either design or construction deficiency would be cost shared 75 percent Federal and 25 percent non-Federal in accordance with Section 103 of the Water Resources Development Act of 1986. Project features identified for reconstruction or major rehabilitation will require additional authorization, and therefore cost shared 65 percent Federal and 35 percent non-Federal in accordance with the Water Resources Development Act of 1986, as amended by Section 202 of the Water Resources Development Act of 1996. Fiscal Year 2004 funds are being used to complete the reconstruction evaluation report and initiate design. Fiscal Year 2005 funds will be used to complete PED, which is scheduled for completion in September 2005.

Project	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
IOWA					
Davenport, Iowa Rock Island District	494,000	234,000	104,000	156,000	0

The project is located at Davenport, Iowa (population of 102,000 – 1999 census) in Scott County, on the right bank of the Mississippi River. Davenport is one of the Quad-Cities, along with Bettendorf, Iowa, and Moline, East Moline, and Rock Island, Illinois. Plans were developed in the 1970's and the early 1980's for structural flood control. A General Design Memorandum was completed in February 1982. The project was deferred at the request of the City. After experiencing three significant flood events in the last ten years (1993, 1997, and 2001), the City of Davenport officials requested that the project be restudied to evaluate current alternatives and benefits for flood damage reduction. The PED resumption, approved by the Energy and Water Development Appropriations Committee in October 2001, puts emphasis on key facilities such as the water treatment plants. The reconnaissance level study was completed and the Limited Revaluation Report was approved in June 2002. The recommended project, estimated to cost $3,600,000 with an estimated Federal cost of $2,700,000 and an estimated non-Federal cost of $900,000, includes construction of levees, floodwalls, closure structures, and interior flood control items. The average annual benefits were estimated to be $855,700, all for flood control. The benefit-cost ratio is 4.0 to 1 based on the latest economic analysis dated October 2003. The City of Davenport is the local sponsor for this project. The design agreement was executed in March 2003. PED will ultimately be cost shared at the rate of the project to be constructed but was financed through the reconnaissance level study at 100 percent Federal and the follow-on PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$ 658,000	Total Estimated Preconstruction Engineering and Design Costs	$ 658,000
Reconnaissance Level Study (Federal)	100,000	Reconnaissance Level Study (Federal)	100,000
Engineering and Design Costs	558,000	Engineering and Design Costs	558,000
Initial Federal Share	394,000	Ultimate Federal Share	394,000
Initial Non-Federal Share	164,000	Ultimate Non-Federal Share	164,000

The project is authorized for construction by the Section 201 of the Flood Control Act of 1970. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with the Water Resources Development Act of 1986. Fiscal Year 2004 funds are being used to initiate plans and specifications for the first item of construction. Funds requested for Fiscal Year 2005 will be used to complete PED, which is scheduled for completion in September 2005.

Project	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
St. Louis Flood Protection, MO St. Louis District	1,684,000	645,000	66,000	450,000	523,000

The St. Louis Flood Protection project area is located in St. Louis, Missouri, on the right bank of the Mississippi River between Miles 176.3 and 187.2 above the mouth of the Ohio River. Approximately 3,160 acres of industrial and commercial development are protected from Mississippi River flooding by the completed St. Louis Flood Protection Project. During the Great Flood of 1993, which was less than the project's design, a short section of the project failed and only quick, extensive emergency actions by the City of St. Louis, Metropolitan St. Louis Sewer District, and Corps of Engineers prevented a large portion of the City of St. Louis from flooding. Significant potential problems identified with the project during 1993 include under seepage, foundation piping, pipe crossing, and toe drains and relief wells. Based on the Reconnaissance Report dated February 1999, preconstruction engineering and design was resumed and a cost-shared reconstruction evaluation is being prepared. The recommended project, estimated to cost $9,000,000, with an estimated Federal cost of $6,750,000 and an estimated non-Federal cost of $2,250,000, includes correcting structural deficiencies, correcting geotechnical concerns, and enhancing recreation features within the project area. The benefit to cost ratio is 6.97 to 1 based upon the latest Economic Analysis dated October 2003. The City of St. Louis signed the Design Agreement on 2 February 2000. PED will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	$2,245,000	Total Estimated Preconstruction Engineering and Design Costs	$2,245,000
Initial Federal Share	1,684,000	Ultimate Federal Share	1,684,000
Initial Non-Federal Share	561,000	Ultimate Non-Federal Share	561,000

The project is authorized for construction by Public Law 84-256, 9 August 1955. Cost sharing will be 75 percent Federal and 25 percent non-Federal in accordance with Section 103 of the Water Resources Development Act of 1986. Fiscal Year 2004 funds are being utilized to continue PED. Funds requested in Fiscal Year 2005 will be used to continue PED. The PED completion date is being determined.

Total - Flood Control	3,378,000	1,763,000	301,000	791,000	523,000
f. Multiple Purpose Power: None.					
TOTAL - PED	6,258,000	1,795,000	1,049,000	1,441,000	1,973,000
GRAND TOTAL – SURVEYS AND PED	134,242,000	29,660,000	9,602,000	18,125,000	76,855,000

APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Chain of Rocks Canal, Mississippi River, Illinois, (Deficiency Correction) (Continuing)

LOCATION: The Chain of Rocks Canal is located on the Mississippi River adjacent to river miles 184 to 194.4 in Madison County, Illinois.

DESCRIPTION: The recommended plan for design deficiency correction involves the installation of relief wells and construction of berms and a pump station. All work is programmed.

AUTHORIZATION: The original project was authorized by the River and Harbor Act of 2 March 1945.

REMAINING BENEFIT-REMAINING COST RATIO: 2.3 to 1 at 7 3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.6 to 1 at 7 3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 7 3/8 percent (FY 1999).

BASIS OF BENEFIT-COST RATIO: Based on the Chain of Rocks Design Deficiency Report dated July 1997 at October 1996 price levels.

SUMMARIZED FINANCIAL DATA	Original Project	
Actual Federal Cost		$59,260,000
Actual Non-Federal Cost		0
Cash Contributions	$ 0	
Other Costs	0	
Total Original Project Cost		$59,260,000

STATUS (1 Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	23	TBD

PHYSICAL DATA

The proposed plan provides for correcting underseepage deficiencies on the nine-mile long levee, installing 50 new relief wells, replacing 50 nonfunctional relief wells, utility relocations landside of the levee, adding fill to berms and filling in low areas, constructing a 155 cfs pump station, and constructing wetland mitigation features.

Remedial Work				ACCUM PCT OF EST FED COST (Remedial Work Only)
Estimated Federal Cost		$33,400,000		
Estimated Non-Federal Cost		0		
Cash Contributions	$ 0			
Other Costs	0			
Total Estimated Remedial Cost		$33,400,000		
Total Estimated Project Cost		$92,660,000		
Allocations to 30 September 2003		$ 7,140,900		
Conference Allowance for FY 2004		2,300,000		
Allocation for FY 2004		1,777,000	1/	
Allocations through FY 2004		8,917,900		27
Allocation Requested for FY 2005		3,900,000		38
Programmed Balance to Complete after FY 2005		20,582,100		
Unprogrammed Balance to Complete after FY 2005		0		

1/ Reflects $509,000 reduction assigned as savings and slippage and $14,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The Chain of Rocks Canal Levee System consists of a dual line of levees running parallel to the canal constructed as part of the Chain of Rocks Canal, Illinois, navigation project. The operation and maintenance of these levees is a 100 percent Federal responsibility. The eastern line of this levee system serves as an integral part of the main line levee protection to the East St. Louis and vicinity area. The east levee has demonstrated inadequate underseepage performance during past floods. Quick conditions and sand boils develop on the landside of the levee during high river stages. The original design assumptions related to the coefficients of permeability for the aquifer and top stratum materials were incorrect. The relief well system was found to be deficient. The levee relies on the impoundment of water against the landside toe of the levee in order to maintain levee stability; however, development over the last 40 years has prevented effective use of this method. Correction of the deficiencies will assure the integrity of the levee system and provide urban level protection for the East St. Louis metropolitan area. The average annual benefits for the design deficiency correction, all flood control, are $2,647,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Lands and Damages	$ 550,000
Relocations	545,000
Wetland Mitigation	310,000
Berms	1,200,000
Maintenance During Construction	95,000
Planning, Engineering and Design	400,000
Supervision and Administration	800,000
Total	$3,900,000

NON-FEDERAL COST: The project is 100 percent Federal.

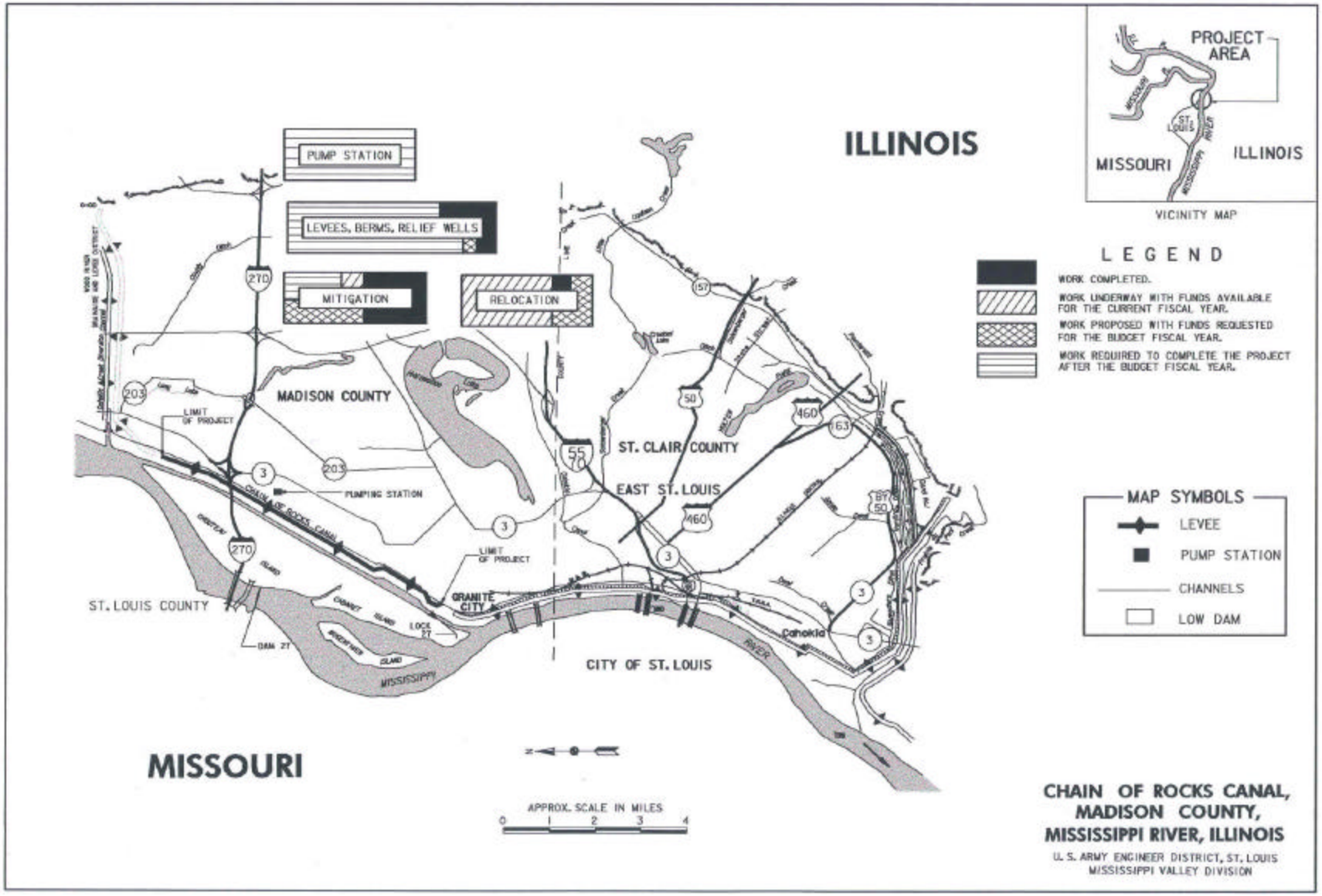
STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $33,400,000 is a decrease of $17,000 from the latest estimate ($33,417,000) presented to Congress (FY 2004). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ -100,000
Price Escalation on Real Estate	83,000
Total	$ -17,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment resulted in a Finding of No Significant Impact (FONSI), which was signed 21 May 1996.

OTHER INFORMATION: Previous funding included the actual cost of $59,260,000 for the construction of the original project, which was completed in Fiscal Year 1953. Funds to initiate construction for the remedial work were appropriated in Fiscal Year 1999. The Corps is seeking a permanent easement of 72 acres within the Charles Melvin Price Support Center, a closed army base, for construction and operational purposes associated with the original project and the deficiency corrections. Fish and Wildlife costs are $1,181,000.


PUMP STATION
LEVEES, BERMS, RELIEF WELLS
MITIGATION
RELOCATION
ILLINOIS
MISSOURI
MADISON COUNTY
ST. CLAIR COUNTY
EAST ST. LOUIS
ST. LOUIS COUNTY
CITY OF ST. LOUIS
GRANITE CITY
Cahokia
LIMIT OF PROJECT
PUMPING STATION
CHAIN OF ROCKS CANAL
LOCK 27
DAM 27
MISSISSIPPI
RIVER
APPROX. SCALE IN MILES
0 1 2 3 4
PROJECT AREA
ST. LOUIS
MISSOURI
ILLINOIS
VICINITY MAP
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
MAP SYMBOLS
LEVEE
PUMP STATION
CHANNELS
LOW DAM
CHAIN OF ROCKS CANAL, MADISON COUNTY, MISSISSIPPI RIVER, ILLINOIS
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Mississippi River Between the Ohio and Missouri Rivers (Regulating Works), Missouri and Illinois (Continuing)

LOCATION: The project involves improvement of the Mississippi River from the mouth of the Ohio River to the mouth of the Missouri River at mile 195 above the mouth of the Ohio River. The project covers the following counties: (Missouri) St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi; (Illinois) Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, and Pulaski.

DESCRIPTION: The project consists of a navigation channel 9 feet deep and not less than 300 feet wide with additional width in bends, from the mouth of the Ohio River to the northern boundary of the City of St. Louis, a distance of approximately 191 miles, thence 200 feet wide, with additional width in bends, to the mouth of the Missouri River. It will be achieved by means of dikes, revetment, construction dredging, and rock removal. All work is programmed.

AUTHORIZATION: River and Harbor Acts of 1910, 1927, and 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 23.0 to 1 at 2.5 percent.

TOTAL BENEFIT-COST RATIO: 10.5 to 1 at 2.5 percent.

INITIAL BENEFIT-COST RATIO: 4.5 to 1 at 2.5 percent (FY 1961).

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Upper Mississippi River Master Plan Report of 1982 at 1986 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$ 270,000,000		Entire Project	80	TBD
Estimated Non-Federal Cost	0				
Cash Contributions	0				
Other Cost	0		PHYSICAL DATA		
Total Estimated Project Cost	$ 270,000,000		Channel 195 miles		
			Ohio River to St. Louis 9 x 300 feet		
Allocations to 30 September 2003	$204,961,000		St. Louis to Missouri River 9 x 200 feet		
Conference Allowance for FY 2004	1,700,000				
Allocations for FY 2004	1,314,000	1/			
Allocations through FY 2004	206,275,000	76			
Allocation Requested for FY 2005	2,000,000	77			
Programmed Balance to Complete After FY 2005	61,725,000				
Unprogrammed Balance to Complete After FY 2005	0				

1/ Reflects $376,000 reduction assigned as savings and slippage and $10,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The Mississippi River between the Ohio and Missouri Rivers is a major artery of the inland waterway system. Commerce in this reach has increased from 4,500,000 tons in 1945 to 121,456,000 tons in 2002 worth approximately $15 billion. Commerce is expected to increase to 167,000,000 tons by the year 2020; therefore, it is essential that construction of project works be continued at a rate which will insure 9-foot channel depths for a year-round navigation season. The average annual benefits, all navigation, are $261,809,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Lands and Damages	$ 345,000
Thompson Bend Riparian Corridor	75,000
Project Dedicated Operating Equipment	100,000
Planning, Engineering and Design	1,475,000
Supervision and Administration	5,000
Total	$ 2,000,000

NON-FEDERAL COST: None

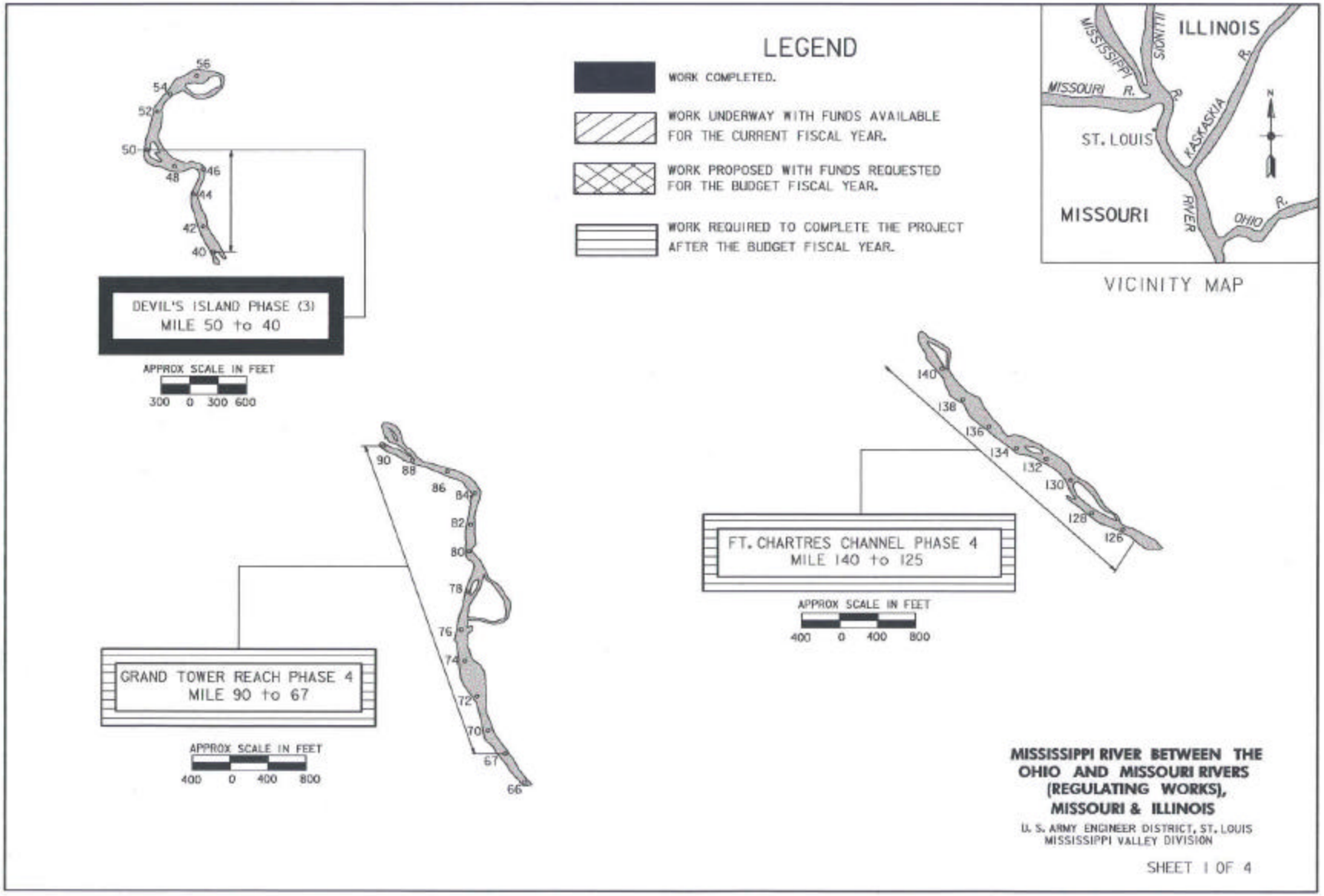
STATUS OF LOCAL COOPERATION: Not applicable.

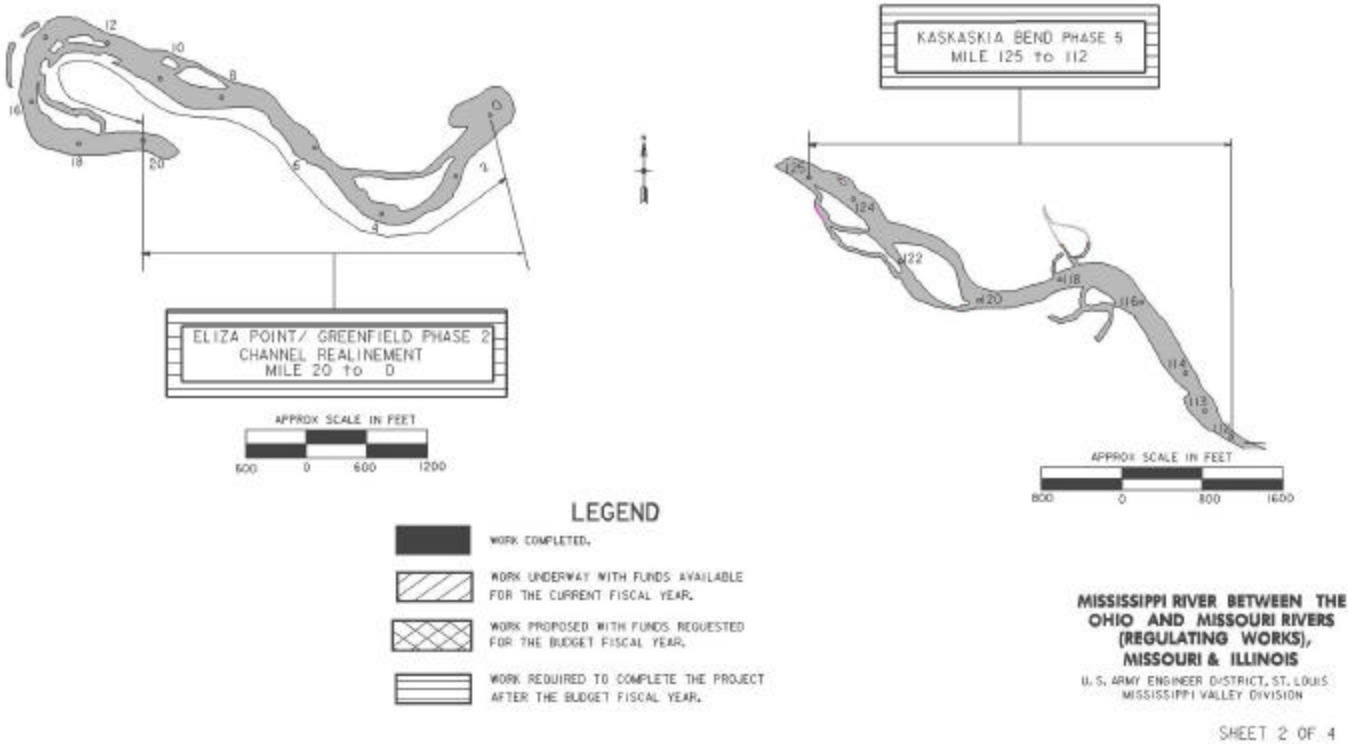
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $270,000,000 is a decrease of $1,000,000 from the latest estimate ($271,000,000) presented to Congress (FY 2004). This change includes the following item:

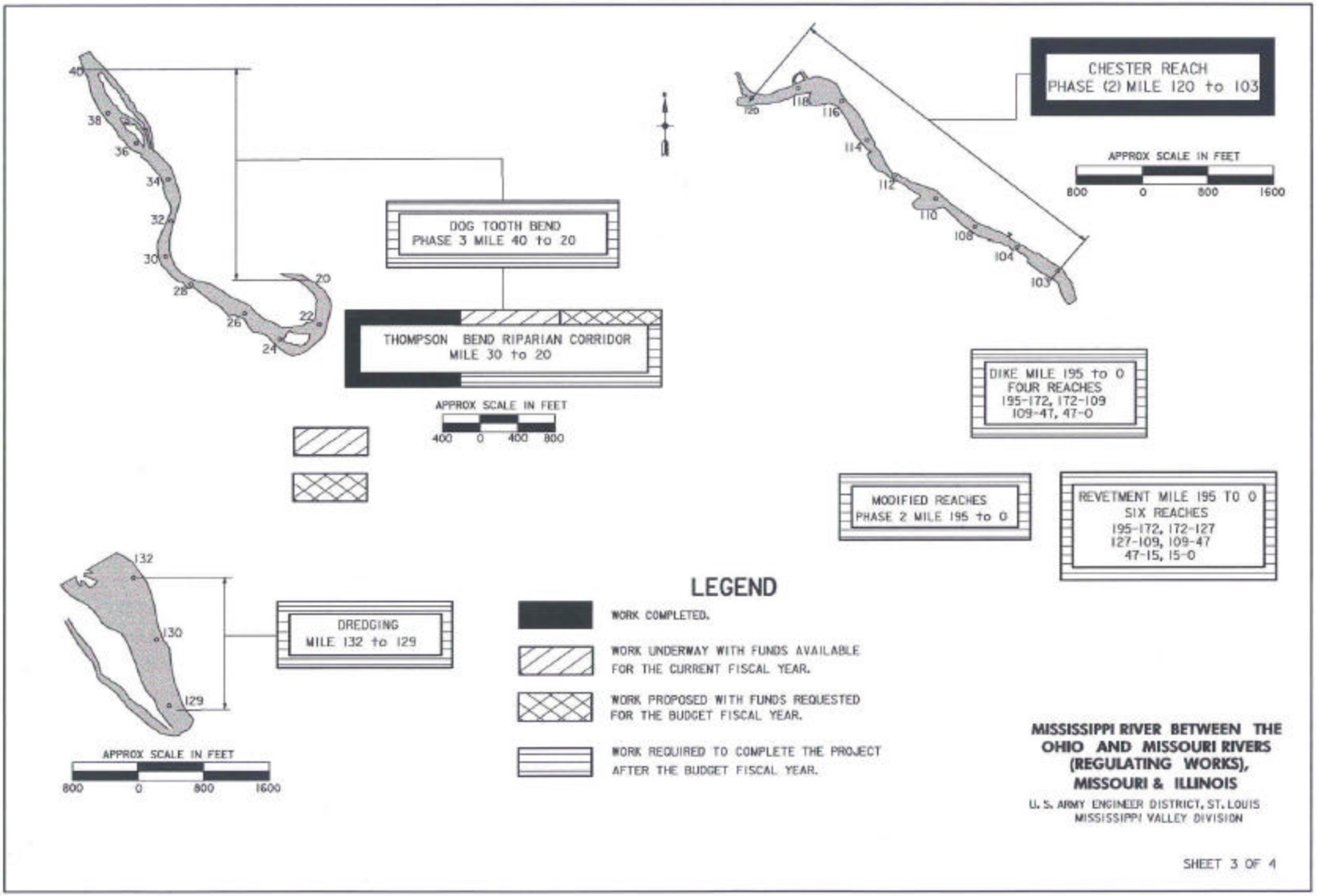
Item	Amount
Price Escalation on Construction Features	$ - 1,000,000
Total	$ - 1,000,000

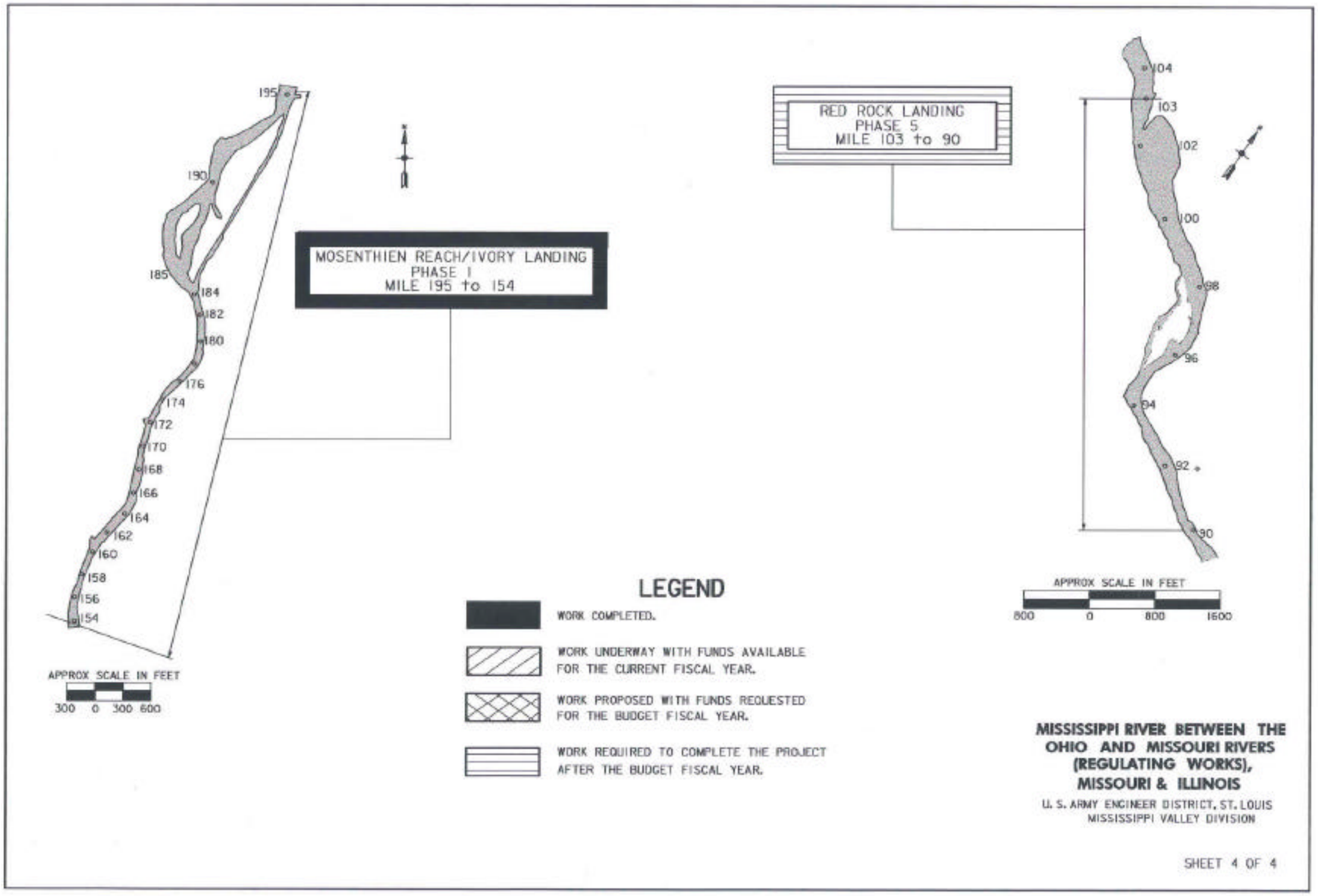
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 April 1976 and published in the Federal Register on 23 April 1976. An Environmental Analysis was completed for the Rock Removal and Finding of No Significant Impact signed on 28 October 1988.

OTHER INFORMATION: Planning was initiated prior to 1910, and construction was initiated in 1910. This project requires no mitigation.


LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
ILLINOIS
MISSISSIPPI
SIONYTH
MISSOURI R.
KASKASKIA
R.
ST. LOUIS
MISSOURI
RIVER
OHIO
R.
N
VICINITY MAP
DEVIL'S ISLAND PHASE (3)
MILE 50 to 40
APPROX SCALE IN FEET
300 0 300 600
GRAND TOWER REACH PHASE 4
MILE 90 to 67
APPROX SCALE IN FEET
400 0 400 800
FT. CHARTRES CHANNEL PHASE 4
MILE 140 to 125
APPROX SCALE IN FEET
400 0 400 800
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REGULATING WORKS), MISSOURI & ILLINOIS
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION
SHEET 1 OF 4


KASKASKIA BEND PHASE 5
MILE 125 to 112
ELIZA POINT/ GREENFIELD PHASE 2
CHANNEL REALINEMENT
MILE 20 to 0
APPROX SCALE IN FEET
600 0 600 1200
APPROX SCALE IN FEET
800 0 800 1600
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REGULATING WORKS), MISSOURI & ILLINOIS
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION
SHEET 2 OF 4


CHESTER REACH
PHASE (2) MILE 120 to 103
APPROX SCALE IN FEET
800 0 800 1600
DOG TOOTH BEND
PHASE 3 MILE 40 to 20
THOMPSON BEND RIPARIAN CORRIDOR
MILE 30 to 20
APPROX SCALE IN FEET
400 0 400 800
DIKE MILE 195 to 0
FOUR REACHES
195-172, 172-109
109-47, 47-0
MODIFIED REACHES
PHASE 2 MILE 195 to 0
REVETMENT MILE 195 TO 0
SIX REACHES
195-172, 172-127
127-109, 109-47
47-15, 15-0
DREDGING
MILE 132 to 129
APPROX SCALE IN FEET
800 0 800 1600
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REGULATING WORKS), MISSOURI & ILLINOIS
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION
SHEET 3 OF 4


MOSENTHIEN REACH/IVORY LANDING
PHASE I
MILE 195 to 154
RED ROCK LANDING
PHASE 5
MILE 103 to 90
195
190
185
184
182
180
176
174
172
170
168
166
164
162
160
158
156
154
104
103
102
100
98
96
94
92
90
APPROX SCALE IN FEET
300 0 300 600
APPROX SCALE IN FEET
800 0 800 1600
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REGULATING WORKS), MISSOURI & ILLINOIS
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION
SHEET 4 OF 4

APPROPRIATION TITLE: Construction, General – Locks and Dams (Navigation)

PROJECT: Melvin Price Lock and Dam, Illinois and Missouri (Continuing)

LOCATION: Melvin Price Lock and Dam is located in Madison County, Illinois, and St. Charles County, Missouri, in the vicinity of Alton, Illinois, at approximately mile 200.8 above the mouth of the Ohio River.

DESCRIPTION: The project includes one 1,200-foot lock; one 600-foot lock (see Other Information); a gated dam with 9 tainter gates, an overflow dike; removal of most of the existing structure; relocation/abandonment of the Burlington-Northern Railroad bridge and a visitors center. Mitigation land was provided to compensate for wildlife losses due to creation of a new pool for the two-mile distance downstream of the existing structure. Recreation facilities will be developed with the city of Alton, Illinois, consistent with the Water Resources Development Acts of 1986, 1990, 1992, and 1996. The project is part of the Upper Mississippi River Navigation System. All work is programmed.

AUTHORIZATION: Internal Revenue Code of 1954, Title I – Replacement of Locks and Dam 26; Water Resources Development Acts of 1986, 1990, 1992, and 1996; and the Consolidated Appropriations Act, 2001, PL 106-554.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is not applicable since the project is nearing completion.

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.6 to 1 at 6 7/8 percent (FY 1974).

BASIS OF BENEFIT-COST RATIO: Benefits are based on Supplement No. 2 to Design Memorandum No. 2, approved on 31 August 1979 at October 1978 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Appropriation Requirement (COE)		$743,843,000		
Estimated Appropriation Requirement (F&WS)		30,000		
Estimated Appropriation Requirement (USGS)		51,000		
Estimated Total Appropriation Requirement		$743,924,000		
Estimated Non-Federal Cost		$ 8,917,000		
Cash Contribution	$8,917,000			
Other	0			
Total Estimated Project Cost		$752,841,000		
Allocations to 30 September 2003		$733,722,000		
Conference Allowance for FY 2004		600,000		
Allocation for FY 2004		463,000	1/	
Allocations through FY 2004		734,185,000		99
Allocation Requested for FY 2005		$ 960,000		99
Programmed Balance to Complete after FY 2005		8,698,000		
Unprogrammed Balance to Complete after FY 2005		0		

STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Entire Project	98	TBD
Lock and Dam	99	Dec 1994
Open to Navigation	100	Feb 1990

PHYSICAL DATA

Locks: One – 1,200 feet x 110 feet
One – 600 feet x 110 feet (see Other Information)
Dam: Non-navigable 9 tainter gates
Overflow Dike: Earth Embankment, 2000 feet
Spur Dike: Earth Embankment, 2.4 miles
Relocations:
Roads ($2,233,000)
Railroad ($13,933,000)
Utilities ($15,959,000)
Pumping Plant: One – 225 cubic feet per second
Lands and Damages:
Acres – 4,286; Type – Predominantly crop, brush, and timberland and some commercial, recreational, and industrial land and improvements fronting the river.
Improvements – Industrial, commercial, and recreation buildings.

1/ Reflects $133,000 reduction assigned as savings and slippage and $4,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The poor physical condition of the old Locks and Dam No. 26 and the inability of the locks to handle current and projected traffic without costly delays made replacement imperative. Both the dam and locks were set on piles, which were driven into the riverbed sands and were not supported by bedrock. The structure, which was placed in operation in 1938, had a history of excessive deflections, settlements, and loss of foundation material. Remedial measures were undertaken to correct deficiencies, but permanent repair of the old structure was impractical because of engineering and cost considerations. The average annual waterborne commerce tonnage (1994-2003) was 75 million tons valued at approximately $10 billion. Grains, chemicals, petroleum, and coal account for 90 percent of this traffic. Because of the small size of the locks, multiple lockages were required to pass a complete tow measuring 1,200 feet in length. The average delay to tows at the old Locks No. 26 was approximately 10.5 hours. Based on the Master Plan Study (authorized by P.L. 95-502), a single lock 110 feet wide by 1,200 feet long would have an estimated capacity of 94 to 100 million tons per year. The length of 1,200 feet permits tows to lock through as a single unit, thus eliminating the delays from double locking and congestion. Future tow sizes are expected to remain at 110 feet wide by 1,200 feet long. Total transportation charges for commodity movements by inland water range between 40 and 60 percent lower than least cost alternative modes. More than 60 percent of traffic is grain, the bulk of which is for export. Average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$ 82,678,000
Recreation	469,000
Total	$ 83,147,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Public Access Facilities	$ 100,000
As-Built Drawings	50,000
O&M Manuals	50,000
Visitor Center Exhibits	520,000
Miscellaneous Operating Equipment	20,000
Planning, Engineering and Design	100,000
Supervision and Administration	120,000
Total	$ 960,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, which are applicable to unstarted separable elements, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay one-half of the separable and joint costs allocated to recreational navigation.	$6,511,000	$357,000
Pay 66 percent of the separable and joint costs allocated to public access roads.	1,406,000	
Pay 27.8 percent of the separable and joint costs allocated to Visitor Center exhibits.	1,000,000	
Total Non-Federal Costs	$8,917,000	$357,000

STATUS OF LOCAL COOPERATION: The Water Resources Development Act of 1990 contains provisions that allow the state of Illinois and the Corps to enter into a Project Cost-sharing Agreement (PCA) for the construction of riverfront recreation facilities. The Water Resources Development Act of 1992 amended the 1990 Act by allowing cost sharing with other non-Federal interests. Public Law 106-554 directs the Corps to enter into an agreement that allows the City of Alton, Illinois, to construct recreation facilities and the Corps to reimburse the city for 50 percent of the cost. Approximately $13 million in recreation facilities can be cost-shared. The City of Alton, Illinois, submitted a letter of intent dated 4 June 2001 for sharing the cost of developing recreation facilities along the riverfront at Alton, in the vicinity of the existing structure. A plan for recreational development was prepared, but approval is pending successful resolution of comments. Construction of the recreation facilities will be initiated after a PCA is executed.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of $743,843,000 is an increase of $110,000 from the latest estimate ($743,733,000) presented to Congress (FY 2004). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$ 110,000
Total	$ 110,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 August 1976 and published in the Federal Register on 8 September 1976.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1970, and funds to initiate construction were appropriated in Fiscal Year 1974.

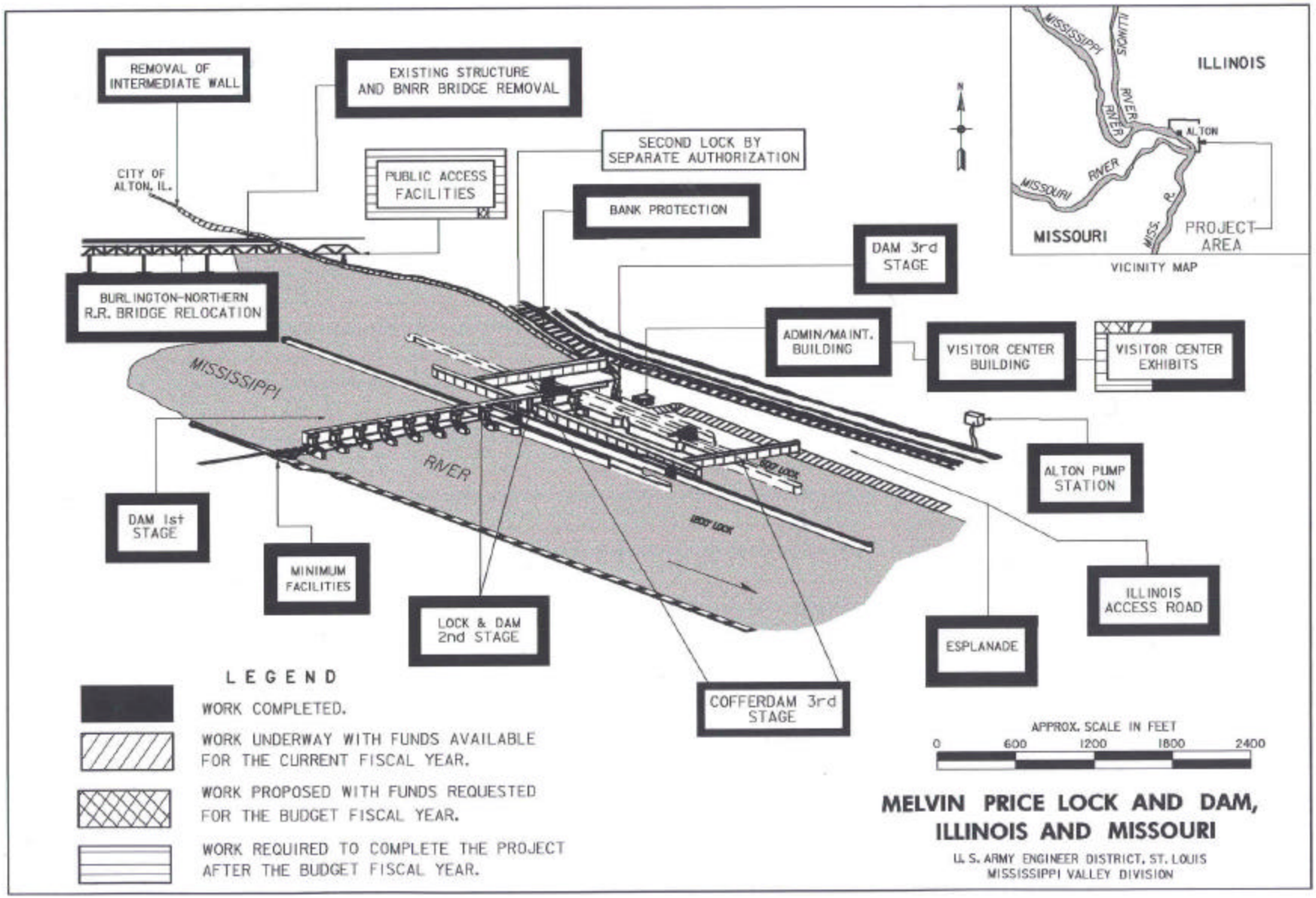
In accordance with Public Law 97-118, the project name changed from Lock and Dam 26 (Replacement) to Melvin Price Lock and Dam.

Dredge material disposal sites were used on Ellis Island during construction, but this phase is complete and no further construction dredging is expected.

The Fish and Wildlife Service and the U.S. Geological Service provided $81,000 to fund a portion of the visitor center exhibits.

The completed 600-foot second lock was funded as a separate project, cost shared with the Inland Waterways Trust Fund. The second lock was authorized by the Supplemental Appropriations Act of 1985 and the Water Resources Development Act of 1986.

Fish and Wildlife mitigation costs are $2,962,000.


REMOVAL OF INTERMEDIATE WALL
EXISTING STRUCTURE AND BNRR BRIDGE REMOVAL
SECOND LOCK BY SEPARATE AUTHORIZATION
PUBLIC ACCESS FACILITIES
BANK PROTECTION
CITY OF ALTON, IL.
DAM 3rd STAGE
BURLINGTON-NORTHERN R.R. BRIDGE RELOCATION
ADMIN/MAINT. BUILDING
VISITOR CENTER BUILDING
VISITOR CENTER EXHIBITS
MISSISSIPPI
RIVER
ALTON PUMP STATION
DAM 1st STAGE
MINIMUM FACILITIES
LOCK & DAM 2nd STAGE
ILLINOIS ACCESS ROAD
ESPLANADE
COFFERDAM 3rd STAGE
ILLINOIS
MISSISSIPPI
ILLINOIS
RIVER
RIVER
ALTON
MISSOURI
RIVER
MISS. R.
MISSOURI
PROJECT AREA
VICINITY MAP
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
APPROX. SCALE IN FEET
0 600 1200 1800 2400
MELVIN PRICE LOCK AND DAM, ILLINOIS AND MISSOURI
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Inner Harbor Navigation Canal Lock, Louisiana (Continuing)

LOCATION: The project is located within the City of New Orleans, Louisiana, in Orleans Parish. It is a combined deep and shallow draft canal extending northward from the Mississippi River to Lake Pontchartrain.

DESCRIPTION: The plan of improvement consists of construction of a precast, floated-in, concrete lock; replacement of the St. Claude Avenue bridge with a new, low level double bascule bridge; construction of a temporary by-pass bridge at St. Claude Avenue; replacement of the center lift-span and raising of the towers on the Claiborne Avenue bridge; provisions for by-pass channels during construction; extension of the Mississippi River flood protection along the canal to the site of the new lock; and implementation of a community impact mitigation plan. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1956, Water Resources Development Acts of 1976, 1986 and 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 2.0 to 1 at 7-1/8 percent.

TOTAL BENEFIT - COST RATIO: 2.0 to 1 at 7-1/8 percent.

INITIAL BENEFIT - COST RATIO: 1.75 to 1 at 7-3/8 percent (FY 1961).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Evaluation Report approved in February 1998 at October 1998 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost (CoE)		$ 704,000,000	Entire Project	7	TBD
General Appropriations	$ 392,737,000 [1]				
Inland Waterways Trust Fund	311,263,000				
Estimated Federal Cost (USCG)		45,000			
Estimated Non-Federal Cost		67,000,000			
Cash Contribution	37,750,000				
Other	29,250,000 [2]				
Total Estimated Project Cost		$771,045,000			

	GENERAL APPROPRIATIONS		INLAND WATERWAYS TRUST FUND	ACCUM. PCT. OF EST. FED. COST
	Deep Draft	Shallow Draft	Shallow Draft	
Allocations to 30 September 2003	$ 0	$ 47,245,500	$ 47,245,500	
Conference Allowance for FY 2004	0	6,000,000	6,000,000	
Allocation for FY 2004	0	4,637,000	4,637,000 [3]	
Allocations through FY 2004	0	51,882,500	51,882,500	15
Allocation Requested for FY 2005	0	5,000,000	5,000,000	16
Programmed Balance to Complete After FY 2005	81,474,000	254,380,500	254,380,500	
Unprogrammed Balance to Complete After FY 2005	0	0	0	

[1] Includes Federal Deep Draft Cost of $81,474,000 that are not cost shared with the Inland Waterways Trust Fund. Details are included in Supplement 1 to the Evaluation Report, approved by ASA (CW) September 2000.

[2] Non-compensable relocations that are the responsibility of the facility owners. Details are included in Supplement 1 to the Evaluation Report, approved by ASA (CW) September 2000.

[3] Reflects $2,654,000 reduction assigned as savings and slippage and $72,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

Locks:
New Lock, 110 feet wide by 36 feet deep by 1,200 feet long
Levees and Floodwalls: 6 miles

Relocations:
Low Level Bridge, St. Claude Avenue
Semi-High Level Bridge, Claiborne Avenue

JUSTIFICATION: The existing Inner Harbor Navigation Canal Lock passes barge traffic between the Mississippi River and the Gulf Intracoastal Waterway at New Orleans and serves as a link in the Gulf Intracoastal Waterway system. The lock also is the connecting link for ship traffic between the Mississippi River-Gulf Outlet and the Mississippi River at New Orleans. Delays to the navigation traffic average 11 hours, with 24-36 hour delays common. The average annual tonnage shipped through the lock by the barge traffic the last 10 years is about 21,000,000 tons. Coal, petroleum products and crude petroleum account for about 2/3 of the tonnage. Other major commodities include metallic ores, industrial chemicals, and non-metallic minerals. The number of ships locked from 1970 through 1995 averaged about 197 per year. This is a reduction in ship lockage since 1961, and is due in part to the development of the Mississippi River-Gulf Outlet channel and the inadequacy of the Inner Harbor Navigation Canal Lock for ship traffic. The maximum size ship that could use the new lock is a 68,000,000 DWT Dry Bulk vessel and a 46,000,000 DWT container vessel. Based on the 1998 Evaluation Report, average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$ 88,466,000
Vehicular	6,547,000
Advanced Closure Navigation Losses Prevented	10,640,000
Savings to Existing Project	4,053,000
Total	$ 109,706,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Demolish East Side Business	$ 800,000
Community Impact Mitigation Plan	500,000
Complete:	
Florida Ave Siphon Relocation	3,700,000
Planning, Engineering and Design	4,600,000
Supervision and Administration	400,000
Total	$ 10,000,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the following requirements:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Modify or relocate utilities and facilities (except railroad bridges) where necessary for construction of the project. (Utility Owners)	$ 29,250,000	
Non-Federal cash requirement based on the incremental cost increase between the Shallow Draft Plan and the Deep Draft Plan.	37,750,000	$ 2,100
Total Non-Federal Costs	$ 67,000,000	$ 2,100

The costs of the new lock were apportioned between general cargo navigation (deep draft) and inland navigation (shallow draft). Those costs assigned to inland navigation (22 feet deep x 110 feet wide x 500 feet long) will be funded 50 percent from the Inland Waterways Trust Fund and 50 percent from the general fund of the U.S. Treasury. The costs of all lands, easements, rights-of-way, and dredged material disposal areas and the costs for utility relocations are included in the inland navigation plan. Only the compensable relocations costs will be cost-shared 50/50. The non-compensable relocations will be the responsibility of the respective non-Federal owners. Those costs assigned to general cargo navigation will be cost-shared in accordance with Section 101 of the Water Resources Development Act of 1986. Details of this cost-sharing are included in Supplement No. 1 to the Evaluation Report approved by the ASA (CW) in September 2000.

STATUS OF LOCAL COOPERATION: The Port of New Orleans by letter dated 14 April 1997 expressed their intent to support the project and furnished their preliminary financing plan to provide their local share. The Project Cooperation of Agreement (PCA) was executed on 27 September 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $704,045,000 is the same as last presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was submitted to the Environmental Protection Agency (EPA) in February 1998. The Record of Decision was issued in December 1998.

OTHER INFORMATION: Funds to initiate engineering and design were appropriated in Fiscal Year 1957. Funds to initiate construction were appropriated in Fiscal Year 1999.

The existing lock was completed in 1923 by non-Federal interests, and had been leased by the Federal Government since 1944. On 1 July 1986, the lock, adjacent land, and facilities were purchased from the Board of Commissioners of the Port of New Orleans for $3,800,000. By purchasing the lock, the Corps received fee title to the lock and appurtenances with operation and maintenance responsibility for the St. Claude and Florida Avenue bridges transferring to the Board of Commissioners of the Port of New Orleans.

Based on Congressional committee guidance in the Fiscal Year 1991 Energy and Water Development Appropriations Bill, an Open Planning Process was adopted in an attempt to build consensus among the major stakeholders for siting the shiplock at the Inner Harbor Navigation Canal (Industrial Canal) site. The Corps and the Port of New Orleans were directed to ". . . develop a comprehensive plan to identify and mitigate to the maximum extent practicable, any adverse social and cultural impacts of the project." The plan will include ". . . measures to provide adequate housing, street circulation and enhanced neighborhood amenities to insure the communities adjacent to the project remain as complete, livable neighborhoods during and after construction of the project." The legislation specifically directed the Corps to strictly follow Federal historic preservation policies in evaluating the impact of lock replacement. Also, full compliance with the provisions of the 1986 Water Resources Development Act, which requires "full participation of members of minority groups living in the affected areas" in any work related to the replacement of the lock. Finally, the legislation directed the Corps to give "maximum consideration to lock replacement alternatives which minimize residential and business disruption while meeting the goal of improving waterborne commerce. The recommended plan for the lock replacement has complied with all of these requirements. Neighborhood groups, navigation interests, affected businesses, local, governmental officials, and the Port of New Orleans have comprised various committees that have discussed all the major aspects of the various alternatives studied at this site. The Corps of Engineers and the Port of New Orleans have provided the engineering, economic, and social analyses to these committees for their deliberations.

The final Evaluation Report, based on the Open Planning Process, was approved by HQUSACE in February 1998. The final Evaluation Report recommended that a deep draft lock, 36 feet deep by 110 feet wide by 1,200 feet long be constructed at the Industrial Canal site north of the existing lock using a prefabricated float-in construction method that would require no relocation of residents and that a comprehensive community impact mitigation plan ($39 million) be implemented in conjunction with the project. The mitigation plan was authorized by the Water Resources Development Act of 1996. In an effort to continue to involve the local stakeholders in the implementation and formulation of the impact mitigation plan, a community based committee was formed. The Corps has entered into a Partnering Agreement with the committee for implementation of the mitigation plan throughout the construction period.

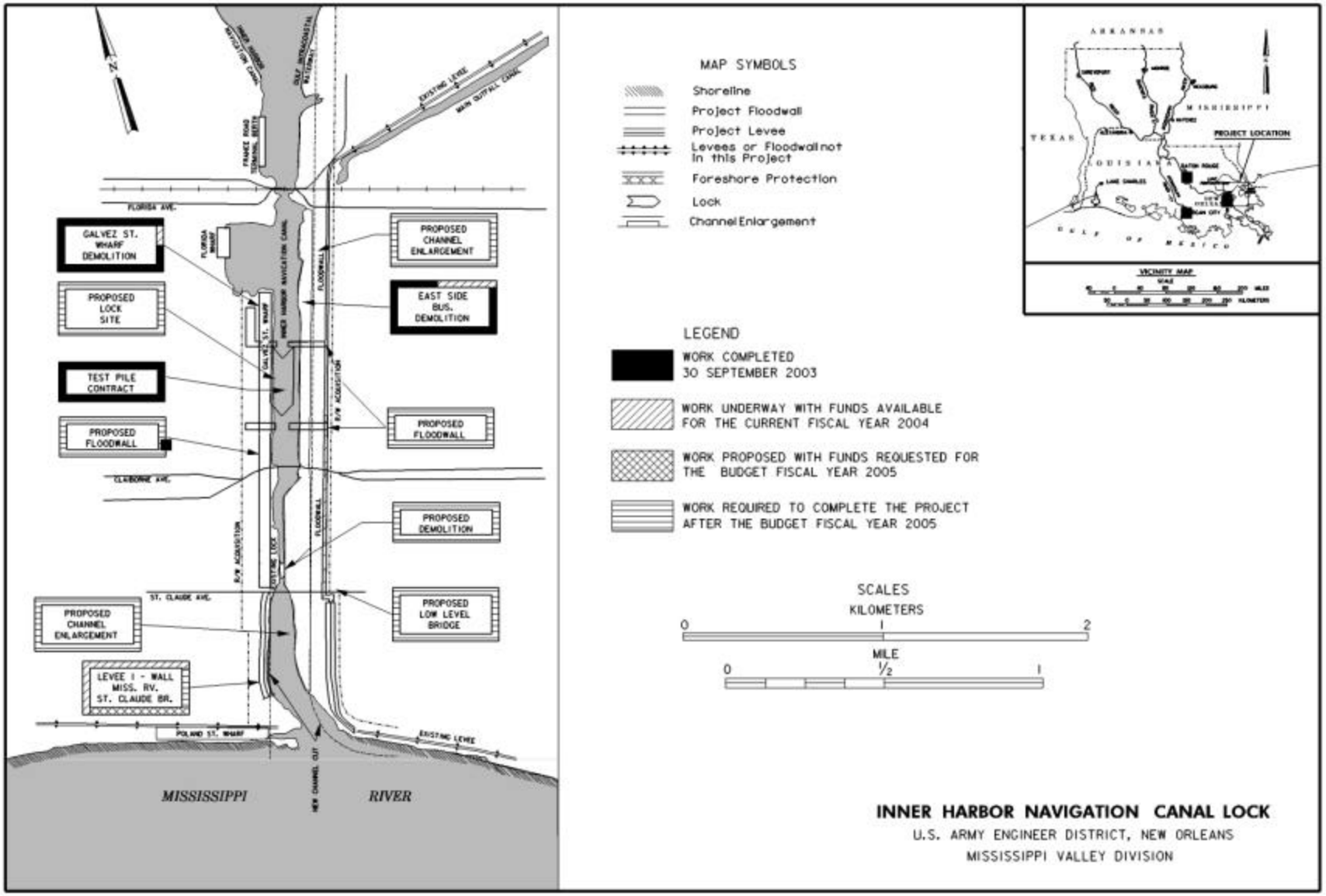
On 30 September 1999, a contract was awarded to a team headed by Gregory C. Rigamer & Associates, Inc., to assist in the establishment of a Community-Based Mitigation Committee (CBMC) and the development of the Partnering Agreement. Upon establishment of the CBMC (which includes representatives from local neighborhood business and religious organizations and local residents), the contractor has led the development of a Needs Assessment and the first 3 year-Mitigation Plan. A contract was awarded to Xavier University for the job training contract as the first part of the mitigation plan. Only residents in the affected communities adjacent to the IHNC were trained. Additional construction skill training is underway at Nunez Community College. Also, as part of the mitigation, additional police officers have been hired to patrol areas in need near the lock.

To further comply with the provision in the 1986 WRDA of "full participation of members of minority groups living in the affected areas", construction contracts have included Labor Preference Clauses that require 10 percent of the labor force be obtained from the communities surrounding the IHNC. Also, the District has worked with the local Small Business Administration Office and minority contractor groups to assist them in competing for some of the construction work to be awarded on this project.

The existing Florida Avenue bridge (vehicular and railroad) has been assumed in our studies to be replaced by others. The vehicular bridge is scheduled to be replaced by the State of Louisiana. Efforts are underway to coordinate with the City of New Orleans and St. Bernard Parish for construction of a new bridge (not necessarily a high-rise) at Florida Avenue. The railroad bridge has been approved for replacement under Truman Hobbs authority. The Coast Guard recommended that the existing railroad bridge is a hazard to navigation, thereby justifying the use of Truman Hobbs. The Port of New Orleans is responsible for the design and replacement of the railroad bridge, and construction has been initiated.

The Senate Report accompanying the Fiscal Year 1994 Energy and Water Development Appropriations Act included language recommending examination of all alternatives for removing the siphon near Florida Avenue bridge, the convening of all interests to determine the best course of action and preparation of a report on this matter. Alternatives were evaluated and the siphon has since been removed. A final invoice from the New Orleans Sewerage and Water Board is pending.

The Fiscal Year 2002, Energy and Water Development Appropriations Act included direction to work with the Old Arabi Neighborhood Association, Regional Planning Commission, St. Bernard Parish, the Louisiana Department of Transportation and Development, and the U.S. Coast Guard to determine if the project will cause vehicular traffic problems and on solutions to any confirmed problems. Contracts have been awarded for preliminary designs for tunnels at Claiborne and St. Claude Avenue and a new mid-rise bridge at Claiborne Avenue to determine if these are viable solutions. The Regional Planning Commission is updating their traffic projections for the entire metro area to reflect the new census data and that will be used for this re-analysis. This re-analysis will be based on traffic projects for the entire metro area being updated by the Regional Planning Commission to reflect the new census data. The purchase of the Galvez St. Wharf and adjacent lands was finalized in Fiscal Year 2003 for $16,855,000. An economic reevaluation of the project is being performed and is scheduled for completion in Fiscal Year 2005.


MAP SYMBOLS
Shoreline
Project Floodwall
Project Levee
Levees or Floodwall not in this Project
Foreshore Protection
Lock
Channel Enlargement
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
SCALES
KILOMETERS
0
1
2
MILE
0
1/2
1
GALVEZ ST. WHARF DEMOLITION
PROPOSED LOCK SITE
TEST PILE CONTRACT
PROPOSED FLOODWALL
PROPOSED CHANNEL ENLARGEMENT
EAST SIDE BUS. DEMOLITION
PROPOSED FLOODWALL
PROPOSED DEMOLITION
PROPOSED LOW LEVEL BRIDGE
PROPOSED CHANNEL ENLARGEMENT
LEVEE I - WALL MISS. RV. ST. CLAUDE BR.
FLORIDA AVE.
CLAIBORNE AVE.
ST. CLAUDE AVE.
POLAND ST. WHARF
EXISTING LEVEE
MISSISSIPPI
RIVER
PROJECT LOCATION
VICINITY MAP
INNER HARBOR NAVIGATION CANAL LOCK
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General - Locks and Dams (Navigation)

PROJECT: J. Bennett Johnston Waterway - Mississippi River to Shreveport, Louisiana (Continuing)

LOCATION: The project is located in central and northwest Louisiana and provides a navigation route from the Mississippi River at its juncture with Old River via Old and Red Rivers to Shreveport, Louisiana. The effected parishes and counties for this project include (Louisiana) Caddo, Bossier, Webster, De Soto, Red River, Bienville, Lincoln, Winn, Natchitoches, La Salle, Grant, Rapides, Avoyelles, Concordia; and (Arkansas) Hempstead, Miller, Nevada, Lafayette, and Columbia.

DESCRIPTION: The project provides for a 9- by 200-foot navigation channel extending about 236 miles from the Mississippi River through Old River and Red River to the vicinity of Shreveport, Louisiana. Five locks with dimensions of 84 by 705 by 14 feet and adjacent dams provide a lift of 141 feet. The project also provides for realigning the channel by means of dredging, cutoffs, and training works and for stabilizing its banks by means of revetments, dikes, and other methods. Recreation facilities and fish and wildlife development are also an integral part of the project. The major unprogrammed work includes recreation sites, and continued acquisition of mitigation lands. This project is part of the J. Bennett Johnston Waterway, Louisiana, Texas, Arkansas, and Oklahoma, which also includes the Shreveport, to Daingerfield, Texas (navigation), Shreveport, Louisiana, to Index, Arkansas (bank stabilization), and Index, Arkansas, to Denison Dam (bank stabilization) reaches.

AUTHORIZATION: River and Harbor Act of 1968, Water Resources Development Act of 1976, Supplemental Appropriations Act of 1984, Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, and 2000 and Energy and Water Development Appropriations Act of 1994.

REMAINING BENEFIT - REMAINING COST RATIO: 10.0 to 1 at 3-1/4 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 1.2 to 1 at 3-1/4 percent (FY 1973).

BASIS OF BENEFIT-COST RATIO: Benefits are from the General Reevaluation Report and Final Supplement No. 2 to the Environmental Impact Statement, at 1982 price levels, approved 4 January 1984. Costs for current analysis are based on October 2003 costs deflated to October 1982 price levels.

SUMMARIZED FINANCIAL DATA

Estimated Non-Federal Cost (COE)			$1,902,398,000
Programmed Construction		$1,889,667,000	
Unprogrammed Construction		12,731,000	
Estimated Apprn Requirements (U.S. Coast Guard)			601,000
Programmed Construction	$ 601,000	TBD	
Unprogrammed Construction	0		
Estimated Non-Federal Cost			107,455,000
Programmed Construction		71,834,000	
Cash Contributions	26,542,000		
Other Costs	45,292,000		
Unprogrammed Construction		35,621,000	
Cash Contributions	10,875,000		
Other Costs	24,746,000		

STATUS (1 Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Entire Project	93	TBD
Open to 9-Foot Navigation		Dec 87
Lindy Boggs Lock & Dam		Dec 87
John H. Overton Lock and Dam		Dec 87
Lock and Dam No. 3		Dec 91 [1]
Russell B. Long Lock and Dam		Dec 94
Joe D. Waggonner, Jr., Lock and Dam		Dec 94

PHYSICAL DATA

Lands and Damages: 26,000 acres, mitigation of wildlife losses above mile 104

Channels and Canals: Channel 9 feet deep, 200 feet wide, and 236 miles long from Old River to Shreveport, Louisiana. Total length of bank protection - 273 miles

Locks: Number - 5; Size - 84 by 705 feet

Dams: Number - 5; Type - Tainter Gated

Relocations: Roads (Modify one bridge)
Railroads (Replace one and modify one bridge)

[1] Initial interim pool impounded.

SUMMARIZED FINANCIAL DATA (Continued)			ACCUM PCT OF EST FED COST
Total Estimated Programmed Construction Cost	$ 1,962,102,000		
Total Estimated Unprogrammed Construction Cost	48,352,000		
Total Estimated Project Cost	2,010,454,000	[1]	
Allocations to 30 September 2003	1,770,080,000		
Conference Allowance for FY 2004	15,600,000		
Allocations for FY 2004	11,005,000	[2]	
Allocations through FY 2004	1,781,085,000	[1]	94
Allocation Requested for FY 2005	4,000,000		94
Programmed Balance to Complete After FY 2005	104,582,000		
Unprogrammed Balance to Complete After FY 2005	12,731,000		

[1] Includes $26,654,000 for John H. Overton Lock and Dam and $21,653,000 for Red River Emergency Bank Protection for construction work.

[2] Reflects $3,453,000 reduction assigned as savings and slippage, $92,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004, and $1,050,000 reprogrammed from the project.

JUSTIFICATION: The Red River was a very erratic river, subject to wide fluctuations in stage and meandering because of the erodible soils. A system of dependable pools was constructed to enable navigation and work continues on channel alignment. The pools are provided by five locks and dams and the proper alignment is provided by bank and channel stabilization works. These works improve water quality, fish and wildlife habitat, and preserve lands. On 31 December 1994, a 9-foot-deep by 200-foot-wide navigation channel was opened from the Mississippi River to Shreveport. The channel provides dependable 9-foot navigation depths year-round.

Navigation from the Mississippi River to Shreveport provides an artery for low-cost transportation which stimulates economic growth of the region. Estimated savings are based on an average annual movement, as forecast, of 7,845,000 tons. Waterborne commerce tonnage on the waterway in 1998 was 3,749,000 tons including all commodities that transited any portion of the system and approximately 4,000,000 tons were moved on the waterway in 2001. Commodities carried over the waterway include iron and steel products and pipe, industrial chemicals, paper and allied paper products, petroleum and petroleum products, other metals and ores, sulphur, agricultural chemicals, and grain. The public will realize an average annual savings of $68,831,000 which will result from reduced transportation costs. Several local entities are actively involved in port development on the waterway. The City of Alexandria has constructed port facilities in Pool 2 for use by industry. The Natchitoches Parish Port in Pool 3 was opened in 1996, and a chip loading facility, general cargo dock and transit shed has been constructed at the port. The Caddo-Bossier Port in Pool 5 was opened in April 1997 and shipped 400,000 tons in 2002. Commodity movements through the port is steadily increasing. Red River Parish has also initiated actions to develop a port site in Pool 4. These ports will be able to accommodate tows or barges of various sizes. The usable lock dimensions were designed for a configuration of six barges with individual dimensions of 35 by 195 feet and a towboat. Larger grain and petroleum barges can also be expected to call at the ports. The project is credited with benefits derived from transportation savings from use of the waterway, flood control, damages prevented by bank stabilization, security against levee crevasses, fish and wildlife, recreation, area redevelopment, reduced maintenance on existing revetments, reduced sedimentation, irrigation, reduced costs of municipal and industrial water supply, and reduced pumping costs.

The average annual benefits are as follows:

Annual Benefits	Amount
Navigation	$ 68,831,000
Flood Control	2,037,000
Bank Stabilization	16,602,000
Fish and Wildlife	460,000
Recreation	4,435,000
Area Redevelopment	14,808,000
Other:	
Irrigation and reduced costs of municipal and industrial water supply	53,000
Total	$ 107,226,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Pools 1-5

Complete:	
Shreveport Visitor Center	$ 1,594,000
Shell Point/Nantachie Drainage Structure	1,778,000
Continue:	
Mitigation	95,000
Planning, Engineering and Design	198,000
Supervision and Administration	335,000
TOTAL	$4,000,000

NON-FEDERAL COST: With the exception of the Louisiana-Arkansas Railroad Bridge Relocation and the mitigation element, local interests are required to provide all lands, easements, and rights-of-way, including a proportionate share of the cost of the bridge relocations over existing channels in accordance with the principles of Section 6 of the Bridge Alteration Act (Truman-Hobbs) of 21 June 1940, as amended by the Act of 16 July 1952, 25 percent of the cost of necessary retaining dikes for dredged materials and 50 percent of the total cost of recreation facilities. Non-Federal costs associated with the total project are broken down as follows.

The non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas	$ 38,291,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project	11,731,000	$ 211,700
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities	54,901,000	1,448,000
Pay 6 percent of the first costs allocated to fish and wildlife and pay 6 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities	527,000 [1]	332,800 [2]
Pay 25 percent of the first cost allocated to retention dikes required for construction and maintenance dredging	2,005,000	31,200
Replacement costs		302,900
Total Non-Federal Costs	$ 107,455,000	$ 2,326,600

[1] Since the local sponsor will assume all operation and maintenance costs and this cost will exceed the 6 percent local share, there will be no local requirement toward implementation costs for Loggy Bayou increment. Implementation costs shown are for the Bayou Bodcau increment.

[2] 100 percent of annual management costs for Loggy Bayou and Bayou Bodcau increments.

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction. Non-Federal cost associated with the scheduled portion of the project are broken down as follows:

Lands and Damages	$ 18,950,000
Utility Relocations	6,868,000
Recreation (Other)	19,474,000
Cash Contribution	26,542,000
Recreation Facilities	(22,954,000)
Bridge Relocations	(1,006,000)
Retaining Dikes	(1,973,000)
Mitigation	(609,000)
Total	$71,834,000

STATUS OF LOCAL COOPERATION: Formal assurances of local cooperation were furnished by the Red River Waterway Commission on 26 February 1969 and accepted on behalf of the United States on 15 April 1969. That agency was formed expressly to provide the local cooperation required for the project and has levied a 2-mill assessment to fulfill its obligations. Amended assurances covering the provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, and the specific written agreement requirements of Section 221 of the Flood Control Act of 1970, Public Law 91-611, were executed by the Red River Waterway Commission on 23 May 1973 and were accepted on behalf of the United States on 14 November 1973. A cost sharing agreement covering nine recreation sites in Pools 1 and 2 was approved by the Deputy Chief of Engineers on 23 July 1985. A Memorandum of Understanding between the Corps and the local sponsor for development of these nine sites was executed in January 1986. A supplement to this cost-sharing agreement was executed in the last quarter of FY 1994 to cover the advance construction of three boat ramps and ancillary facilities in Pools 4 and 5 in FY 1995. In the Conference Report that accompanied the Energy and Water Development Appropriations Act of 1993, Congress directed the Corps of Engineers to prepare a supplement to the recreation master plan to serve as the project document to support the contract for recreation development in Pools 3 to 5. The Project Cooperation Agreement for recreation developments in Pools 3 to 5 was executed in April 2000.

The Red River Waterway Commission agreed by letter dated 6 September 1983 to fulfill all responsibilities of the local sponsor relative to the purchase of wildlife mitigation lands. The Louisiana Department of Wildlife and Fisheries, by letter dated 22 July 1983, agreed to assume operation and maintenance responsibilities for acquired wildlife mitigation lands. Updated letters of agreement covering the mitigation plan as presently conceived (i.e., acquisition of up to 5,000 acres in the vicinity of Loggy Bayou) were furnished by the Red River Waterway Commission and the Louisiana Department of Wildlife and Fisheries on 13 August 1990 and 17 August 1990, respectively. The Local Cooperation Agreement between the Federal Government and the State of Louisiana for the acquisition of up to 5,000 acres of mitigation lands in the vicinity of Stumpy Lake/Swan Lake/Loggy Bayou Wildlife Management Area was executed by the Red River Waterway Commission in May 1993 and by the Assistant Secretary of the Army in June 1993.

The Project Cooperation Agreement covering the acquisition of mitigation lands in the vicinity of the Bayou Bodcau Wildlife Management Area was executed in June 1996.

The Red River Waterway Commission furnished a letter of agreement dated 10 October 1997 supporting additional mitigation lands in Red River and Caddo Parishes that are to be considered adjacent to the Loggy Bayou Wildlife Management Area. These new areas were directed in the Water Resources Development Act of 1996. A report detailing a plan of action to acquire these lands was processed as directed by the legislation. Amendment No. 1 to the June 1993 Loggy Bayou Area Local Cooperation Agreement covering the initial acquisition effort in Caddo Parish was executed by the Red River Waterway Commission and the Assistant Secretary of the Army in October 1999. The Water Resource Development Act of 2000 authorized the acquisition of mitigation lands in any of the parishes that comprise the Red River Waterway District, consisting of Avoyelles, Bossier, Caddo, Grant, Natchitoches, Rapides, and Red River Parishes.

The Red River Waterway Commission is providing its share of the project first costs by furnishing the necessary lands, easements, and rights-of-way, performing utility relocations as needed, and providing cash contributions for recreation facilities, bridge relocations, and retaining dikes. They will contribute their share of retention dike construction for maintenance dredging by cash contribution and they will provide the lands, easements, and rights-of-way for these dikes.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate (Corps of Engineers) of $1,902,398,000 is a decrease of $15,058,000 from the latest estimate ($1,917,456,000) presented to Congress (FY 2004). This change includes the following item.

Item	Amount
Price Escalation on Construction Features	$ 15,058,000
Total	$ 15,058,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final statement was filed with the Council on Environmental Quality on 11 May 1973. The Environmental Impact Statement is included in the project "Red River Waterway." Supplement No. 1 to the Environmental Impact Statement was prepared for the Mississippi River to Shreveport reach of the J. Bennett Johnston Waterway due to a change in project alignment from the authorizing document, and to include updated environmental information due to a reanalysis and to include results of the ground-water studies. The final Supplement No. 1 was filed with the Council on Environmental Quality on 18 February 1977, and published in the Federal Register on 25 February 1977. A third Environmental Impact Statement (Supplement No. 2) was submitted to the Environmental Protection Agency in final form on 10 November 1983, and the record of decision was signed by the Division Engineer on 4 January 1984.

An Environmental Assessment was prepared for Pool No. 2 to present the results of investigations of the impacts of the 58- and 64-foot elevations. The Environmental Assessment resulted in a Finding of No Significant Impact which allowed a design change from 58- to 64-foot pool elevations. Following review by the public, the Finding of No Significant Impact was signed on 21 April 1982.

An Environmental Assessment of the Loggy Bayou Area mitigation increment has been performed. This area was not included in the original mitigation report. The Environmental Assessment was required to satisfy the National Environmental Policy Act. The Environmental Assessment resulted in a Finding of No Significant Impact, which was signed 11 January 1993. Environmental Assessments are required to present the impacts associated with the construction of riverside levee protection berms in Pools 3 and 5. The berms are necessary to ensure the integrity of the existing flood control levee system. The Environmental Assessment for the berms in Pool 3 resulted in a Finding of No Significant Impact which was signed on 16 July 1992. The Environmental Assessment for the berms in Pool 5 also resulted in a Finding of No Significant Impact which was signed on 24 May 1993.

Environmental Assessments were required for the Bayou Bodcau mitigation increment and the Nantachie Lake drawdown structure to satisfy National Environmental Policy Act requirements. The Bayou Bodcau mitigation Environmental Assessment resulted in a Finding of No Significant Impact that was signed on 28 April 1995, and the Nantachie Lake drawdown structure Environmental Assessment was completed in FY 1996, also resulting in a Finding of No Significant Impact. An Environmental Assessment for the mitigation lands to be acquired in Caddo and Red River Parishes will be performed. An assessment of the initial tract in Caddo Parish has been completed, and resulted in a Finding of No Significant Impact that was signed on 23 September 1999.

A Final Environmental Assessment has been prepared covering instream disposal of maintenance dredge material in Pools 3, 4, and 5 in lieu of disposal in contained upland areas. A Finding of No Significant Impact was signed on 19 March 1996.

A Final Environmental Assessment has been prepared covering maintenance dredging of the oxbow lakes designated for preservation in project documentation. The dredging consists of maintaining a 5-foot-deep by 20-foot-wide connection from the river into the oxbow lakes in order to achieve all project benefits. The dredged material will be disposed of instream. A Finding of No Significant Impact was signed 18 November 1997.

An Environmental Assessment and Finding of No Significant Impact are included in Supplement No. 2 to the Recreation Master Plan which presents the revised plan for recreation development in Pools 3, 4, and 5. Supplement No. 2 was approved by the Mississippi River Commission on 1 May 1998. The Finding of No Significant Impact was signed on 6 October 1997. An Environmental Assessment was performed in Fiscal Year 2000 for the Hampton's Lake Recreation Area that was added to the Pools 3 to 5 Master Plan by August 1999, Supplement No. 3. A Finding of No Significant Impact was signed on 24 May 2000.

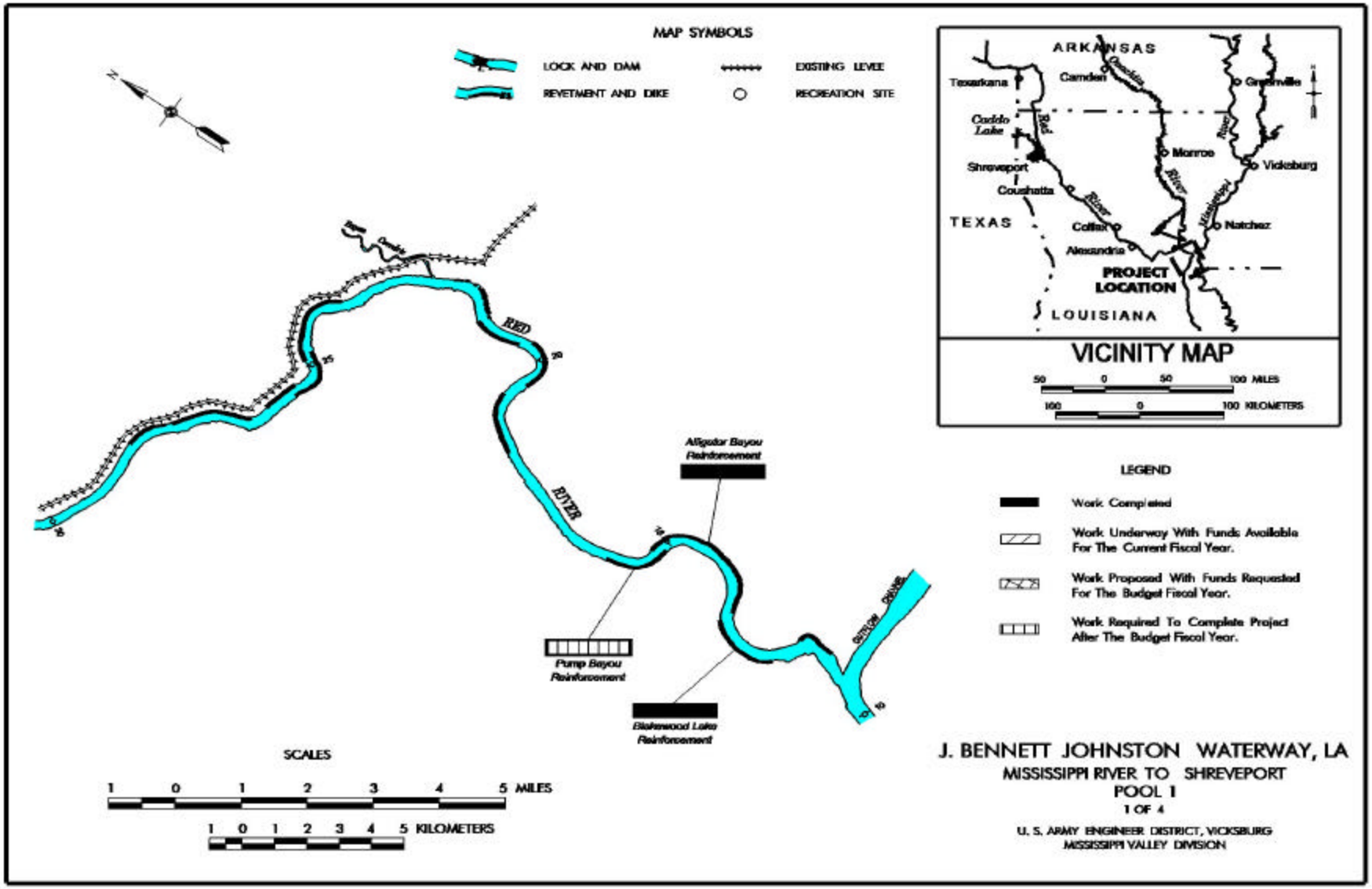
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1971 and allotted in Fiscal Year 1972. Funds to initiate construction were appropriated in Fiscal Year 1973.

The Energy and Water Development Appropriations Act of 1996 authorized a Regional Visitors Center in the vicinity of Shreveport. The Energy and Water Development Appropriations Act of 1997 provided $3,000,000 and directions to initiate design and construction of the Regional Visitors Center in Fiscal Year 1997. The 1997 Appropriations Act also provided funds to initiate design of the previously authorized Project Visitors Center at Grand Ecore. Design for both of the Visitors Centers has been completed. Construction of the Project Visitors Center at Grand Ecore was completed in Fiscal Year 2003 and the Regional Visitors Center at Shreveport is scheduled for award in the second quarter of Fiscal Year 2004. The Fiscal Year 2001 Appropriations Act (P. L. 106-377) directs the use of available Construction, General funds, in addition to the funds provided by the Fiscal Year 1997 Appropriations Act, to complete design and construction of the Regional Visitor Center at an estimated cost of $6,000,000.

The Draft Master Plan Supplement No. 3 covering adjustments to cost-shared recreation facilities in Pools 3, 4, and 5 was approved by the District Commander in September 1999. The Project Cooperation Agreement covering the same recreation facilities presented in Supplement Nos. 2 and 3 was executed in April 2000. Recreation Master Plan Supplement No. 4 covering minor transfers of facilities between approved sites, with no net change in quantity of facilities, was approved by the District Commander in April 2003.

The Water Resources Development Act of 1996 increased the total cost of the Loggy Bayou mitigation increment to $10,500,000. It further provided that lands that are purchased adjacent to the Loggy Bayou Wildlife Management Area may be located in Caddo Parish or Red River Parish. The Water Resources Development Act of 1996 also modified the waterway project to require the Secretary to dredge or perform other related work as required to reestablish and maintain access to, and the environmental value of, the bendway channels designated for preservation in previous project documentation. Further, this work shall be carried out in accordance with the local cooperation requirements for other navigation features of the project. These project modifications are subject to completion of reports showing the work is technically sound and environmentally and economically acceptable, as applicable. The favorable bendway channel (oxbow lakes) dredging report has been returned by OMB for the development of supplemental environmental data and resubmission, and was resubmitted in late Fiscal Year 2001.

The Water Resources Development Act of 1986, as modified by the Water Resources Development Acts of 1988, 1990 and 2000, and the Fiscal Year 1990 and Fiscal Year 1994 Energy and Water Development Appropriations Acts, authorized the wildlife mitigation project for the waterway above mile 104 to Shreveport, Louisiana, at a total cost of $9,420,000. The Water Resources Development Act of 1990 modifies the mitigation project by authorizing the Secretary of the Army to acquire an additional 12,000 acres adjacent to or close to the Bayou Bodcau Wildlife Management Area. The real estate design memorandums, which present the real estate requirements for the Loggy Bayou area and Bayou Bodcau area mitigation lands, have been approved. A supplemental report, which was submitted prior to passage of the Fiscal Year 1990 Energy and Water Development Appropriations Act and the Water Resources Development Act of 1990, recommends the acquisition of only 300 acres in the Stumpy Lake area and no lands in the vicinity of the Bayou Bodcau Wildlife Management Area. In the Energy and Water Development Appropriations Act of 1994, the Corps was directed to reimburse the project local sponsor annually for the Federal share of management costs for the Bayou Bodcau mitigation area. The Water Resources Development Act of 2000 modifies the mitigation project by authorizing the purchase of mitigation land from willing sellers in any of the parishes that comprise the Red River Waterway District, consisting of Avoyelles, Bossier, Caddo, Grant, Natchitoches, Rapides, and Red River Parishes.


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
RED
RIVER
Alligator Bayou Reinforcement
Pump Bayou Reinforcement
Blakewood Lake Reinforcement
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red
River
Monroe
Vicksburg
Shreveport
Coushatta
Mississippi
TEXAS
Colfax
Natchez
Alexandria
PROJECT LOCATION
LOUISIANA
VICINITY MAP
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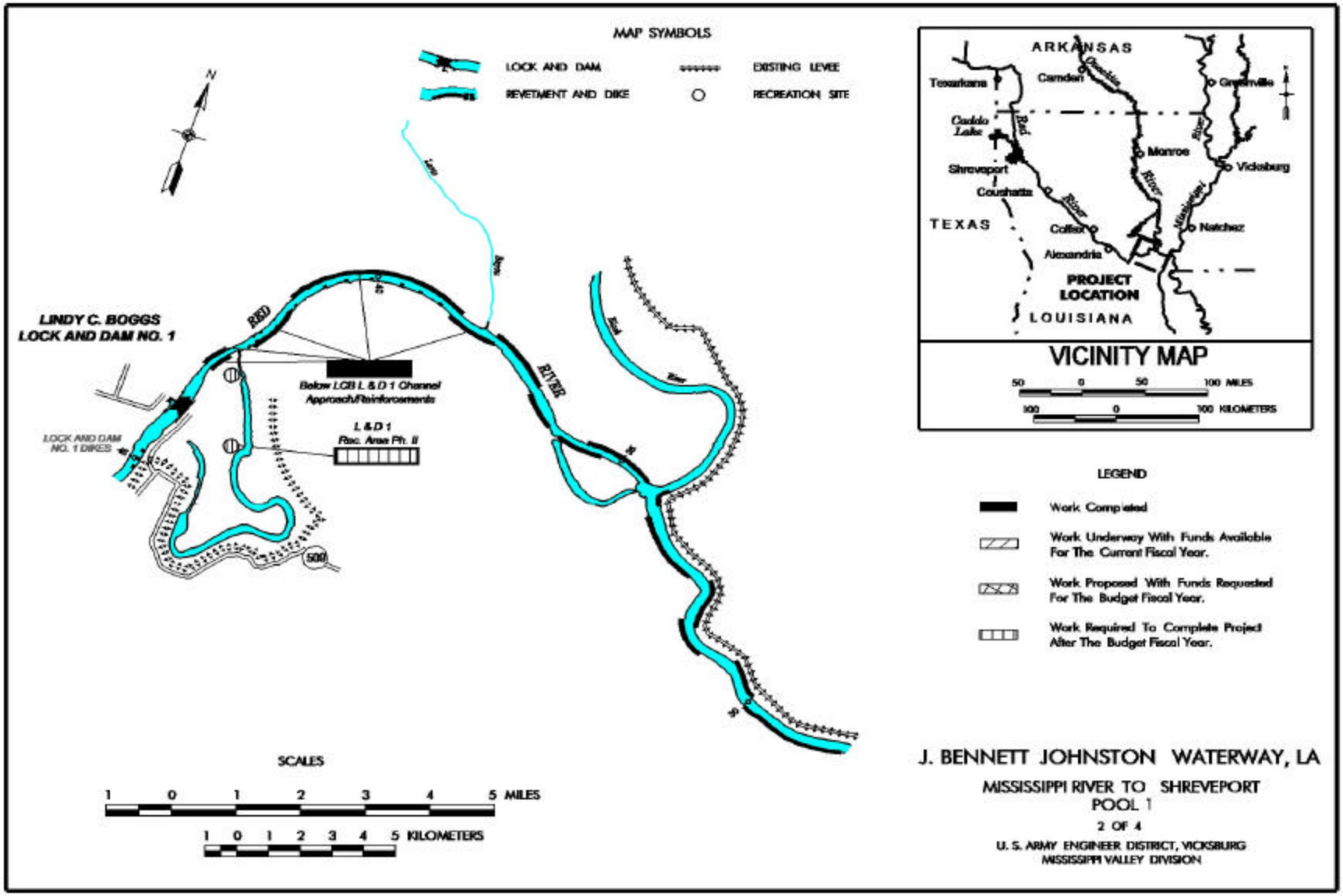
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 1
1 OF 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
LINDY C. BOGGS
LOCK AND DAM NO. 1
RED
RIVER
Below LCB L & D 1 Channel
Approach/Reinforcements
L & D 1
Rec. Area Ph. II
LOCK AND DAM
NO. 1 DIKES
500
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Shreveport
Coushatta
Monroe
Vicksburg
TEXAS
Colfax
Alexandria
Natchez
PROJECT
LOCATION
LOUISIANA
VICINITY MAP
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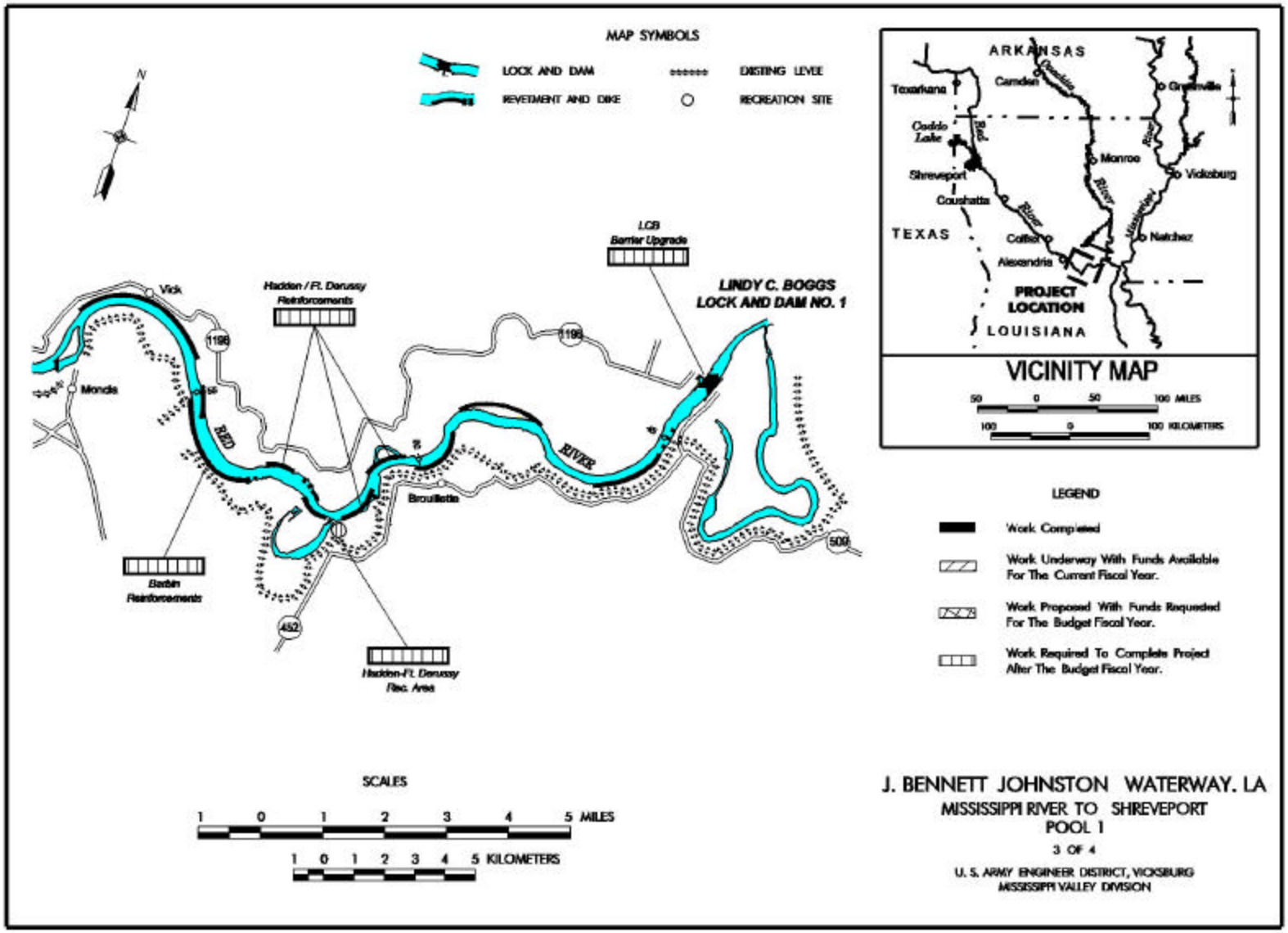
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 1
2 OF 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
REVETMENT AND DIKE
EXISTING LEVEE
RECREATION SITE
N
LCB
Barrier Upgrade
LINDY C. BOGGS
LOCK AND DAM NO. 1
Hadden / Ft. Derussy
Reinforcements
Vick
Mondis
1198
1199
RED
RIVER
Brouillette
Barbin
Reinforcements
452
Hadden-Ft. Derussy
Rec. Area
509
ARKANSAS
Texarkana
Camden
Greenville
Caddo
Lake
Red
River
Monroe
Vicksburg
Shreveport
Coushatta
TEXAS
Colfax
Natchez
Alexandria
PROJECT
LOCATION
LOUISIANA
VICINITY MAP
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Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
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MISSISSIPPI RIVER TO SHREVEPORT
POOL 1
3 OF 4
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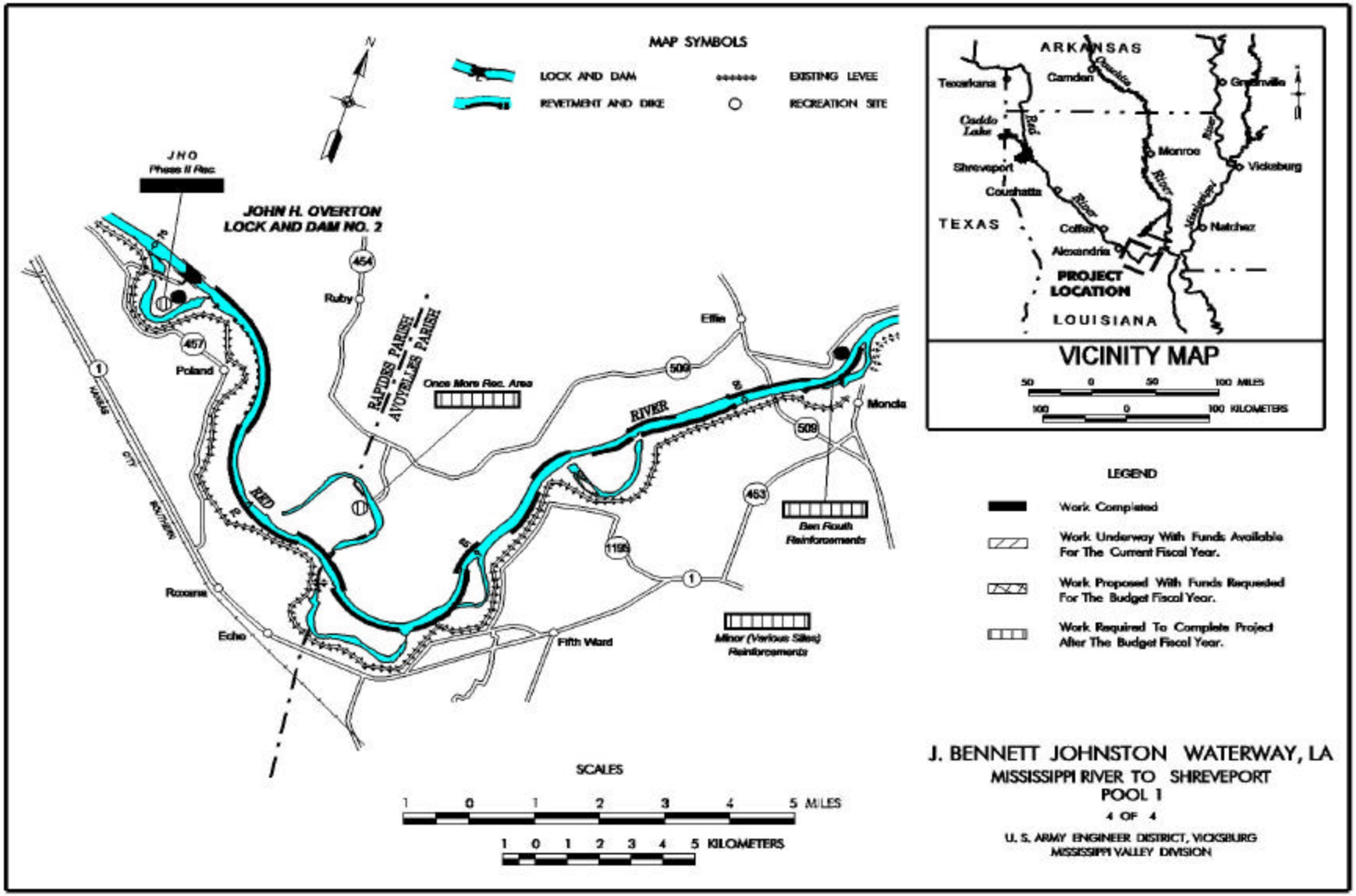
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
REVETMENT AND DIKE
EXISTING LEVEE
RECREATION SITE
JNO
Phase II Rec.
JOHN H. OVERTON
LOCK AND DAM NO. 2
Ruby
Poland
RAPIDES PARISH
AVOYELLES PARISH
Once More Rec. Area
Effie
RIVER
RED
Monda
Ben Routh
Reinforcements
Rosenna
Echo
Fifth Ward
Minor (Various Sites)
Reinforcements
SCALES
MILES
KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Shreveport
Monroe
Vicksburg
Coushatta
TEXAS
Natchez
Alexandria
PROJECT
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LOUISIANA
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MILES
KILOMETERS
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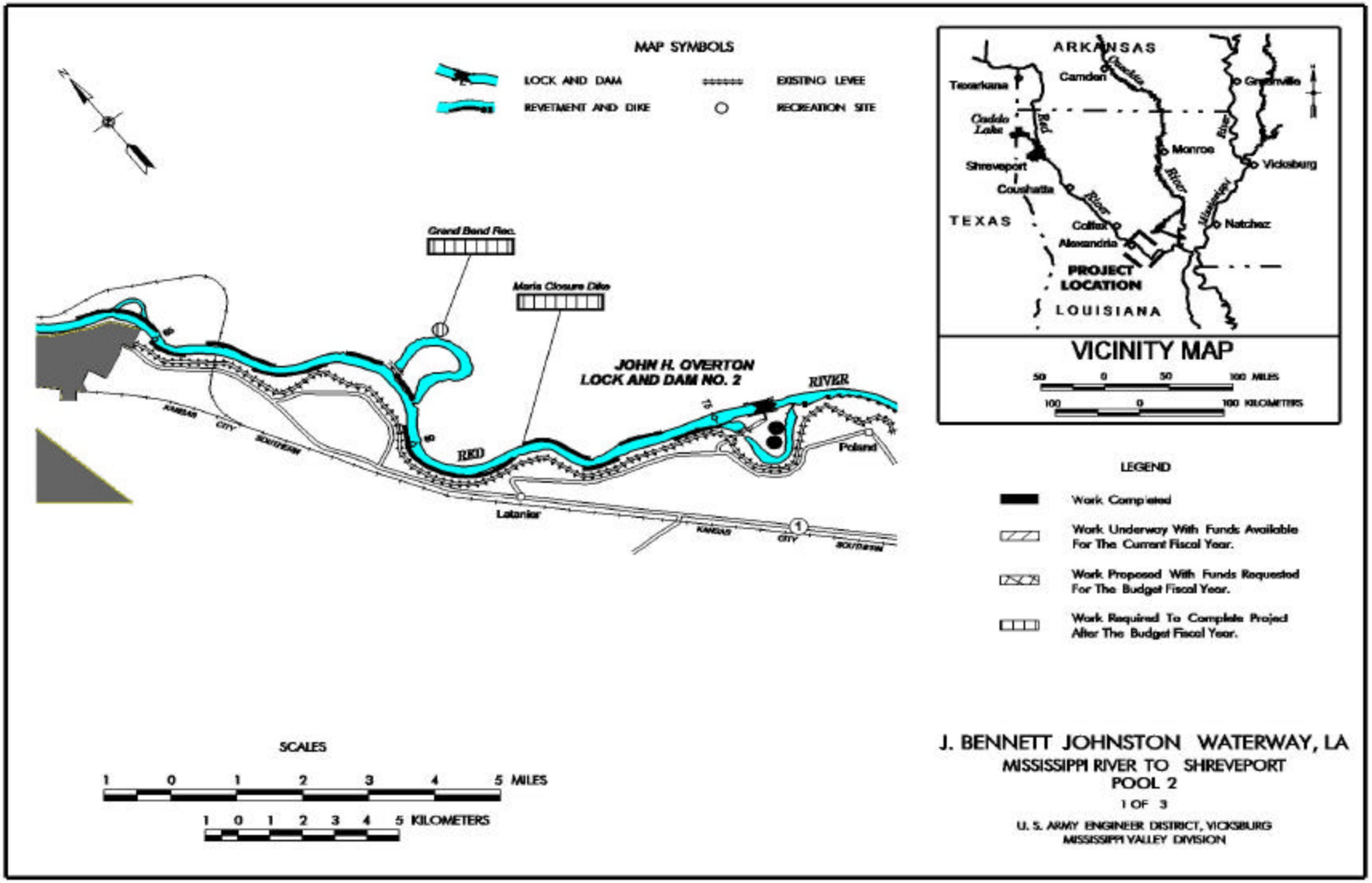
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 1
4 OF 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Grand Bend Rec.
Maris Closure Dike
JOHN H. OVERTON
LOCK AND DAM NO. 2
RIVER
RED
Latanier
Poland
KANSAS CITY SOUTHERN
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red
River
Monroe
Vicksburg
Shreveport
Coushatta
TEXAS
Colfax
Natchez
Alexandria
PROJECT LOCATION
LOUISIANA
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50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
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J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
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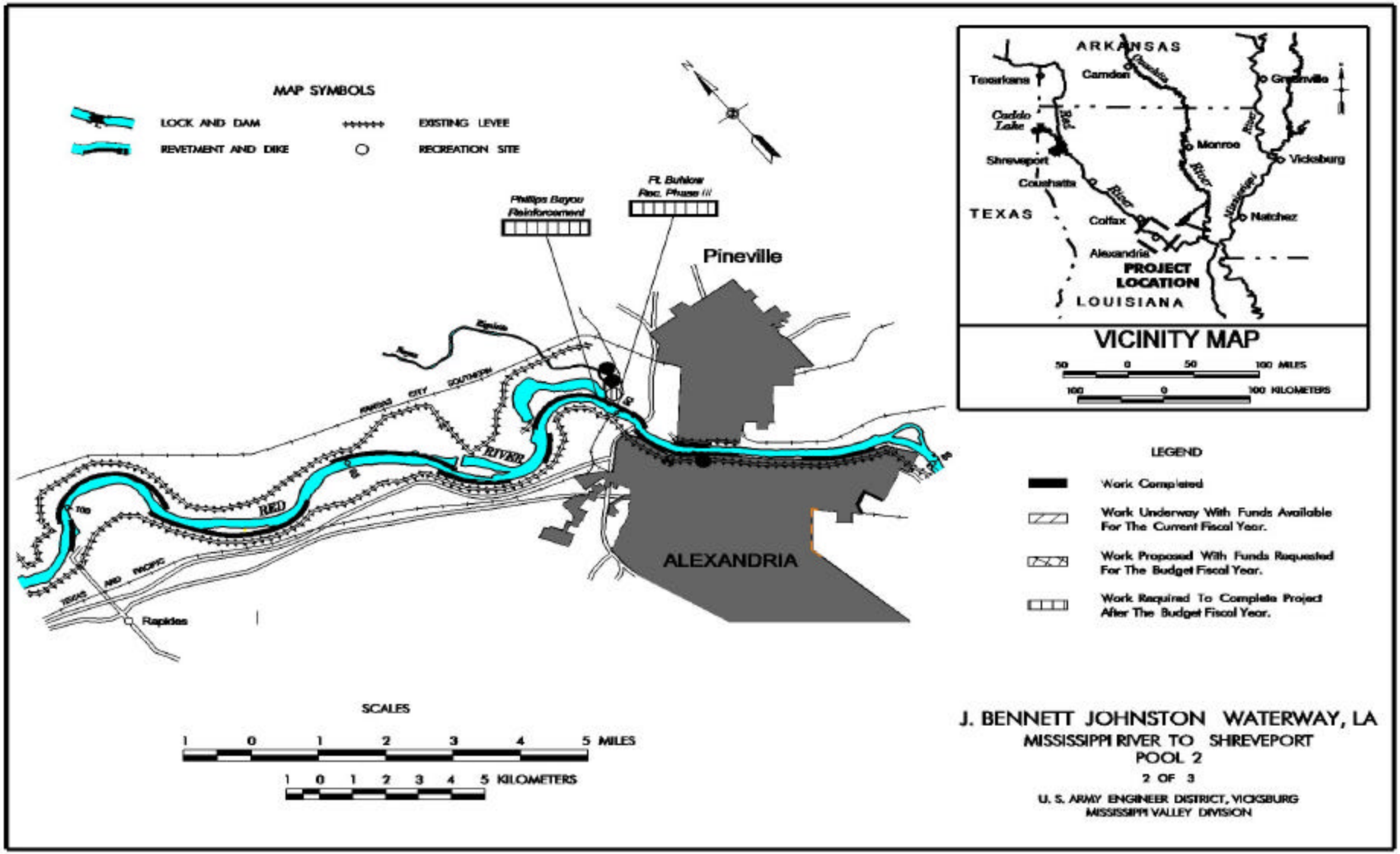
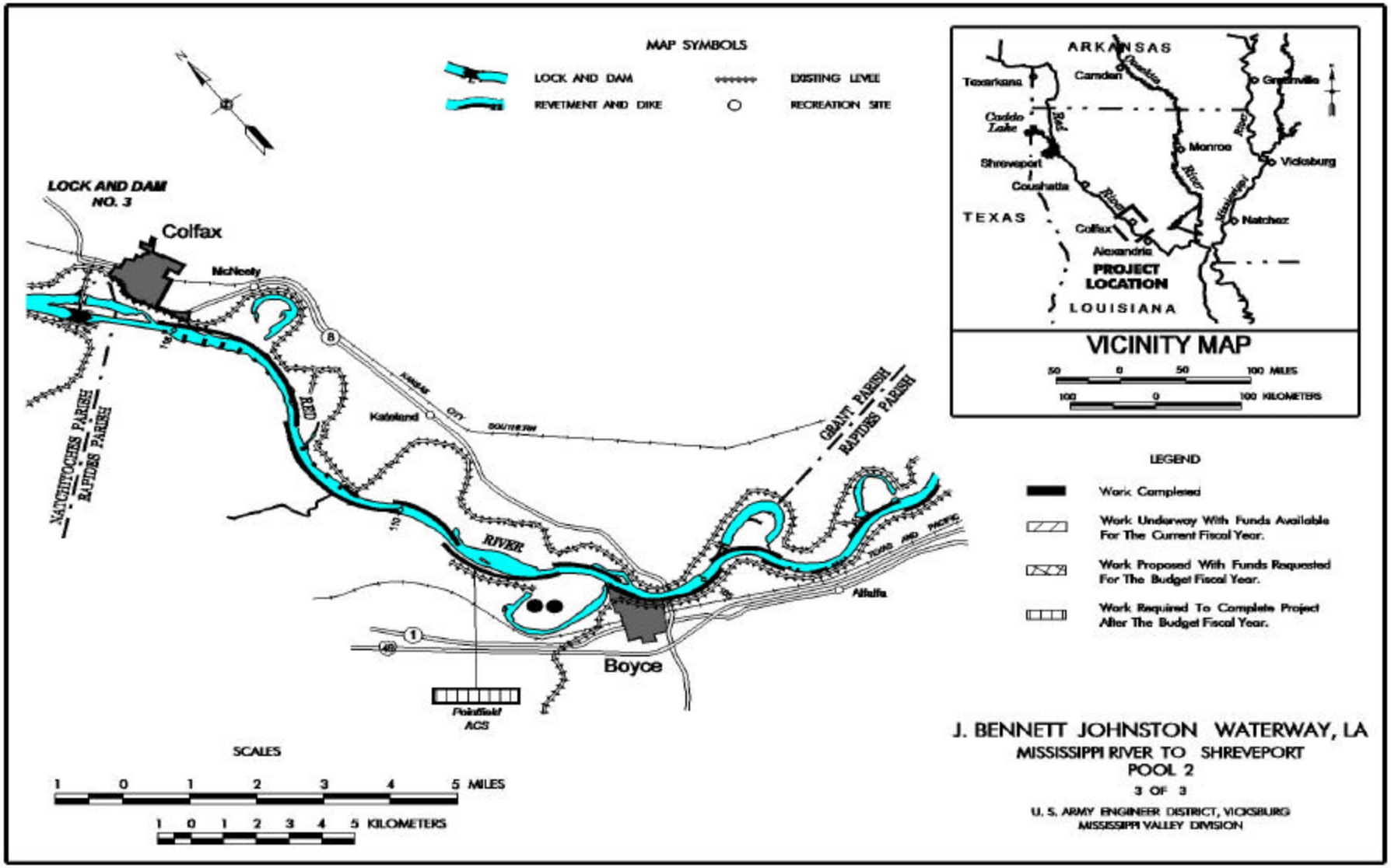
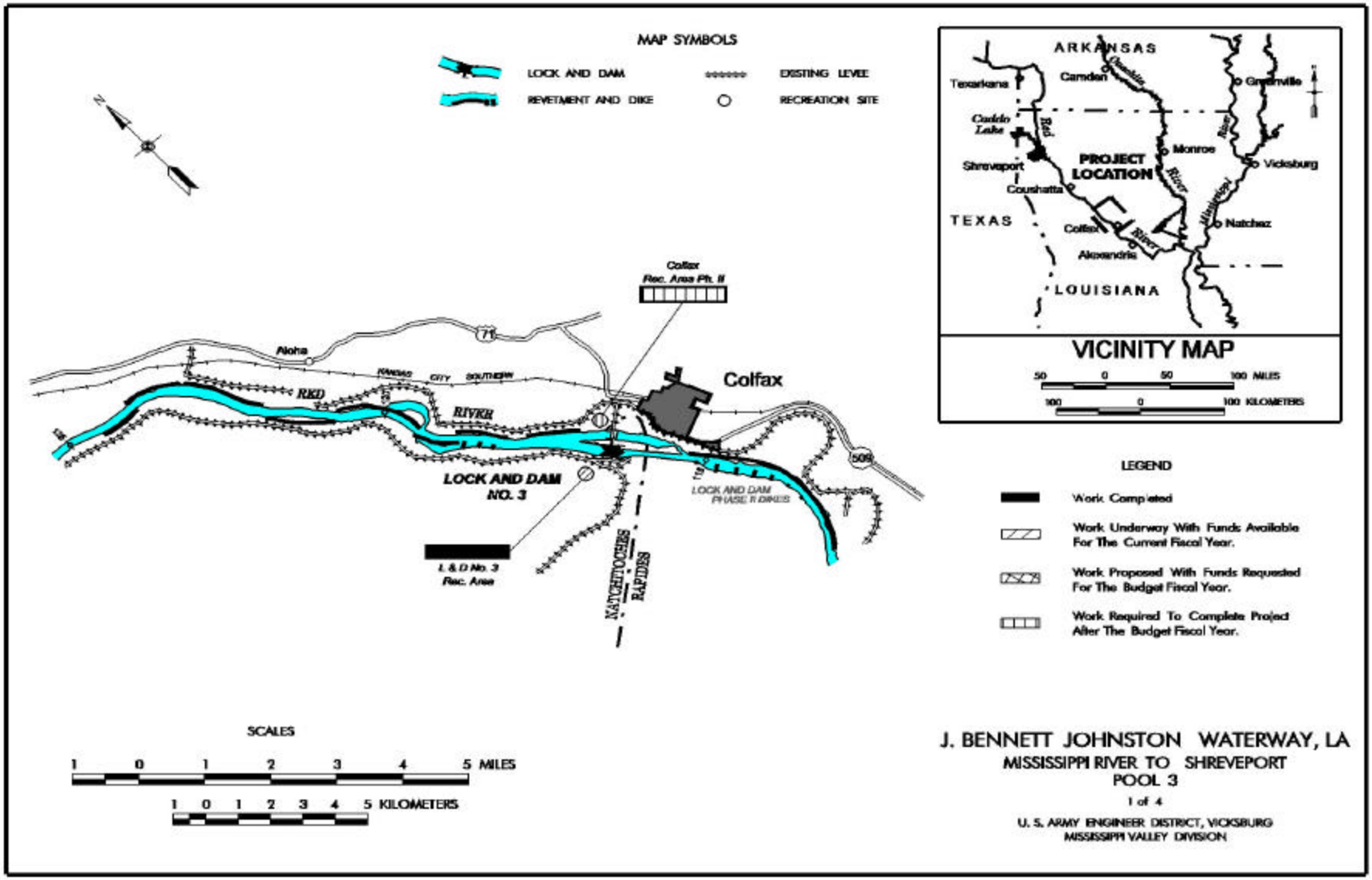
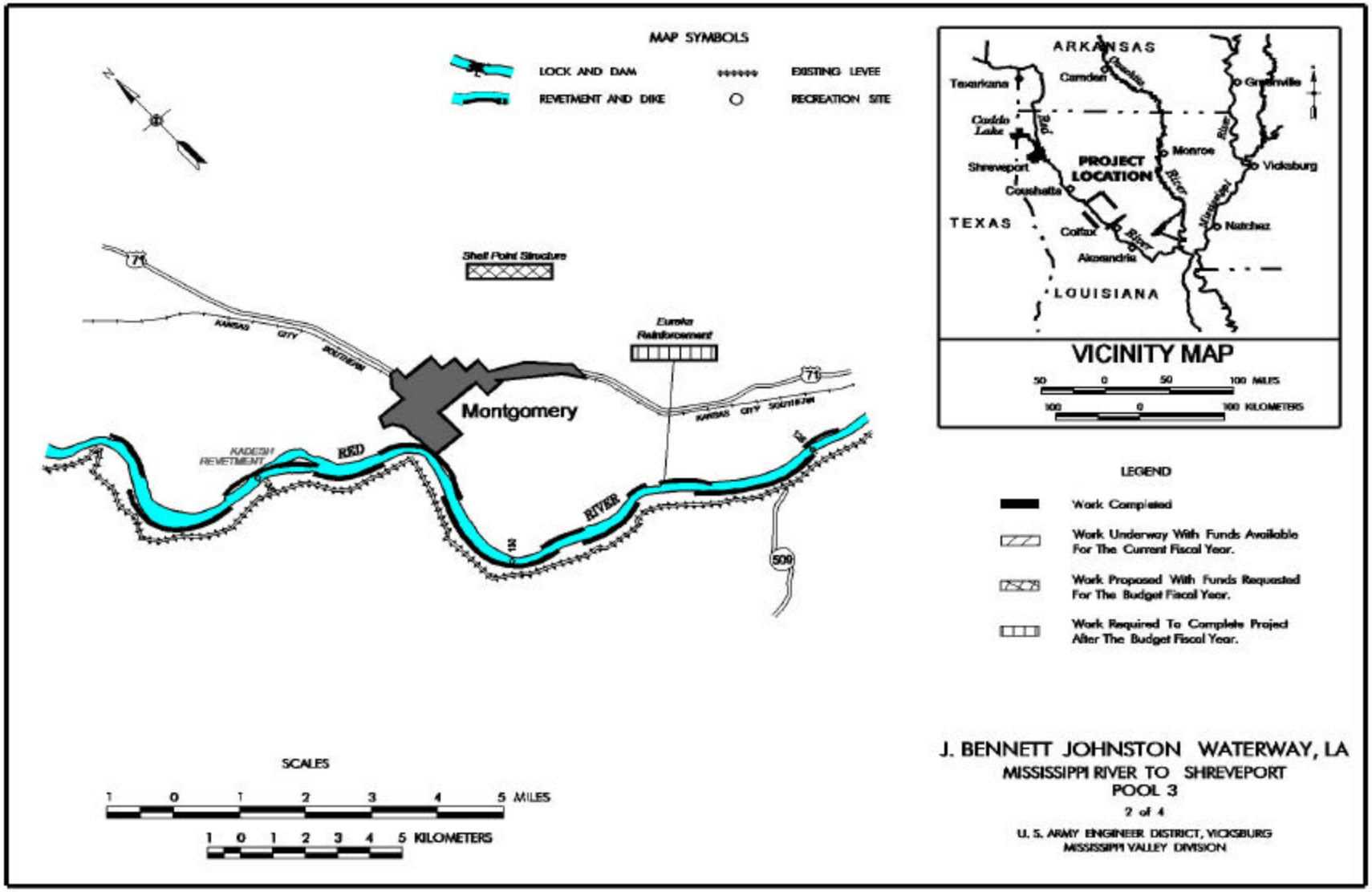
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
REVETMENT AND DIKE
EXISTING LEVEE
RECREATION SITE
Phillips Bayou Reinforcement
Ft. Buhlow Rec. Phase III
Pineville
ALEXANDRIA
RED
RIVER
Rapides
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Shreveport
Monroe
Vicksburg
Coushatta
TEXAS
Colfax
Natchez
Alexandria
PROJECT LOCATION
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 2
2 OF 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
REVETMENT AND DIKE
EXISTING LEVEE
RECREATION SITE
LOCK AND DAM NO. 3
Colfax
Nichols
Katoland
RED
RIVER
NATCHITOCHES PARISH
RAPIDES PARISH
GRANT PARISH
RAPIDES PARISH
Alfalfa
Boyce
Pointfield ACS
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Caddo Lake
Shreveport
Coushatta
Monroe
Vicksburg
Natchez
TEXAS
Colfax
Alexandria
PROJECT LOCATION
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 2
3 OF 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Colfax
Rec. Area Pt. II
Aloha
KANSAS CITY SOUTHERN
RED
RIVER
Colfax
LOCK AND DAM
NO. 3
LOCK AND DAM
PHASE II DIKES
L. & D No. 3
Rec. Area
NATCHITOCHES
RAPIDS
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red
River
Monroe
Shreveport
PROJECT
LOCATION
Vicksburg
Coushatta
TEXAS
Colfax
Natchez
Alexandria
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 3
1 of 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Shell Point Structure
Eureka Reinforcement
Montgomery
KADESH REVETMENT
RED
RIVER
KANSAS CITY SOUTHERN
71
150
509
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red
River
Shreveport
PROJECT LOCATION
Monroe
Vicksburg
Coushatta
Mississippi
TEXAS
Natchez
Colfax
Alexandria
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
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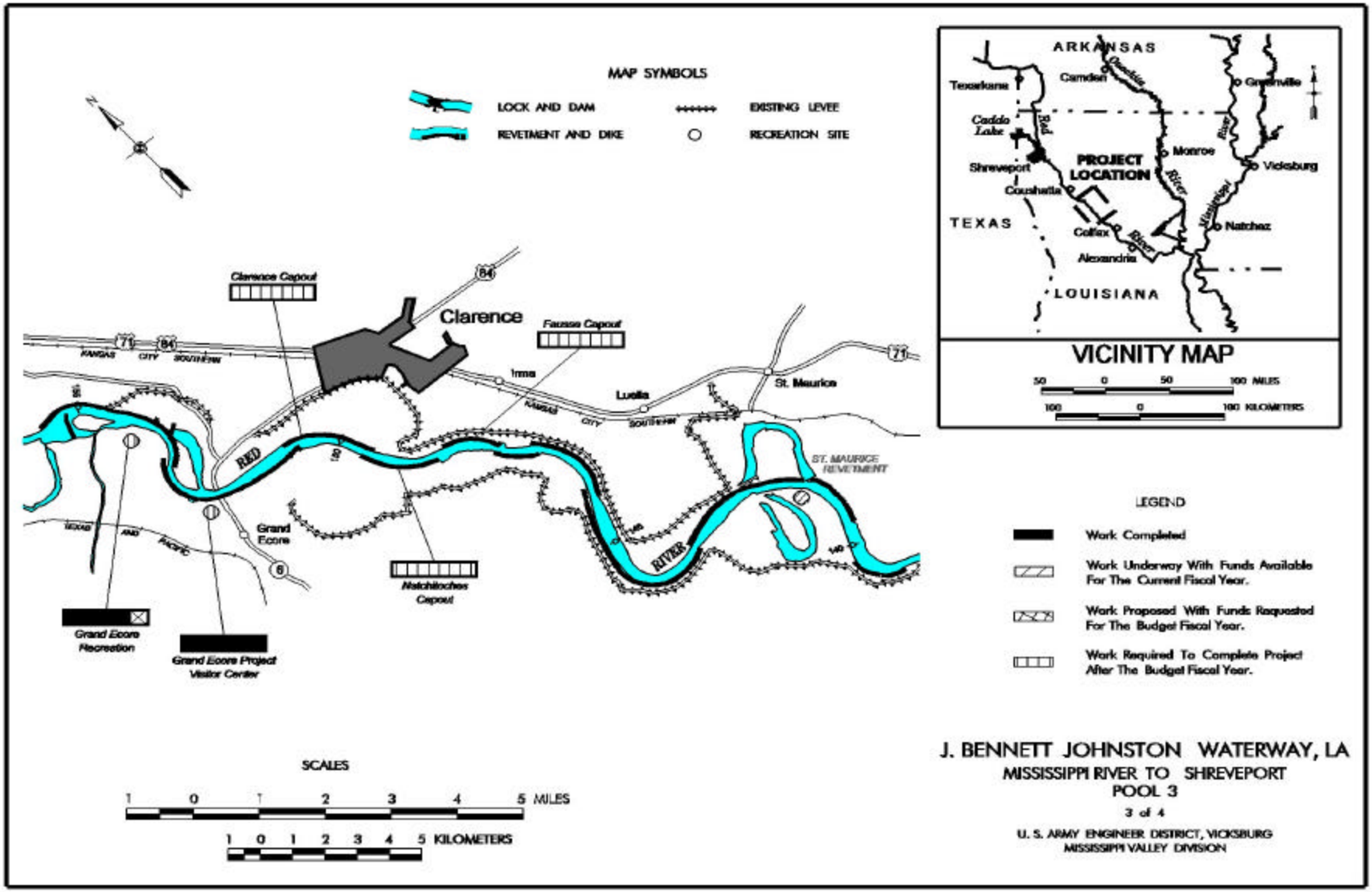
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 3
2 of 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Clarence Capout
Clarence
Fausse Capout
Irma
Lucila
St. Maurice
ST. MAURICE REVETMENT
RED
RIVER
Grand Ecore
Natchitoches Capout
Grand Ecore Recreation
Grand Ecore Project Visitor Center
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red River
Shreveport
PROJECT LOCATION
Monroe
Vicksburg
Coushatta
TEXAS
Mississippi River
Natchez
Colfax
Alexandria
LOUISIANA
VICINITY MAP
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LEGEND
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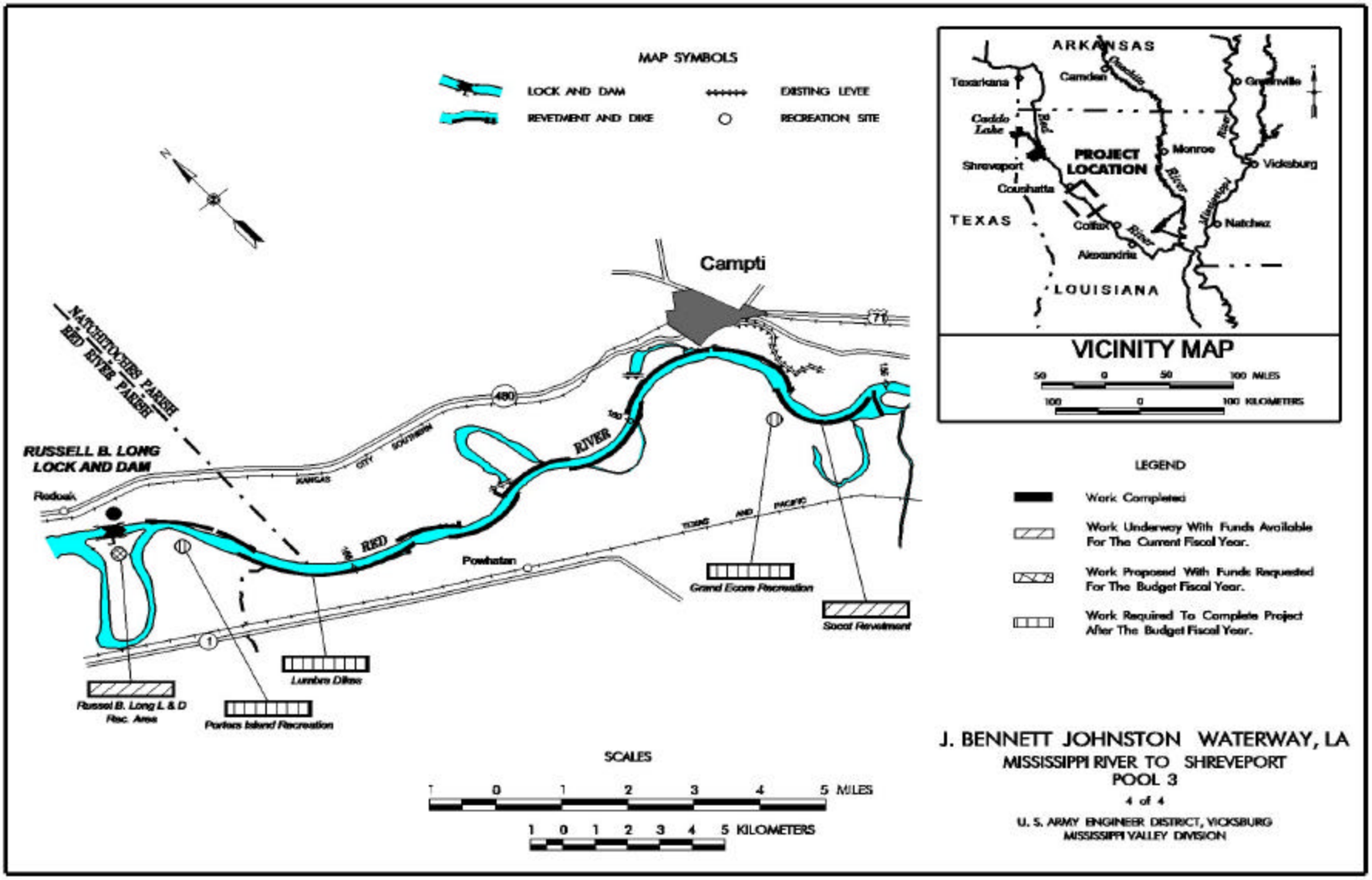
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 3
3 of 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Campti
NATCHITOCHES PARISH
RED RIVER PARISH
RUSSELL B. LONG LOCK AND DAM
Redoak
KANSAS CITY SOUTHERN
RED RIVER
Powhatan
TEXAS AND PACIFIC
Grand Ecore Recreation
Socat Revetment
Lumbra Dikes
Russel B. Long L & D Rec. Area
Pontoon Island Recreation
SCALES
MILES
KILOMETERS
ARKANSAS
Texarkana
Camden
Caddo Lake
Shreveport
Coushatta
PROJECT LOCATION
Monroe
Vicksburg
TEXAS
Natchez
Alexandria
LOUISIANA
VICINITY MAP
MILES
KILOMETERS
LEGEND
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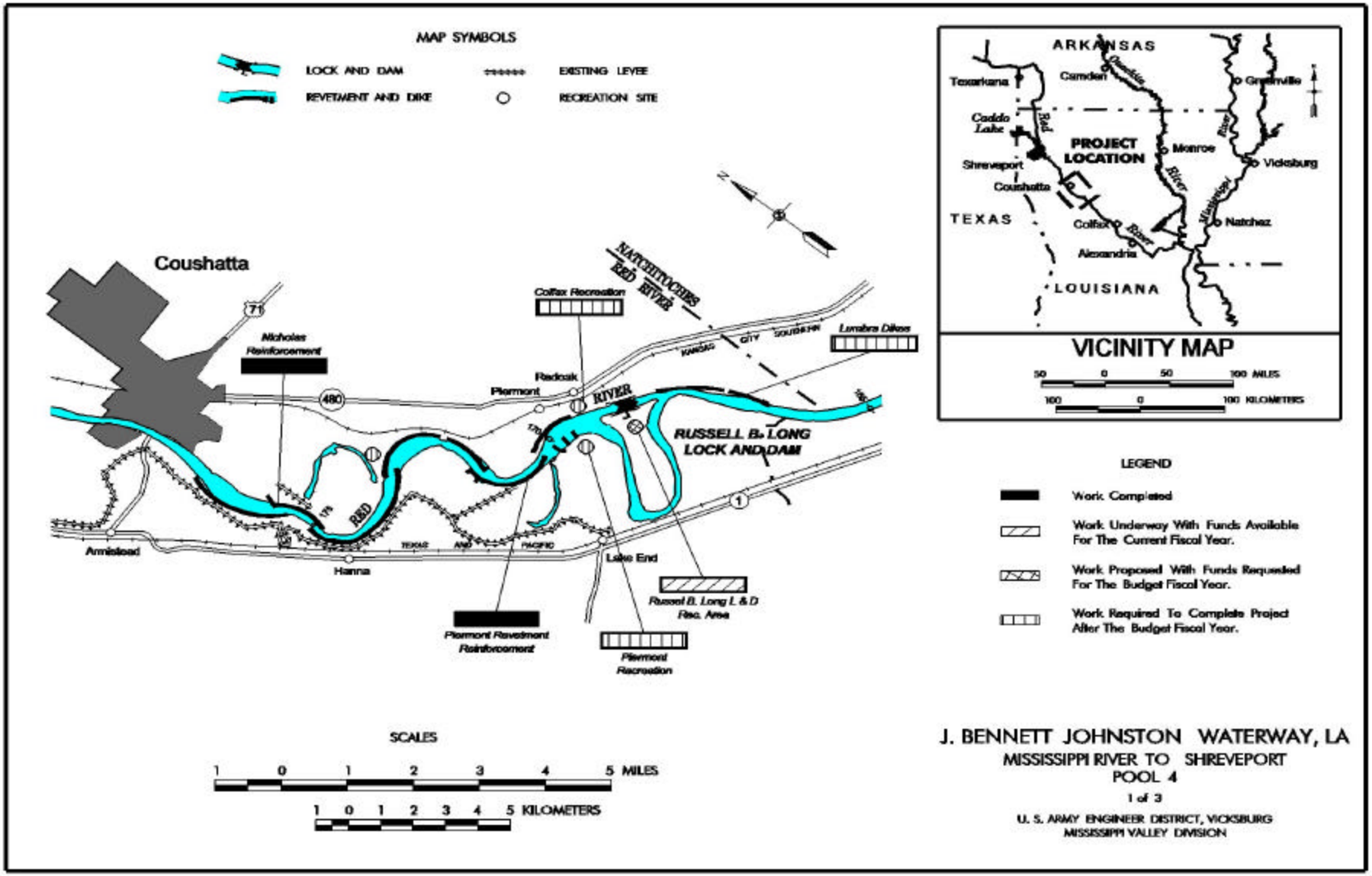
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 3
4 of 4
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Coushatta
Nicholas Reinforcement
Colfax Recreation
NATCHITOCHES
RED RIVER
Lundins Dikes
Radcliff
Piermont
RIVER
RUSSELL B. LONG LOCK AND DAM
RED
Armistead
Hanna
Lake End
Russell B. Long L & D Rec. Area
Piermont Revetment Reinforcement
Piermont Recreation
SCALES
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ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red
PROJECT LOCATION
Monroe
Vicksburg
Shreveport
Coushatta
TEXAS
Colfax
Natchez
Alexandria
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
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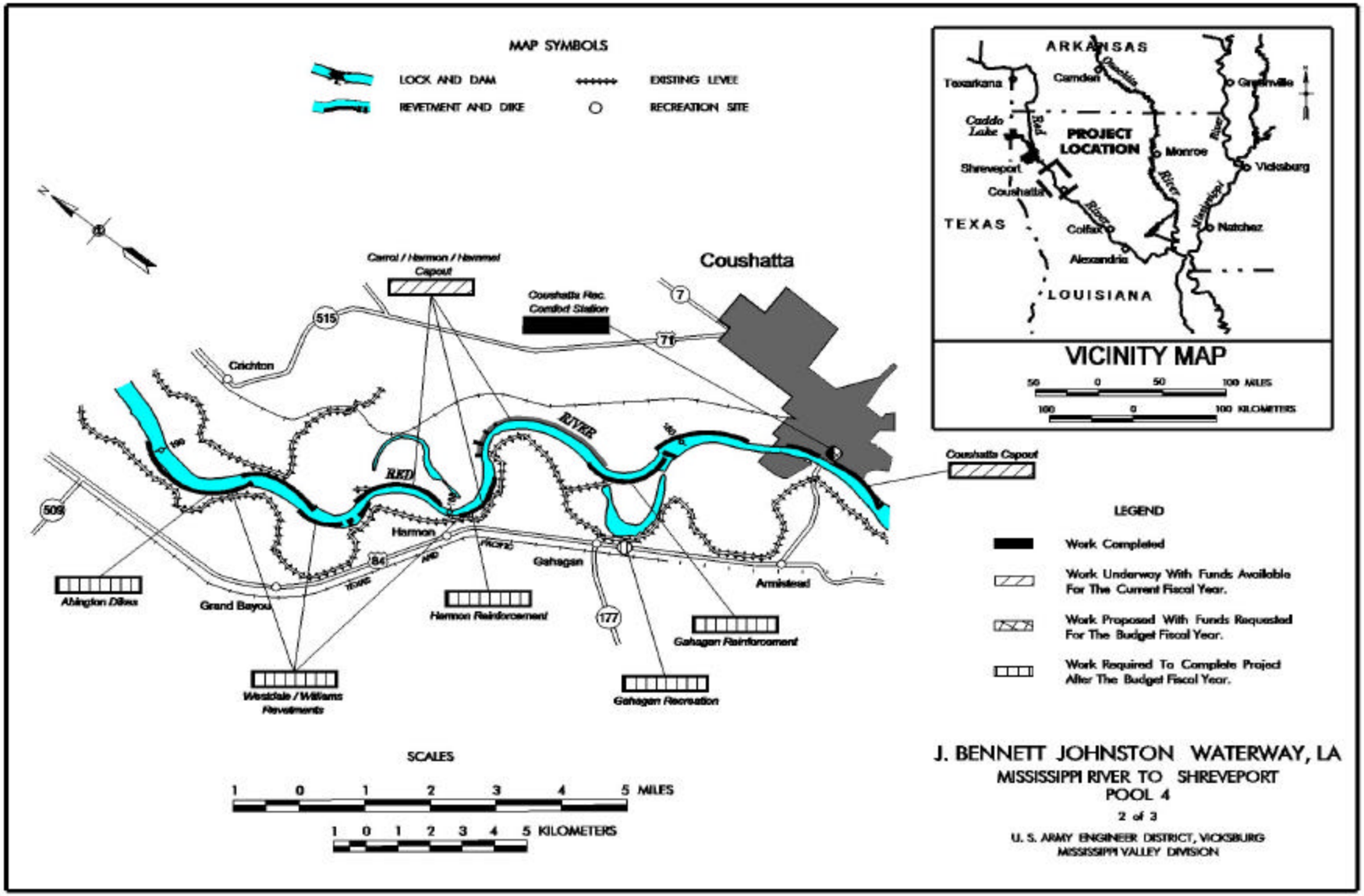
MISSISSIPPI RIVER TO SHREVEPORT
POOL 4
1 of 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION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LOCK AND DAM
REVETMENT AND DIKE
EXISTING LEVEE
RECREATION SITE
Carrol / Harmon / Hammel Capout
Coushatta Rec. Comfort Station
Coushatta
Crichton
RIVER
RED
Harmon
Gahagan
Armistead
Grand Bayou
Abington Dikes
Harmon Reinforcement
Gahagan Reinforcement
Westdale / Williams Revetments
Gahagan Recreation
Coushatta Capout
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
TEXAS
LOUISIANA
Texarkana
Camden
Greenville
Caddo Lake
PROJECT LOCATION
Monroe
Vicksburg
Shreveport
Coushatta
Natchez
Colfax
Alexandria
VICINITY MAP
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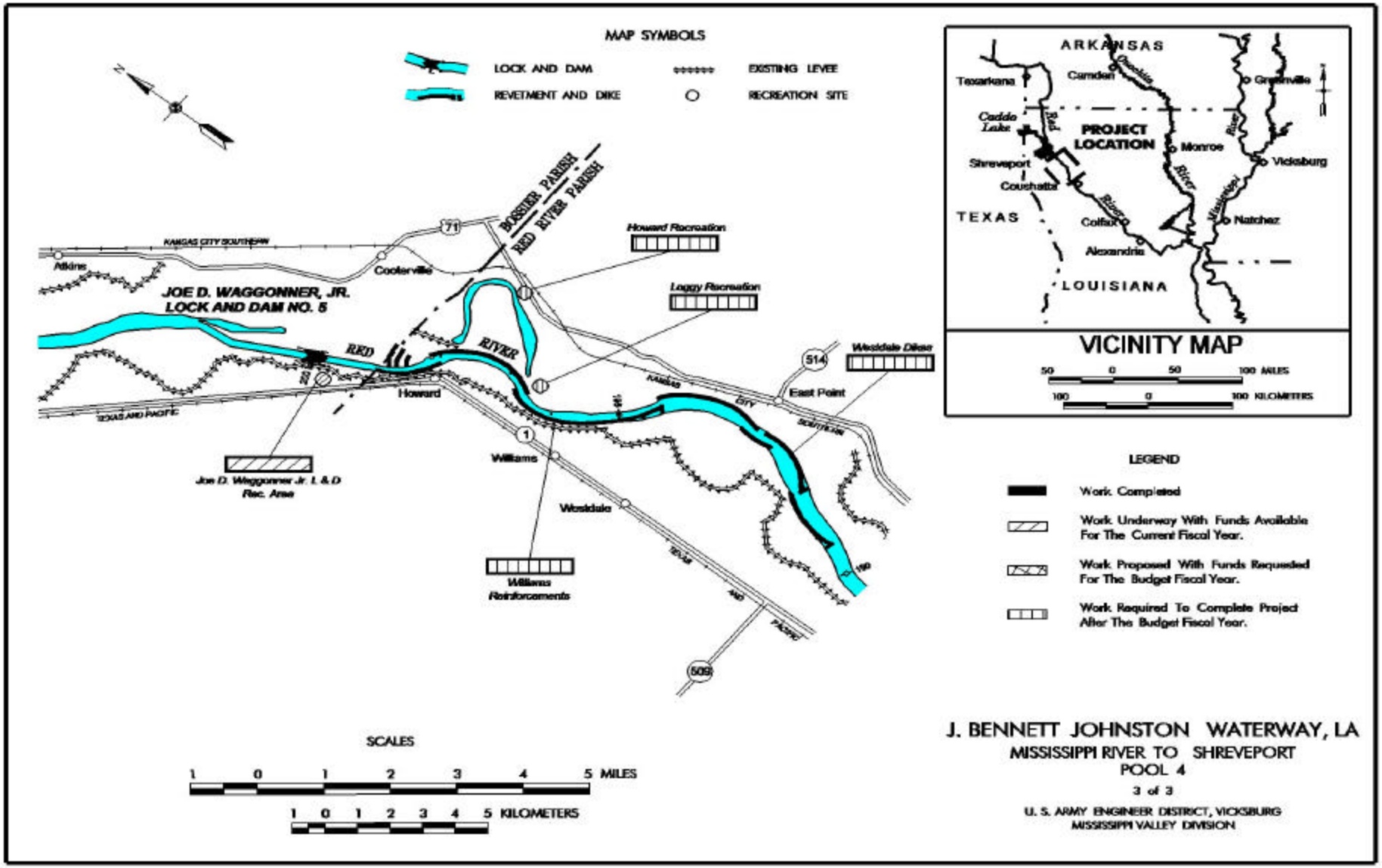
MISSISSIPPI RIVER TO SHREVEPORT
POOL 4
2 of 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
REVETMENT AND DIKE
EXISTING LEVEE
RECREATION SITE
BOSSIER PARISH
RED RIVER PARISH
KANSAS CITY SOUTHERN
Atkins
Cooterville
JOE D. WAGGONNER, JR.
LOCK AND DAM NO. 5
RED
RIVER
Howard
Howard Recreation
Loggy Recreation
Westdale Dikes
East Point
Williams
Westdale
Joe D. Waggonner Jr. L & D
Rec. Area
Williams
Reinforcements
TEXAS AND PACIFIC
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
PROJECT LOCATION
Monroe
Vicksburg
Shreveport
Coushatta
TEXAS
Colfax
Natchez
Alexandria
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
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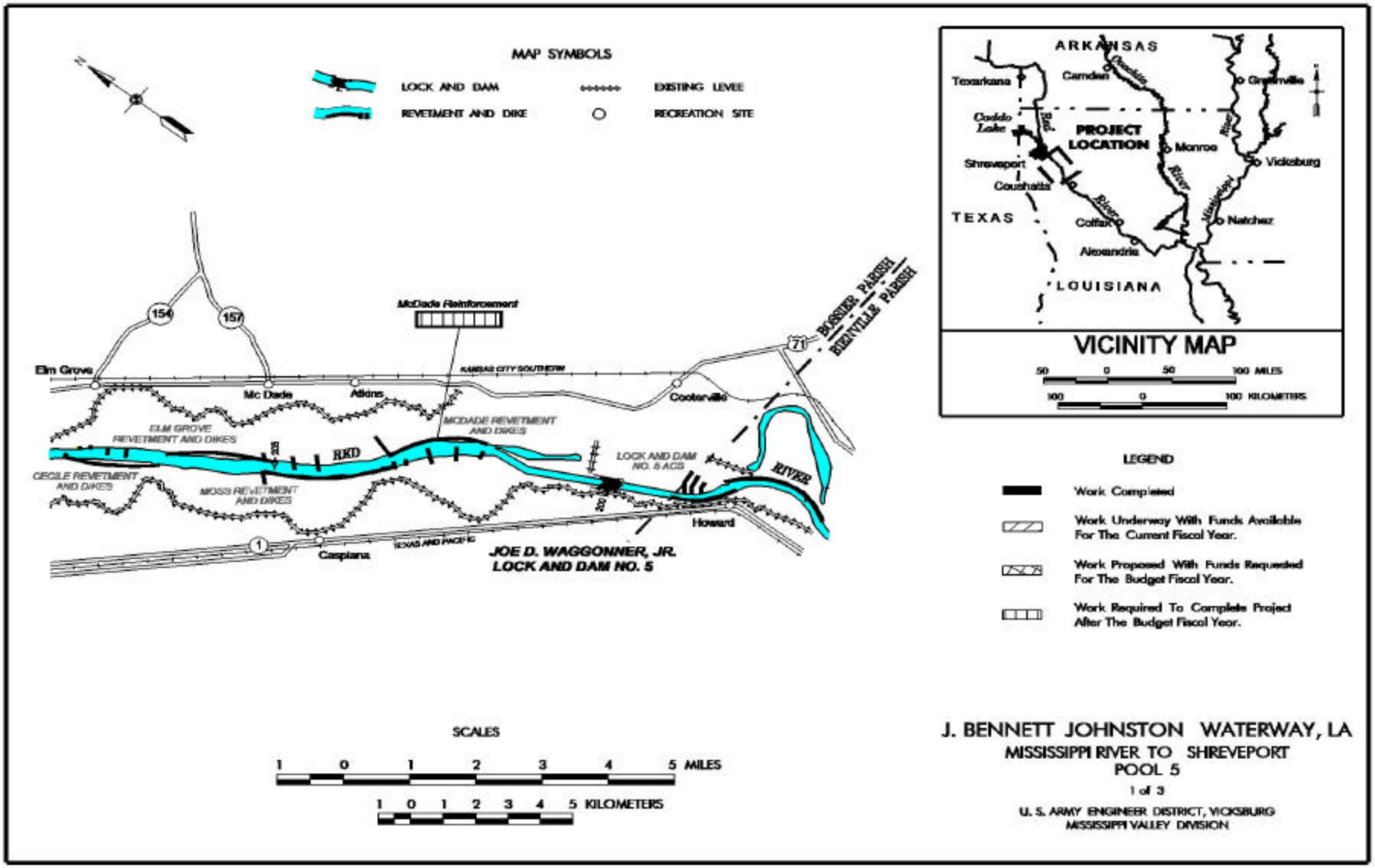
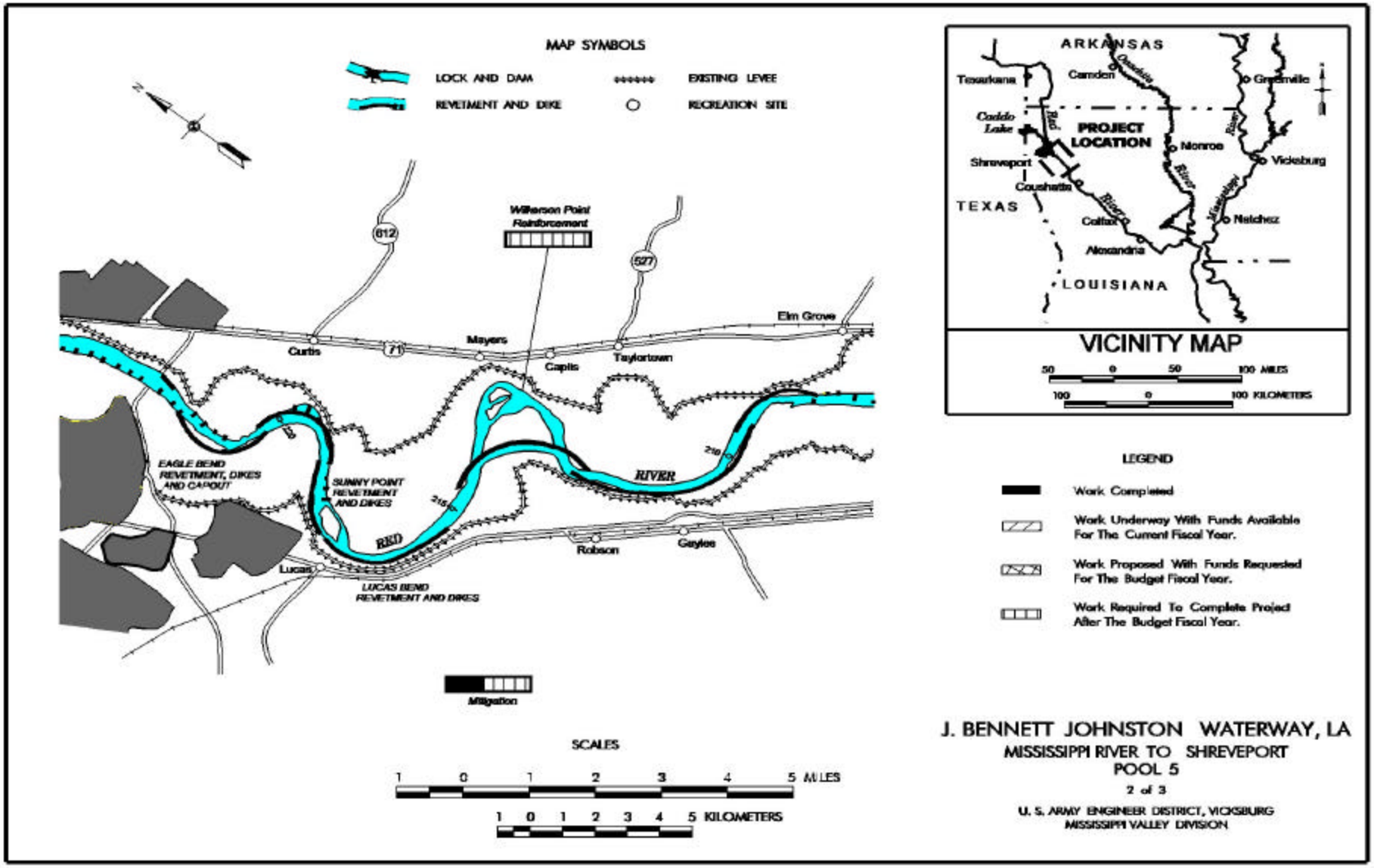
MISSISSIPPI RIVER TO SHREVEPORT
POOL 4
3 of 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
McDade Reinforcement
Elm Grove
Mc Dade
Atkins
Cooterville
KANSAS CITY SOUTHERN
ELM GROVE REVETMENT AND DIKES
MCDADE REVETMENT AND DIKES
CECILE REVETMENT AND DIKES
MOSS REVETMENT AND DIKES
RKD
LOCK AND DAM NO. 5 ACIS
RIVER
Howard
Caspiana
TEXAS AND PACIFIC
JOE D. WAGGONNER, JR. LOCK AND DAM NO. 5
BOSSIER PARISH
BIENVILLE PARISH
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
PROJECT LOCATION
Monroe
Vicksburg
Shreveport
Coushatta
TEXAS
Colfax
Natchez
Alexandria
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 5
1 of 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION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LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Wilkerson Point Reinforcement
612
527
71
Curtis
Mayers
Capitis
Taylortown
Elm Grove
EAGLE BEND REVETMENT, DIKES AND CAPOUT
SUNNY POINT REVETMENT AND DIKES
RED
RIVER
Robson
Gaylee
Lucas
LUCAS BEND REVETMENT AND DIKES
Mitigation
SCALES
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1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
Texarkana
Camden
Greenville
Caddo Lake
Red
PROJECT LOCATION
Monroe
River
Vicksburg
Shreveport
Coushatta
TEXAS
Mississippi
Natchez
Colfax
Alexandria
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
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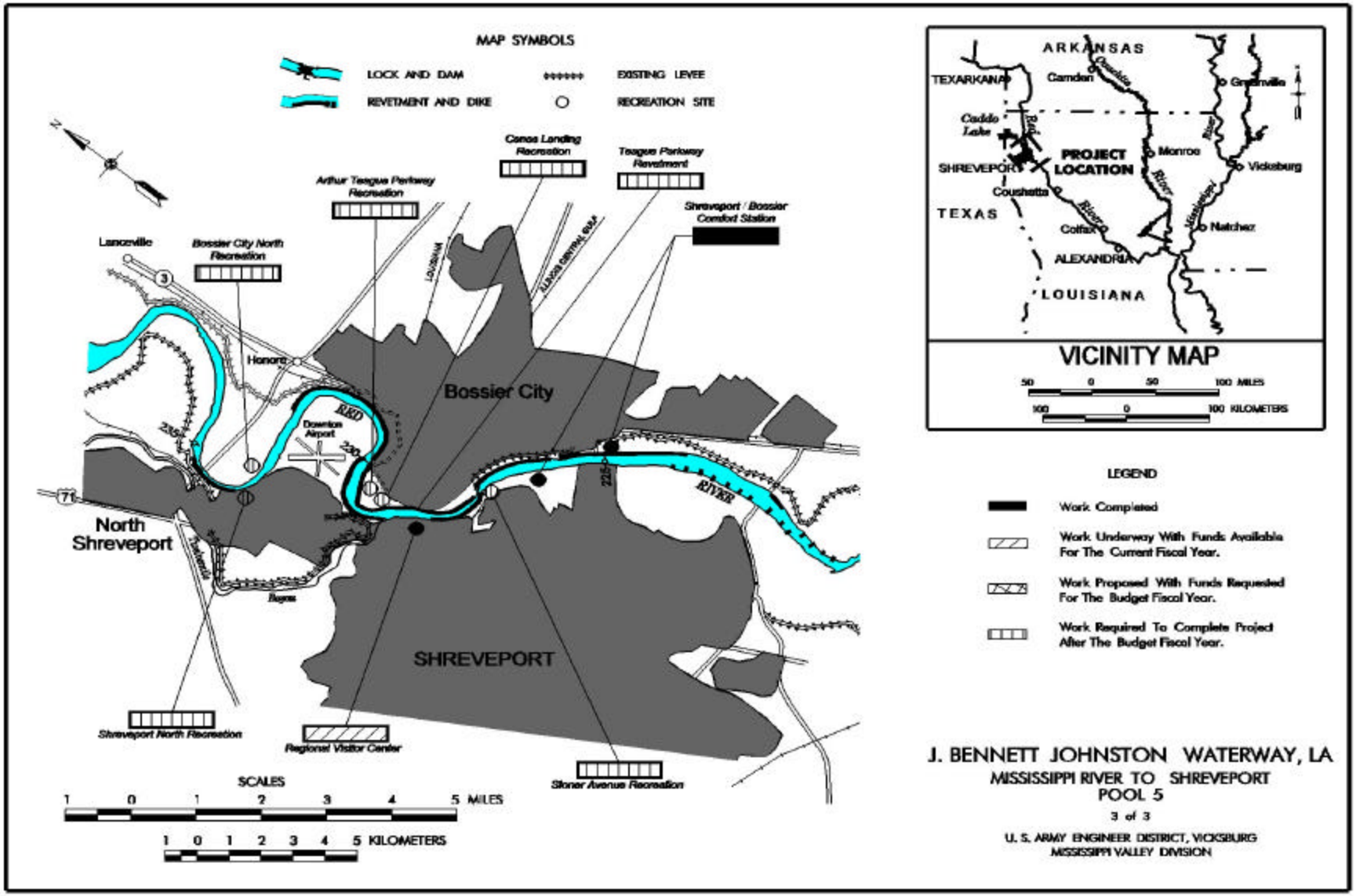
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 5
2 of 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION


MAP SYMBOLS
LOCK AND DAM
EXISTING LEVEE
REVETMENT AND DIKE
RECREATION SITE
Camas Landing Recreation
Teague Parkway Revetment
Arthur Teague Parkway Recreation
Shreveport / Bossier Comfort Station
Lanoxville
Bossier City North Recreation
Honore
Bossier City
Downtown Airport
RED
RIVER
North Shreveport
SHREVEPORT
Shreveport North Recreation
Regional Visitor Center
Stoner Avenue Recreation
SCALES
1 0 1 2 3 4 5 MILES
1 0 1 2 3 4 5 KILOMETERS
ARKANSAS
TEXARKANA
Camden
Caddo Lake
SHREVEPORT
PROJECT LOCATION
Monroe
Vicksburg
Coushatta
TEXAS
Colfax
Natchez
ALEXANDRIA
LOUISIANA
VICINITY MAP
50 0 50 100 MILES
100 0 100 KILOMETERS
LEGEND
Work Completed
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Work Required To Complete Project After The Budget Fiscal Year.
J. BENNETT JOHNSTON WATERWAY, LA
MISSISSIPPI RIVER TO SHREVEPORT
POOL 5
3 of 3
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General - Flood Control

PROJECT: Comite River Diversion Channel, Louisiana (Continuing)

LOCATION: The Comite River basin comprises approximately 348 square miles and includes portions of Wilkinson and Amite Counties in Mississippi and East Feliciana and East Baton Rouge Parishes in Louisiana. The diversion project is located between the Comite and Mississippi Rivers north of the Town of Baker, Louisiana, and south of the Town of Zachary, Louisiana.

DESCRIPTION: The purpose of the project is to provide flood protection for the residents of the Comite River Basin. The authorized project will reduce stages on the Comite River from the diversion point to the confluence with the Amite River, on the Amite River from the confluence with the Comite River near Denham Springs to Port Vincent, and on Hurricane Creek, Robert Canal, and White's, Cypress and Baton Rouge Bayous. The Comite River is a right bank tributary of the Amite River, with a confluence near the city of Denham Springs, east of Baton Rouge, LA. The project provides for the construction of a 12-mile-long diversion channel located between the Comite and Mississippi Rivers north of the town of Baker, LA and south of the town of Zachary, LA. Included in the project are a diversion structure, a control structure at Lilly Bayou, four drop structures to handle intercepted drainage, three low flow augmentation pumps to supplement flows down stream of the diversion channel, improvements to Bayou Baton Rouge, White Bayou, and Cypress Bayou, and the provision of project mitigation areas. All work is programmed.

AUTHORIZATION: Water Resources Development Acts of 1992, 1996 and 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 2.3 to 1 at 6-1/8 percent.

TOTAL BENEFIT - COST RATIO: 2.3 to 1 at 6-1/8 percent.

INITAL BENEFIT - COST RATIO: 1.2 to 1 at 7 3/8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the design memorandum approved in August 1996 with an economic re-evaluation in June 2002 at October 2000 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 115,000,000		Entire Project	2	TBD
Estimated Non-Federal Cost		48,000,000				
Cash Contributions	$ 8,269,000					
Other Cost	39,731,000					
Total Estimated Project Cost		$ 163,000,000				
Allocations to 30 September 2003		$ 17,511,000				
Conference Allowance for FY 2004		3,500,000				
Allocations for FY 2004		2,704,000	1/			
Allocations through FY 2004		20,215,000	18			
Allocation Requested for FY 2005		$ 1,500,000	19			
Programmed Balance to Complete After FY 2005		93,285,000				
Unprogrammed Balance to Complete After FY 2005		0				

1/ Reflects $775,000 reduction assigned as savings and slippage and $21,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

CHANNELS AND CANALS: 12 miles.
LEVEES AND FLOODWALLS: An earthen closure will be constructed at Brooks Lake.
PUMPING STATIONS: Three 1.5 cfs
FLOODWAY CONTROL AND DIVERSION STRUCTURES: Comite River Diversion Structure
Lilly Bayou Control Structure
Four drop structures
MITIGATION: 1,484 acres to include planting of trees on 765 acres.

JUSTIFICATION: Flooding within the project area originates from excessive rainfall resulting in headwater and backwater overflow of the Comite River and tributary systems. Between 1973 and 1983, four major floods occurred in the subbasin. The maximum flood of record in the Amite River basin occurred in 1983 and caused approximately $172,000,000 in damages, (1983 price levels) including $48,000,000 occurring in the Comite River subbasin. East Baton Rouge Parish experienced $65,200,000 in damages, with 75 percent occurring in the Comite River subbasin. Flooding up to eight feet above the first floor level was reported with inundation of structures lasting from a few hours to several days. About 55,000 acres of land were flooded and a total of 1,550 urban residences, 20 rural residences and 37 urban businesses were flooded in East Baton Rouge Parish. The total average annual benefits, all flood control, are $26,582,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Contine:	
Lilly Bayou Control Structure Phase II	$ 1,000,000
Lands and Damages	28,000
Planning, Engineering and Design	272,000
Supervision and Administration	200,000
Total	$ 1,500,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1996 and 1999, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	$16,460,000	
Provide during the period of construction a cash contribution equal to 5 percent of total project cost allocated to flood control.	8,269,000	
Modify or relocate utilities, roads, bridges (except railroad bridges) where necessary for the construction of the project.	23,271,000	
Pay all cost allocated to operation, maintenance, repair, rehabilitation, and replacement of the project features.		$ 554,000
Total Non-Federal Cost	$ 48,000,000	$ 554,000

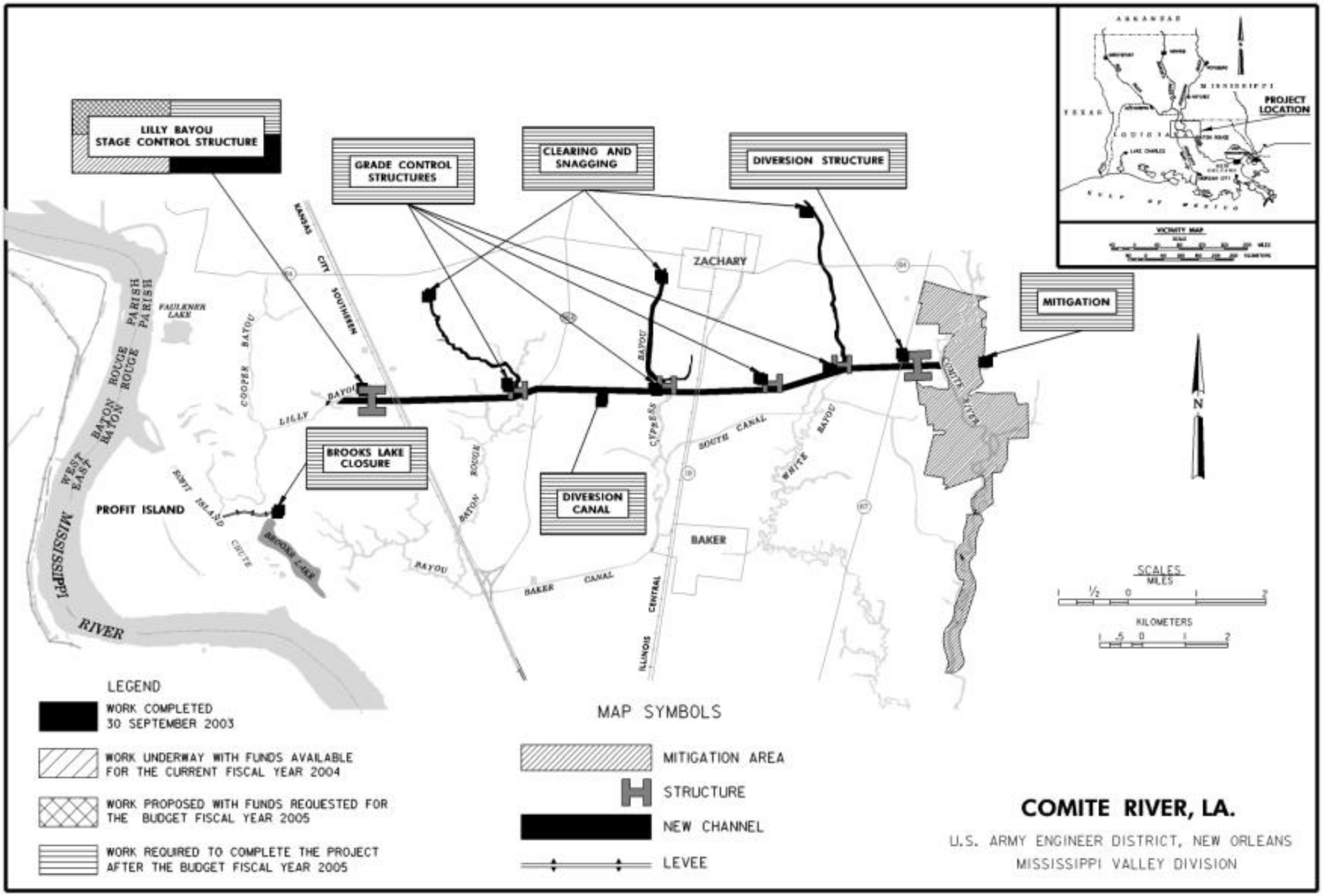
The non-Federal sponsor has agreed to make all payments of first costs concurrently with project construction.

STATUS OF LOCAL COOPERATION: The construction local sponsor is the Louisiana Department of Transportation and Development. The operation and maintenance (O&M) local sponsor is the City/Parish of East Baton Rouge. The Project Cooperation Agreement was signed 1 October 2001.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $115,000,000 is the same as last presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on April 10, 1991. An Environmental Assessment which documents changes to the authorized project has been completed and a Finding of No Significant Impact was signed on 19 December 1995.

OTHER INFORMATION: Funds to initiate Preconstruction Engineering and Design were appropriated in Fiscal Year 1991. Funds to initiate construction were appropriated in Fiscal Year 1999. The Water Resources Development Act of 1999, dated 17 August 1999 (PL106-53), Section 371, modified the project to include the costs of highway relocations to be cost shared as a project construction feature.


LILLY BAYOU STAGE CONTROL STRUCTURE
GRADE CONTROL STRUCTURES
CLEARING AND SNAGGING
DIVERSION STRUCTURE
MITIGATION
BROOKS LAKE CLOSURE
DIVERSION CANAL
PROFIT ISLAND
ZACHARY
BAKER
PROJECT LOCATION
VICINITY MAP
SCALES
MILES
KILOMETERS
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
MITIGATION AREA
STRUCTURE
NEW CHANNEL
LEVEE
COMITE RIVER, LA.
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION

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

PROJECT: Lake Pontchartrain, Louisiana, and Vicinity (Hurricane Protection)(Continuing)

LOCATION: The project is located in St. Charles, Jefferson, Orleans, St. Bernard and St. Tammany Parishes in southeast Louisiana in the general vicinity of New Orleans, adjacent to Lake Pontchartrain.

DESCRIPTION: The recommended plan consists of a new levee north of US Highway 61, from the east Bonnet Carré Spillway guide levee to the Jefferson-St. Charles Parish boundary; a floodwall along the Jefferson-St. Charles Parish line; an enlarged levee along the Jefferson Parish lakefront; an enlarged New Orleans lakefront levee landward of the seawall including parallel flood protection on the 17th Street, Orleans Avenue, and London Avenue outfall canals; a new and enlarged levee and floodwall along both sides of the Inner Harbor Navigation Canal (IHNC); a new levee and floodwall along the lakefront from the airport to South Point; an enlarged levee from South Point to the Gulf Intracoastal Waterway (GIWW); an enlarged levee and new floodwall along the northside of the Mississippi River-Gulf Outlet (MR-GO) and GIWW; a new levee in the Chalmette area from the IHNC levee along the south bank of the MR-GO to approximately 2-1/2 miles northwest of Verret and west to the Mississippi River levee near Caernarvon; a strengthened Mandeville seawall on the north shore at present height; and a new pumping station and vertical lift gates for the Florida Avenue Complex. The parallel protection work for Orleans and London Avenue Outfall canals is unprogrammed after FY 2002.

AUTHORIZATION: Flood Control Act of 1965; Water Resources Development Acts of 1974, 1986, 1990, 1992, 1996, and 2000.

REMAINING BENEFIT TO REMAINING COST RATIO: 4.6 to 1 at 3-1/8 percent.

TOTAL BENEFIT - COST RATIO: 3.0 to 1 at 3-1/8 percent.

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

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

SUMMARIZED FINANCIAL DATA

Estimated Federal Total Appropriation Requirement			$ 528,000,000
Programmed Construction		$ 527,665,000	
Unprogrammed Construction		335,000	
Future Non-Federal Reimbursement			258,000
Programmed Construction		258,000	
Unprogrammed Construction		0	
Estimated Federal Cost (Ultimate)			527,742,000
Programmed Construction		527,407,000	
Unprogrammed Construction		335,000	
Estimated Non-Federal Cost			210,000,000
Programmed Construction		190,701,000	
Cash Contribution	$ 82,453,000		
Other Costs	107,990,000		
Reimbursements:			
Hurricane Protection	258,000		
Unprogrammed Construction		19,299,000	
Cash Contribution	19,005,000		
Other Costs	294,000		
Reimbursements	0		

STATUS (1 Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
New Orleans East Unit	91	TBD
New Orleans West Unit	65	TBD
Mandeville Unit	100	March 1996 [1]
Chalmette Unit	98	TBD
Entire Project	80	TBD

PHYSICAL DATA

Levees: Average Height: 16 feet
Length: 80 miles

Drainage Structures: 9

Dam Closures: 2

Floodwalls: 17.9 miles

Pumping Plant: 1

Floodgates: 2

Control Valve Structures: 3

[1] Work accomplished by the Fiscal Year 1992 Dire Emergency Supplemental under Appropriation 96x3125, Flood Control and Coastal Emergencies.

SUMMARIZED FINANCIAL DATA (Continued)

Total Estimated Programmed Construction Cost	$ 718,366,000		
Total Estimated Unprogrammed Construction Cost	19,634,000		
Total Estimated Project Cost	$ 738,000,000		
			ACCUM.
Allocations to 30 September 2003	$ 445,238,000		PCT. OF EST.
Conference Allowance for FY 2004	5,500,000		FED. COST
Allocation for FY 2004	4,250,000	1/	
Allocations through FY 2004	449,488,000		85
Allocation Requested for FY 2005	$ 3,937,000		86
Programmed Balance to Complete After FY 2005	74,240,000		
Unprogrammed Balance to Completed After FY 2005	335,000		

1/ Reflects $1,217,000 reduction assigned as savings and slippage and $33,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The lowlands in the Lake Pontchartrain tidal basin are subject to tidal overflow. The Greater New Orleans Metropolitan Area which lies in this basin will continue its rapid economic development in the future years even though severe damages have resulted from several hurricanes in the past years. Hurricane damages result from surges entering Lake Pontchartrain from Lake Borgne through natural tidal passes at the Rigolets and Chef Menteur Passes and the Inner Harbor Navigation Canal. The surges are intensified by local wind effects and the combination of waves and surges causing overtopping of the pre-project protective works along the shores of Lake Pontchartrain. The eastern portion of the area is also subject to flooding by surges and waves that move directly from Lake Borgne and overtop the then existing inadequate protective system seaward of the developed land areas. As a result, residences and industrial and commercial establishments suffer damage, business activities are disrupted, lives are endangered, and hazards to health are created. Hurricanes much more severe than any of record are possible. In the event of the occurrence of such a severe hurricane, catastrophic property damage and loss of human life would be experienced. Local interests have requested protection against these threats to life and property. Hurricane Betsy in September 1965 caused extensive damage and flooding of urban areas of the New Orleans area to depths of up to 10 feet. Hurricane Camille occurred in the project area in August 1969 and flooded areas along the Inner Harbor Navigation Canal. Extensive flooding and overtopping of levees would have occurred in the project area in September 1974 if Hurricane Carmen had continued on its predicted course. In 1985 Hurricane Juan caused extensive flooding in the St. Charles Parish area. The Lake Pontchartrain hurricane protection project will provide protection from similar occurrences. The project will provide protection against flooding from the Standard Project Hurricane (SPH). The average annual benefits, all flood control, are $95,771,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

NEW ORLEANS EAST UNIT	
Complete:	
Hammond Hwy	$ 400,000
Pump Station 6	400,000
Pump Station 4	397,000
Lands and Damages	20,000
Surveys and Layouts	20,000
Planning, Engineering and Design	900,000
Supervision and Administration	100,000
Subtotal	2,237,000
NEW ORLEANS WEST UNIT	
Complete:	
Hammond Hwy	400,000
St. Rose Canal Drainage Structure	200,000
Lands and Damages	20,000
Survey and Layouts	30,000
Planning, Engineering and Design	900,000
Supervision and Administration	150,000
Subtotal	1,700,000
Total	$ 3,937,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1965 and the Water Resources Development Act of 1974, the non-Federal sponsors must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and right-of-ways, and borrow and excavated or dredged material disposal areas.	$ 43,255,000	
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	21,035,000	
Pay 30 percent of the total project cost, including the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers, excluding a reimbursement to the Federal Government for costs allocated pursuant to the Water Resources Development Act of 1974.	145,452,000	
Reimburse the Federal Government for costs allocated pursuant to the Water Resources Development Act of 1974.	258,000	
Pay all costs of operations, maintenance, repair, rehabilitation, and replacements of all features of the project works.		$ 1,375,000
Total Non-Federal Costs	$ 210,000,000	$ 1,375,000

In addition, local interests, through the combined efforts of the State of Louisiana, local levee and drainage districts, and parish police juries, have spent an estimated $25,366,000 between 1930-1963, based on the best cost records available, to improve and maintain the hurricane protection system existing prior to project authorization. Available costs of record are as follows:

Combination of State of Louisiana and Lake Borgne Levee District and Chalmette Back Levee District on the Chalmette Back Levee Protection Systems	$ 4,410,000
Orleans Levee District	12,010,000
Port of New Orleans (levees along Industrial Canal)	924,000
Pontchartrain Levee District	5,022,000
Fourth Drainage District of Jefferson Parish	3,000,000
Total	$25,366,000

A very severe hurricane, "Betsy," occurred in the project area in September 1965, just prior to the authorization of the project in October 1965. Considerable damage was done to many of the existing levees, and local interests immediately instituted an accelerated rehabilitation program, with the view of restoring and strengthening existing protection prior to succeeding hurricane seasons. Any work performed by the non-federal interests after project authorization, that conforms to the project design criteria and alignment, is considered as work-in-kind in lieu of a cash contribution.

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

1. Chalmette Area Plan:

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

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

2. High Level Plan:

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

b. St. Tammany Parish: The Louisiana Office of Public Works executed an act of assurance dated 8 November 1976, agreeing to fulfill all project cooperation requirements for that portion of the project in St. Tammany Parish. These assurances were accepted on behalf of the United States on 7 December 1977. Amended assurances for the High Level Plan are required; however, due to failure of the local sponsor to agree to the items of local cooperation, this portion of the project has an indefinite completion date.

c. Pontchartrain Levee District: New agreements of assurances covering all project cooperation requirements and a deferred payment plan as authorized by the Water Resources Development Act of 1974, were executed on 20 September 1976. On 8 November 1976, the Louisiana Office of Public Works agreed to lend financial assistance above $100,000 to the Pontchartrain Levee District for that portion of the Barrier Plan which is the responsibility of that levee district. These assurances were accepted on behalf of the United States on 7 December 1977. Supplemental assurances for the High Level Plan were executed by the Pontchartrain Levee District for the St. Charles Parish portion of the project on 20 April 1987, and accepted on behalf of the United States on 7 August 1987.

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

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $528,000,000 is an increase of $1,000,000 from the latest estimate ($527,000,000) presented to Congress (FY 2004). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$ 1,000,000
Total	$ 1,000,000

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

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

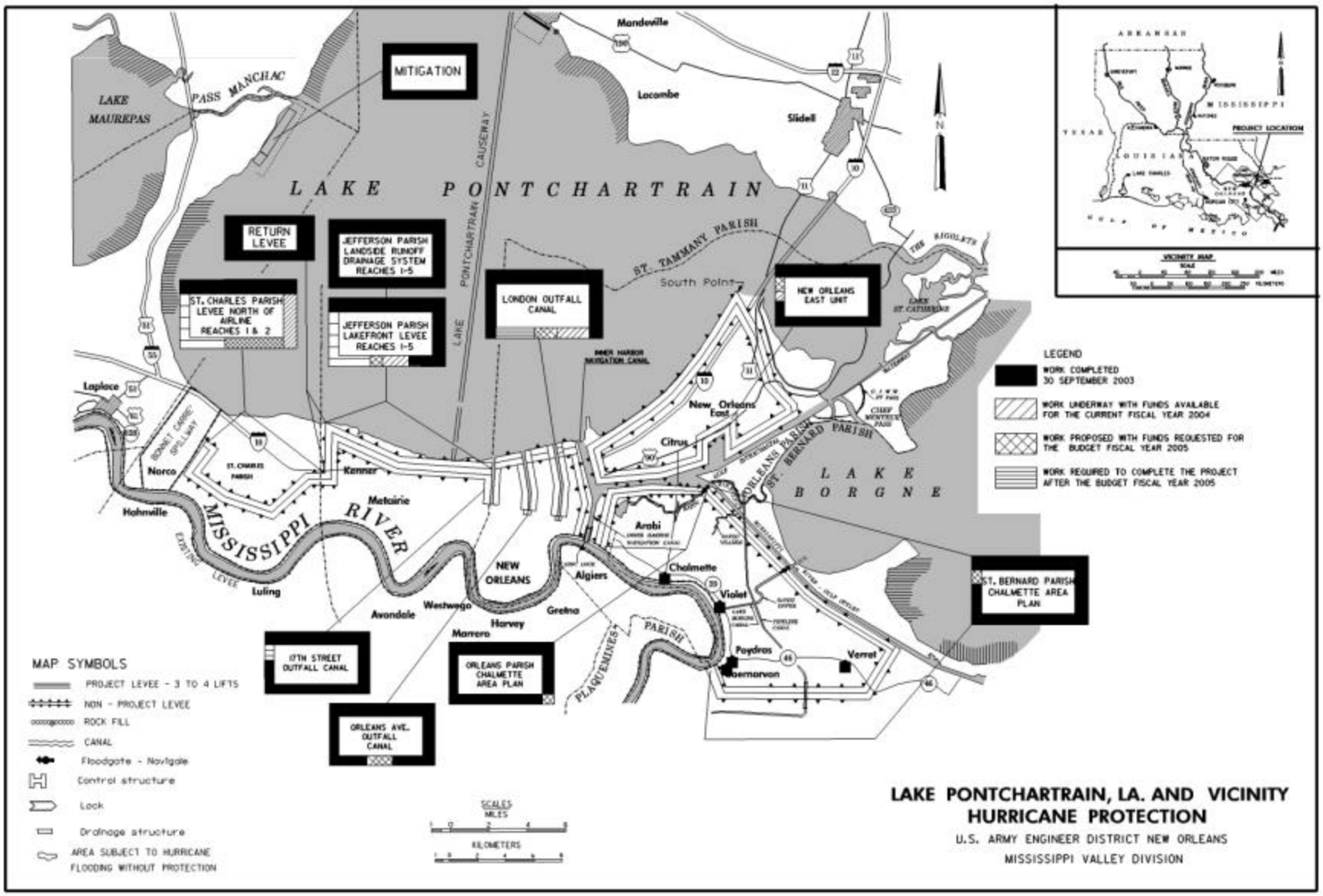
The project was initially designed in the 1960s, and a reanalysis was performed for part of the project in the mid-1980s. Continuing coastal land loss and settlement of land in the project area may have impacted the ability of the project to withstand the design storm. Refinement of existing computer models to assist in determining the impact of these environmental changes on the project will continue.

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.	
Water Resources Development Act of 1986, dated 17 November 1986 (PL 99-662), Section 805	A modification of the project to include construction of a floodwall with sluice gates or other necessary means to ensure that hurricane-flood protection within Jefferson Parish will be unimpaired as a result of any pumping station constructed by local interests.	$3,500,000 (1985)
Water Resources Development Act of 1990, dated 28 November 1990 (PL 101-640) Section 116(k)	A restudy of and report on project benefits to determine whether or not sponsors have received expected benefits and whether or not there should be a reallocation of costs as a result of any unrealized expected benefits. No non-Federal payment for the St. Bernard Parish portion of project was required during the study period (28 November 1990 - 28 November 1991)	
Water Resources Development Act of 1992, dated 31 October 1992 (PL 102-580) Section 102(j)(2)	A reevaluation of the reallocation of project cost based on the benefit study required by the WRDA 1990 Section 116(k)	

[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 3-1/8 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.

Water Resources Development Act of 1992, dated 31 October 1992 (PL 102-580) Section 102(j)(1)	A modification to the project to include conveying landsite runoff from the Jefferson Parish Lakefront levee from the levee right-of-way to the street drainage system.
Water Resources Development Act of 1996, dated 12 October 1996 (PL 104-303) Section 325	A modification to the project to provide that St. Bernard Parish, Louisiana, and the Lake Borgne Basin Levee District, Louisiana, shall not be required to pay the unpaid balance, including interest, of the non-Federal cost-share of the project.
Water Resources Development Act of 2000, dated 11 December 2000 (PL 106-541) Section 432	A post authorization change report to include structural modifications to the seawall providing protection along the south shore of Lake Pontchartrain not later than 180 days after WRDA enactment.


LAKE PONTCHARTRAIN
LAKE MAUREPAS
PASS MANCHAC
MITIGATION
RETURN LEVEE
JEFFERSON PARISH LANDSIDE RUNOFF DRAINAGE SYSTEM REACHES 1-5
ST. CHARLES PARISH LEVEE NORTH OF AIRLINE REACHES 1 & 2
JEFFERSON PARISH LAKEFRONT LEVEE REACHES 1-5
LONDON OUTFALL CANAL
NEW ORLEANS EAST UNIT
ST. BERNARD PARISH CHALMETTE AREA PLAN
17TH STREET OUTFALL CANAL
ORLEANS PARISH CHALMETTE AREA PLAN
ORLEANS AVE. OUTFALL CANAL
PONTCHARTRAIN CAUSEWAY
LAKE PONTCHARTRAIN
INNER HARBOR NAVIGATION CANAL
MISSISSIPPI RIVER
EXISTING LEVEE
BONNET CARRE SPILLWAY
ST. TAMMANY PARISH
ST. BERNARD PARISH
ORLEANS PARISH
PLAQUEMINES PARISH
LAKE BORGNE
Mandeville
Lacombe
Slidell
South Point
Laplace
Norco
Hahnville
Luling
Kenner
Metairie
New Orleans East
Citrus
Arabi
Chalmette
Violet
Poydras
Boemarvon
Verret
Algiers
NEW ORLEANS
Westwego
Avondale
Harvey
Marrero
Gretna
MAP SYMBOLS
PROJECT LEVEE - 3 TO 4 LIFTS
NON - PROJECT LEVEE
ROCK FILL
CANAL
Floodgate - Navigate
Control structure
Lock
Drainage structure
AREA SUBJECT TO HURRICANE FLOODING WITHOUT PROTECTION
SCALES
MILES
KILOMETERS
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
GULF OF MEXICO
PROJECT LOCATION
VICINITY MAP
LAKE PONTCHARTRAIN, LA. AND VICINITY
HURRICANE PROTECTION
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
MISSISSIPPI VALLEY DIVISION

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

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

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

DESCRIPTION: The project consists of a ring levee approximately 40 miles in length encircling the areas along Bayou Lafourche from Larose to Golden Meadow and extending approximately 9,800 feet from each side of the bayou. Enlargement of about 3 miles of the existing levee at Golden Meadow and construction of floodgates on Bayou Lafourche at the upper and lower limits of the protection system will be used for navigation and hurricane protection purposes. Approximately 8 miles of low interior levees and eight multi-barrelled culverts controlled by flap gates are needed to regulate intercepted drainage. All work is programmed.

AUTHORIZATION: Flood Control Act of 1965.

REMAINING BENEFIT - REMAINING COST RATIO: 12.4 to 1 at 3-1/4 percent.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 3-1/4 percent.

INITIAL BENEFIT - COST RATIO: 1.4 to 1 at 3-1/4 percent (FY 1972).

BASIS OF BENEFIT - COST RATIO: Benefits are based on General Design Memorandum Number 1, and Supplement Number 1, approved 18 May 1973 at 1971 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 81,000,000		Entire Project	95	TBD
Estimated Non-Federal Cost		35,000,000				
Cash Contributions	$ 6,193,000					
Other Cost	28,807,000					
Total Estimated Project Cost		$ 116,000,000				
Allocations to 30 September 2003		$ 77,886,000				
Conference Allowance for FY 2004		461,000				
Allocations for FY 2004		356,000 1/				
Allocations through FY 2004		78,242,000	96			
Allocation Requested for FY 2005		583,000	97			
Programmed Balance to Complete After FY 2005		2,175,000				
Unprogrammed Balance to Complete After FY 2005		0				

1/ Reflects $102,000 reduction assigned as savings and slippage and $3,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

Levees	Floodgates	Drainage Structures
Loop levee approximately 40 miles in length along both banks of Bayou Lafourche; enlargement of three miles of levees at Golden Meadow; eight miles of low interior levee to regulate intercepted drainage.	2	Eight multi-barreled culverts

JUSTIFICATION: The project area is of great economic importance to the State of Louisiana, and includes lands and improvements having an aggregate value of approximately $203,904,000 (1995 prices). The population of the area was 20,000 in 1980 and has increased steadily. While oil and gas production, commercial fisheries, and related service industries dominate the economy of the area, there is a wide spectrum of economic activity.

Situated within a region of high hurricane incidence (on the average, two hurricanes threaten the Louisiana coast every three years), the project area is highly vulnerable to overflow from the tidal surges which accompany hurricanes. The highest flood stage during the hurricane of 1915 was 5.5 feet at Golden Meadow, taken from a high-water mark. Should a hurricane similar to that of 1915 move through the area, damages of approximately $10,962,000 (1995 prices) could be expected. Hurricane Juan (1985) was accompanied by flooding of 6.6 feet, as recorded on the Leeville gauge. Damages sustained during Hurricane Juan were

$35,000,000 and at current prices (1995), $44,866,000. The flood duration was from two days to one week. Damages began at 3 feet, with significant damages at 4.5 feet. Should a major hurricane approaching the standard project hurricane in intensity move through the area, the entire project area would be submerged in the tidal surge, and monetary damages would likely amount to $86,811,000 (1995 prices). This damage would include minor crop losses, but the bulk of the damage would consist of physical damage to residential, commercial, and industrial establishments. Residential and commercial facilities are valued at $52,000,000 (1971 prices), excluding contents, plus $3,500,000 (1971 prices), or $207,713,000 (1995 price levels). Average annual damages with the project are negligible (zero), while without the project they are $14,947,000 (1995 price levels). Flood damages prevented on future developments were determined by projecting future damages at rates equal to the projected population growth and bringing them back to present value by applying a discount rate of 3-1/4 percent. Present values were then amortized for the life of the project to obtain average annual benefits on future damages prevented. The relationship between depth of flooding and percent damage of structures and contents was derived from detailed studies of flood damages in the coastal area of Louisiana for four hurricanes, Carla (1961), Hilda (1964), Betsy (1965) and Camille (1969). These in-depth studies were made for flood insurance rate studies conducted by the U.S. Army Corps of Engineers for the Federal Insurance Administration.

Lafourche Parish has been determined to be an area of "substantial and persistent" unemployment.

The project will provide protection against flooding from hurricanes having a frequency of occurrence of once in 100 years. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$ 3,559,000
Area Redevelopment	24,000
Total	$ 3,583,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Section C-North P&S	$ 200,000
Miscellaneous Floodwall Cappings	150,000
Lands and Damages	13,000
Planning, Engineering and Design	150,000
Supervision and Administration	70,000
Total	$ 583,000

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

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way, including borrow and dredged material disposal areas (as applicable).	$ 4,973,000	
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	$ 7,966,000	
Pay 30 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers.	$22,061,000	
Bear all cost of operation and maintenance including replacements.		$ 219,000
Total Non-Federal Cost	$35,000,000	$ 219,000

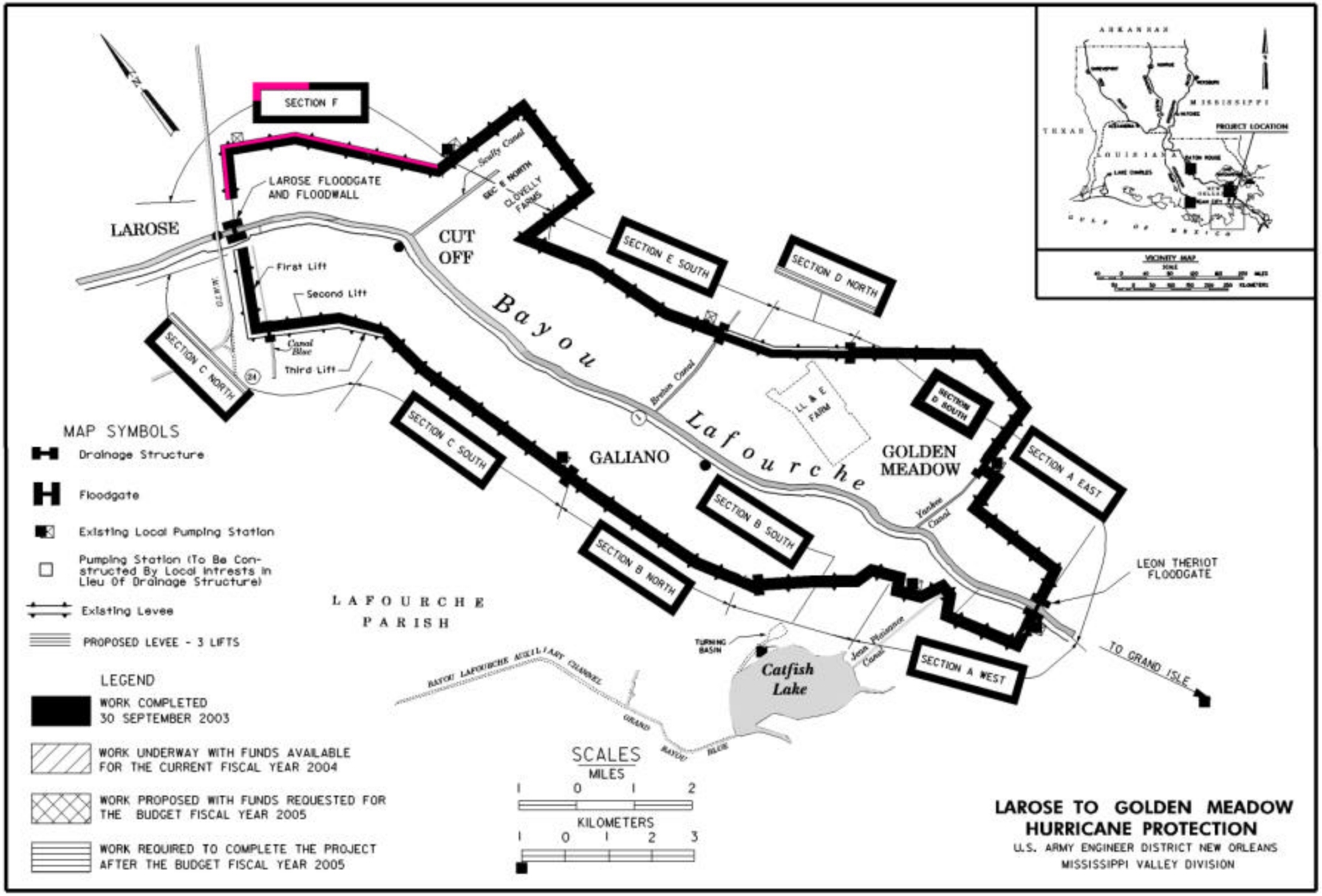
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Assurances covering all requirements of local cooperation were received from the South Lafourche Levee District and accepted on behalf of the United States on 29 August 1973. The South Lafourche Levee District has requested and received funds from the State of Louisiana for rights-of-way acquisition and relocations required to support construction work. In addition to lands and damages and relocations, the South Lafourche Levee District has accomplished levee construction, pumping station and lateral levee construction, and administrative/operating work.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $81,000,000 is the same as last presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 13 May 1974. A draft supplement to the Environmental Impact Statement covering the revised levee alignments, previously unidentified wetland impacts, and necessary mitigation, was filed with the Environmental Protection Agency on 20 July 1984, and the final supplement was filed with the Environmental Protection Agency on 1 March 1985. An Environmental Assessment covering the revised levee alignment for Section D-North was distributed for review on 3 December 1990, and a Finding of No Significant Impact for the revised alignment was signed on 8 March 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1967, and funds to initiate construction were appropriated in Fiscal Year 1972.


SECTION F
LAROSE FLOODGATE AND FLOODWALL
LAROSE
First Lift
Second Lift
Third Lift
Canal Blue
Scully Canal
SEC. 8 NORTH
CLOVELLY FARMS
CUT OFF
Bayou
Lafourche
SECTION E SOUTH
SECTION D NORTH
SECTION C NORTH
SECTION C SOUTH
SECTION B NORTH
SECTION B SOUTH
SECTION D SOUTH
SECTION A EAST
SECTION A WEST
GALIANO
GOLDEN MEADOW
L.L. & E. FARM
Bruton Canal
Yankee Canal
LEON THERIOT FLOODGATE
TO GRAND ISLE
TURNING BASIN
Catfish Lake
Jean Plaisance Canal
BAYOU LAFOURCHE AUXILIARY CHANNEL
GRAND BAYOU BLUE
LAFOURCHE PARISH
MAP SYMBOLS
Drainage Structure
Floodgate
Existing Local Pumping Station
Pumping Station (To Be Constructed By Local Intrests In Lieu Of Drainage Structure)
Existing Levee
PROPOSED LEVEE - 3 LIFTS
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
SCALES
MILES
1 0 1 2
KILOMETERS
1 0 1 2 3
LAROSE TO GOLDEN MEADOW
HURRICANE PROTECTION
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
MISSISSIPPI VALLEY DIVISION
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP

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

PROJECT: New Orleans to Venice, Louisiana (Hurricane Protection)(Continuing)

LOCATION: The project is located in Plaquemines Parish, along the east bank of the Mississippi River from Phoenix, Louisiana, approximately 28 miles southeast of New Orleans, Louisiana to Bohemia, Louisiana and from St. Jude, Louisiana, on the west bank approximately 39 miles southeast of New Orleans, Louisiana to Venice, Louisiana.

DESCRIPTION: The recommended plan on the west side of the Mississippi River consists of enlarging approximately 3 miles of existing back levee between St. Jude and City Price, Louisiana; enlarging approximately 13 miles of existing back levee between City Price and Tropical Bend, Louisiana (Reach "A") and installing two 54-inch flap-gated corrugated metal culverts; enlarging approximately 12 miles of existing back levee between Tropical Bend and Fort Jackson, Louisiana (Reach "B-1") and constructing a floodgate at Empire, Louisiana; enlarging approximately 9 miles of existing back levee between Fort Jackson and Venice, Louisiana (Reach "B-2"); and enlarging approximately 34 miles of existing Mississippi River levee from Mile 10 to Mile 44 above Head of Passes (West Bank River Levee). On the east side of the Mississippi River, the recommended plan consists of enlarging approximately 16 miles of existing back levee between Phoenix, and Bohemia, Louisiana (Reach "C") and installing ten flap-gated culverts. All work is programmed.

AUTHORIZATION: Flood Control Act of 1962.

REMAINING BENEFIT-REMAINING COST RATIO: 3.4 to 1 at 2-7/8 percent.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 2-7/8 percent.

INITIAL BENEFIT-COST RATIO: 2.4 to 1 at 2-7/8 percent (FY 1964).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in March 1987 at 1986 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$ 177,000,000			St. Jude to City Price	60	TBD
Estimated Non-Federal Cost		76,000,000	[1]		Reach "A" – City Price To Tropical Bend	99	TBD
Cash Contribution	$30,240,000						
Other	45,760,000				Reach "B-1" – Tropical Bend to Fort Jackson	92	TBD
Total Estimated Project Cost		$ 253,000,000			Reach "B-2" – Fort Jackson to Venice	99	TBD
					Reach "C" – Phoenix to Bohemia	90	TBD
Allocations to 30 September 2003		$ 150,951,000					
Conference Allowance for Fiscal Year 2004		2,000,000			West Bank River Levee	60	TBD
Allocation for Fiscal Year 2004		1,545,000	[2]				
Allocation through Fiscal Year 2004		152,496,000		86 88	Entire Project	80	TBD
Allocation Requested for Fiscal Year 2005		2,965,000			Each reach, when complete, will provide interim protection from flooding.		
Programmed Balance to Complete After Fiscal Year 2005		21,539,000					
Unprogrammed Balance to Complete After Fiscal Year 2005		0					

[1] Cost does not include $505,000 non-Federal work authorized by the Post Authorization Change Report for St. Jude to City Price Levee Enlargement.

[2] Reflects $443,000 reduction assigned as savings and slippage and $12,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

Reach	Levees and Floodwalls	Drainage Structure
St. Jude to City Price	Enlarge approximately 3 miles	None
"A" - City Price to Tropical Bend	Enlarge approximately 13 miles	Two 54" flap-gated corrugated metal culverts.
"B-1" - Tropical Bend to Fort Jackson	Enlarge approximately 12 miles	Floodgate at Empire
"B-2" - Fort Jackson to Venice	Enlarge approximately 9 miles	None
"C" - Phoenix to Bohemia	Enlarge approximately 16 miles	Ten flap-gated culverts
West Bank River Levee	Enlarge approximately 34 miles of levee on the Mississippi River west bank from Mile 10 to Mile 44 above Head of Passes.	None

JUSTIFICATION: The project will provide protection from hurricane tidal overflow to a major part of the developed and inhabited area along the Mississippi River delta. Approximately seventy-five percent of the population and seventy percent of the improved lands within the delta are contained in the project area. Hurricanes in the past have caused overtopping of the existing protective works, resulting in extensive damage to structures, industries, other urban and rural developments, crops, and livestock. Evacuation of inhabitants has been required frequently. The most recent storm causing extensive damages, Hurricane Camille, occurred on 17 August 1969. Severe damages were sustained in Reaches B-1 and B-2 (Empire to Venice), and somewhat lesser damages were sustained in Reach A (Port Sulphur to Empire). Estimated flood damages sustained in the project area due to hurricanes are as follows:

Year of Hurricane	Actual Damages Sustained	Damages at Present Value and Conditions of Development
September 1915	$ 2,325,000	$175,043,000
September 1956 (Flossy)	1,709,000	17,048,000
September 1957 (Esther)	1,180,000	11,904,000
September 1965 (Betsy)	45,500,000	336,711,000
August 1969 (Camille)	62,500,000	329,805,000
October 1985 (Juan)	46,000,000	74,659,000

The present value and type of property subject to flood damages are as follows:

	Flood of Record	Protection by Authorized Works Against Design Flood
Number of Acres:		
Agriculture or undeveloped	11,800	11,800
Residential	2,500	2,500
Commercial	600	600
Marshland	0	0
Total	14,900	14,900
Value of Lands and Improvements:		
Lands	$216,300,000	$216,300,000
Improvements	$445,100,000	$445,100,000
Total	$661,400,000	$661,400,000

The back levees are designed for protection against hurricane-generated stages of 100-year frequency. The maximum flood of record on the east side of the Mississippi River occurred in September 1965 (Betsy). On the west side, the maximum flood occurred in August 1969 (Camille). The damages from Hurricane Betsy were $45,500,000 in 1965 ($336,711,000 present). The damages from Hurricane Camille were $62,500,000 in 1969 ($329,805,000 present).

The duration of flooding within the project area lasted from about three days to several weeks. The most recent flood event was Hurricane Juan in October 1985.

Benefits from the project consist of reduction of flood damage from hurricane tidal overflow caused by overtopping of the existing back levees and land intensification. The average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$ 2,303,000
Mitigation	12,000
Total	$ 2,315,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

West Bank River Levees	
Continue:	
Station 1313-1793, 2nd Enlargement	$2,060,000
Lands and Damages	5,000
Planning, Engineering and Design	500,000
Supervision and Administration	400,000
Total	$ 2,965,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements		Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way including borrow and dredge material disposal areas.	$ 9,032,000		
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	5,698,000		
Pay 30 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project after authorization and in accordance with construction schedules as required by the Chief of Engineers.	61,270,000		
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement.			$ 938,300
Subtotal Non-Federal Costs	$76,000,000		$ 938,300
Bear all of the costs of the construction of the St. Jude to City Price, LA levee enlargement in excess of the cost of the Federal Plan.	505,000	[1]	
Total Non-Federal Costs	$76,505,000	[1]	$ 938,300

The Non-Federal sponsor has agreed to make all required payments concurrently with project construction.

In addition, prior to project authorization, local interests expended in excess of $3,761,000 between 1 April 1926 and 31 December 1959, in the Mississippi River delta area below New Orleans for levees and interior drainage facilities to provide protection against inundation from storm tides.

[1] Project cost estimate does not include $505,000 non-Federal work authorized by the Post Authorization Change Report for St. Jude to City Price Levee Enlargement.

STATUS OF LOCAL COOPERATION: Assurances of local cooperation for Reaches A, B-1, B-2, and C furnished by the Plaquemines Parish Commission Council were accepted on behalf of the United States on 14 April 1965. Supplemental assurances covering provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, furnished by the Plaquemines Parish Commission Council were accepted on behalf of the United States on 20 June 1973. The local sponsor, on 29 December 1987, provided the supplemental assurances of local cooperation for the West Bank River Levee. These assurances were accepted on 28 January 1988. Supplemental assurances of local cooperation for the St. Jude to City Price, Louisiana, levee enlargement were furnished by the Plaquemines Parish Government on 21 December 1992 and were accepted on 18 February 1993.

Local interests have constructed the first and second lifts of Reach C. Based on more detailed planning of construction, a third and fourth lift are required to raise the existing levee to project grade. Credit for equivalent work in lieu of a cash contribution is given upon evaluation of the construction. Local interests have been providing their required cash contributions on schedule to maintain their proportionate share of the project costs.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $177,000,000 is an increase of $1,000,000 from the latest estimate ($176,000,000) presented to Congress (FY 2004). This change includes the following items:

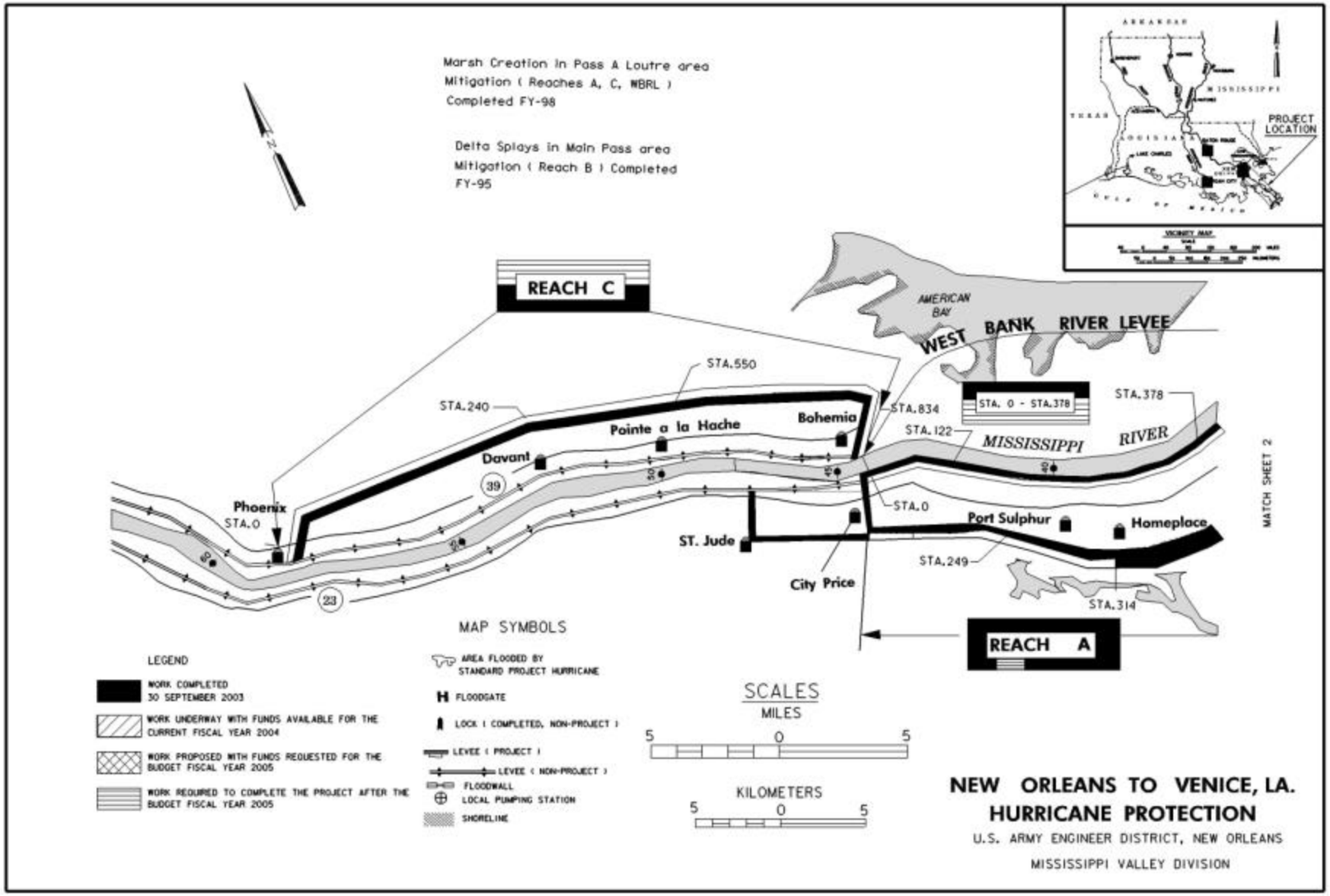
Item	Amount
Price Escalation on Construction Features	$ - 1,790,000
Post Contract Award and Other Estimating Adjustments	2,790,000
Total	$ +1,000,000

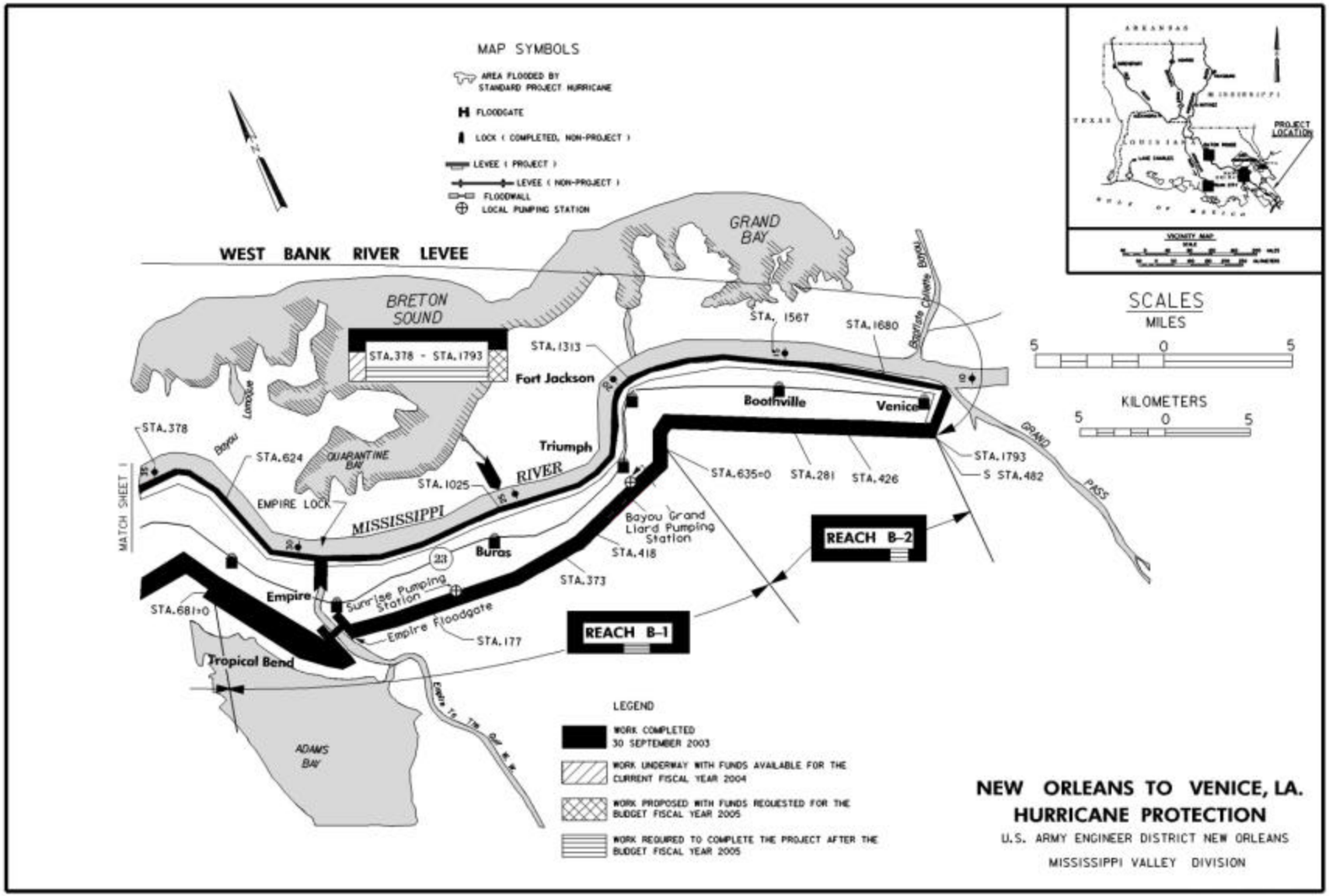
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 24 January 1975; however, during subsequent review, it became apparent that the final Environmental Impact Statement was deficient. A draft Environmental Impact Statement supplement was submitted to the Environmental Protection Agency on 23 March 1984, and the final Environmental Impact Statement supplement with a Section 404 evaluation was filed with the Environmental Protection Agency on 12 April 1985. A draft Supplemental Environmental Impact Statement (Supplement II) for work on the West Bank River Levee was submitted to the Environmental Protection Agency on 5 August 1987, and the final was submitted on 4 December 1987.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1963 and funds to initiate construction were appropriated in Fiscal Year 1964.

The project will impact approximately 3,000 acres of habitat (not including shallow open water). Of the 3,000 acres, 1,103 acres will be mitigated. A mitigation plan has been developed for Reach B that will produce new marsh in the Delta National Wildlife Refuge using delta-splays. Five crevasses in the bank at Main Pass are required for Reach B and have been constructed. A Supplemental Mitigation Plan has been developed to readdress impacts on Reach A and also determine mitigation requirements for Reach C and the West Bank River Levee. Approval of this Supplemental Mitigation Report was received in 1996. This supplemental plan, consisting of creating and preserving marsh, was constructed in 1997.

At the request of Plaquemines Parish, a Post Authorization Change report was prepared to incorporate the area from St. Jude to City Price (an additional 3.3 miles of levee protection) into the project. This area is adjacent to the upstream end of Reach A. Costs for this work are 100 percent non-Federal. Plaquemines Parish wants to include this reach so that flood insurance can be obtained by residents and industry in the area. The lateral levee at City Price, which is currently the upstream terminus of Reach A, will not be constructed. The savings achieved by not constructing the lateral levee and its related relocations will be creditable to the local sponsor. The Post Authorization Change report was submitted to Lower Mississippi Valley Division on 5 February 1992, and was approved 6 March 1992. Proposed supplemental assurances were approved on 10 July 1992. Plaquemines Parish Government executed the supplemental assurances on 21 December 1992 and they were accepted on 18 February 1993.


Marsh Creation in Pass A Loutre area
Mitigation (Reaches A, C, NBRL)
Completed FY-98
Delta Splays in Main Pass area
Mitigation (Reach B) Completed
FY-95
REACH C
AMERICAN BAY
WEST BANK RIVER LEVEE
STA.550
STA.240
STA.834
STA. 0 - STA.378
STA.378
STA.122
MISSISSIPPI RIVER
Pointe a la Hache
Bohemia
Davant
39
Phoenix
STA.0
STA.0
Port Sulphur
Homeplace
ST. Jude
STA.249
City Price
STA.314
23
REACH A
MATCH SHEET 2
PROJECT LOCATION
MAP SYMBOLS
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
AREA FLOODED BY STANDARD PROJECT HURRICANE
FLOODGATE
LOCK (COMPLETED, NON-PROJECT)
LEVEE (PROJECT)
LEVEE (NON-PROJECT)
FLOODWALL
LOCAL PUMPING STATION
SHORELINE
SCALES
MILES
5 0 5
KILOMETERS
5 0 5
NEW ORLEANS TO VENICE, LA.
HURRICANE PROTECTION
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION
SHEET 1 OF 2


MAP SYMBOLS
AREA FLOODED BY STANDARD PROJECT HURRICANE
FLOODGATE
LOCK (COMPLETED, NON-PROJECT)
LEVEE (PROJECT)
LEVEE (NON-PROJECT)
FLOODWALL
LOCAL PUMPING STATION
WEST BANK RIVER LEVEE
GRAND BAY
BRETON SOUND
STA. 378 - STA. 1793
Fort Jackson
STA. 1313
STA. 1567
STA. 1680
Bootheville
Venice
Triumph
RIVER
MISSISSIPPI
STA. 378
STA. 624
QUARANTINE BAY
EMPIRE LOCK
STA. 1025
STA. 635+0
STA. 281
STA. 426
STA. 1793
S STA. 482
GRAND PASS
Bayou Grand Liard Pumping Station
STA. 418
STA. 373
Buras
Empire
Sunrise Pumping Station
Empire Floodgate
STA. 177
STA. 681+0
Tropical Bend
ADAMS BAY
REACH B-2
REACH B-1
MATCH SHEET 1
SCALES
MILES
5 0 5
KILOMETERS
5 0 5
PROJECT LOCATION
VICINITY MAP
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
NEW ORLEANS TO VENICE, LA.
HURRICANE PROTECTION
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
MISSISSIPPI VALLEY DIVISION

SHEET 2 OF 2

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

PROJECT: Southeast Louisiana, Louisiana (Continuing)

LOCATION: The project is located in the urban areas of Jefferson, Orleans and St. Tammany parishes in southeast Louisiana. These areas make up the three major urban centers of the New Orleans Metropolitan Statistical Area.

DESCRIPTION: Programmed work includes canal improvements, removal of canal obstructions, and increased pumping capacities in Jefferson and Orleans Parishes. Channel improvement on Mile Branch near Covington, Louisiana, in St. Tammany Parish is unprogrammed.

AUTHORIZATION: Energy and Water Development Appropriations Act, Fiscal Year 1996 (Section 108), and the Water Resources Development Act of 1996 and 1999 (Section 533).

REMAINING BENEFIT - REMAINING COST RATIO: 3.1 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 2.5 to 1 at 8 percent.

INITIAL BENEFIT - COST RATIO: 2.5 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are based on the Jefferson and Orleans Parishes, Louisiana, Urban Flood Control and Water Quality Management reconnaissance study dated July 1992 at October 1991 price levels and the Tangipahoa, Tchefuncte, and Tickfaw Rivers reconnaissance study dated June 1991 at October 1990 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$532,000,000		Jefferson Parish	80	TBD
Estimated Non-Federal Cost		182,000,000		Orleans Parish	90	TBD
Cash Contribution	142,340,000			St. Tammany Parish	0	TBD
Other	39,660,000					
Total Estimated Project Cost		$714,000,000		PHYSICAL DATA		
Allocations to 30 September 2003		355,821,000		Channel Improvement: 7 miles		
Conference Allowance for FY 2004		34,000,000 1/		Pumping Stations Modifications: 6		
Allocation for FY 2004		25,911,000		New Pump Stations: 2		
Allocations through FY 2004		381,732,000	72			
Allocation Requested for FY 2005		30,000,000	77			
Programmed Balance to Complete After FY 2005		72,230,000				
Unprogrammed Balance to Complete After FY 2005		48,038,000				

1/ Reflects $7,524,000 reduction assigned as savings and slippage, $201,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004, and $364,000 reprogrammed from the project.

JUSTIFICATION: Jefferson, Orleans, and St. Tammany parishes are located in southeast Louisiana. They make up the three major urban centers of the New Orleans Metropolitan Statistical Area. Jefferson Parish has a population of 450,000 (1990). Orleans Parish and the City of New Orleans have coincident boundaries and a population of 500,000 (1990). Jefferson and Orleans Parishes are located in the deltaic plain of the Mississippi River, within the coastal zone of Louisiana. St. Tammany Parish, on the north shore of Lake Pontchartrain, is developing rapidly with a population of 143,000 in 1990, a 30-percent increase since 1980.

Jefferson and Orleans Parishes are bisected by the Mississippi River, creating an east and a west bank area. Generally, the areas near the Mississippi River are above sea level. However, ground elevations decrease with distance from the river and some areas within the levee systems have elevations of as much as nine feet below sea level. Most of the developed areas are protected by levee systems from river and hurricane flooding and drained by pumps which discharge primarily into estuarine water bodies such as Lake Pontchartrain, Barataria Bay, and Lake Borgne.

The leveed areas in Jefferson Parish are divided into three hydrologically distinct basins (East Bank, West Bank - East of Harvey Canal, and West Bank - West of Harvey Canal) that are further subdivided into many sub-basins by natural and man-made barriers. These basins are webbed with canals that terminate at pumping stations. The east bank includes the cities of Kenner and Harahan and unincorporated Metairie. The west bank includes the cities of Westwego and Gretna and the unincorporated communities of Avondale, Bridge City, Marrero, Harvey, Terrytown, and Lafitte.

Orleans Parish is divided into many sub-basins by natural and man-made barriers. These basins are also webbed with canals that terminate at pumping stations. The City of New Orleans makes up an east bank and a west bank basin. The west bank community is commonly referred to as Algiers.

St. Tammany Parish includes the cities of Covington, Slidell, Mandeville, Madisonville, Lacombe, Abita Springs, and other smaller communities. The parish is characterized by gently rolling hills which become flatter in the south near Lake Pontchartrain. A narrow bank of deltaic plain extends along the shore of the lake. Elevations range from 200 feet in the north to near sea level at the lake. The parish is drained by numerous watersheds of varying size. The Pearl River drains an area along the east side of the parish, and backwater flooding from the river occurs in the southeast near Slidell. The remainder of the parish is drained by the Tchefuncte River, Bayou Lacombe, Bayou Bonfouca, and numerous smaller watersheds. Rapid growth, primarily in the southern portion of the parish, has increased rainfall runoff and flooding. The area along the north shore of the lake, including portions of Slidell, Mandeville, Madisonville, and Lacombe, are also subject to flooding from hurricane surges.

Approximately 30 percent of the state's population and 40 percent of the state's economy reside in the three affected parishes which have suffered great flooding losses. Local interests have made substantial improvement to the existing flood control system but are unable to address the major flooding events that continue to plague the Southeast Louisiana area. Flood damages since 1979 are in the billions of dollars. In the extreme rainfall event that occurred in May 1995, more than 24 inches of rain fell into the basin in less than 24 hours. Damages from this one event were approximately $1.5 billion. The Federal expenditures for this damage recovery are expected to exceed $500 million. The average annual benefits, all flood control, are $54,877,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Jefferson Parish	
Continue:	
Soniat, Nap to Lynette	$ 3,500,000
Two Mile Canal Phase I	6,300,000
Lands and Damages	100,000
Surveys and Layouts	34,000
Planning, Engineering and Design	6,605,000
Supervision and Administration	2,200,000
Subtotal	18,739,000
Orleans Parish	
Complete:	
Hollygrove Phase I	100,000
Dwyer Rd P.S. Addition	200,000
Dwyer Discharge	221,000
Lands and Damages	44,000
Surveys and Layouts	41,000
Planning, Engineering and Design	9,055,000
Supervision and Administration	1,600,000
Subtotal	11,261,000
Total	$ 30,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way, including borrow and dredged material disposal areas.	$ 13,844,000	
Accomplish alterations to roads, pipelines, cables, wharves, oil wells, and any other facilities necessary for construction of the project.	$ 25,816,000	
Bear 25 percent of the total project cost, to include the items listed above and a cash contribution or equivalent work specifically undertaken as an integral part of the project subsequent to the reports cited in the authorizing language.	$142,340,000	
Bear all costs of operation, maintenance, repair, rehabilitation and replacements of all features of the project.		$ 1,592,000
Total Non-Federal Cost	$182,000,000	$ 1,592,000

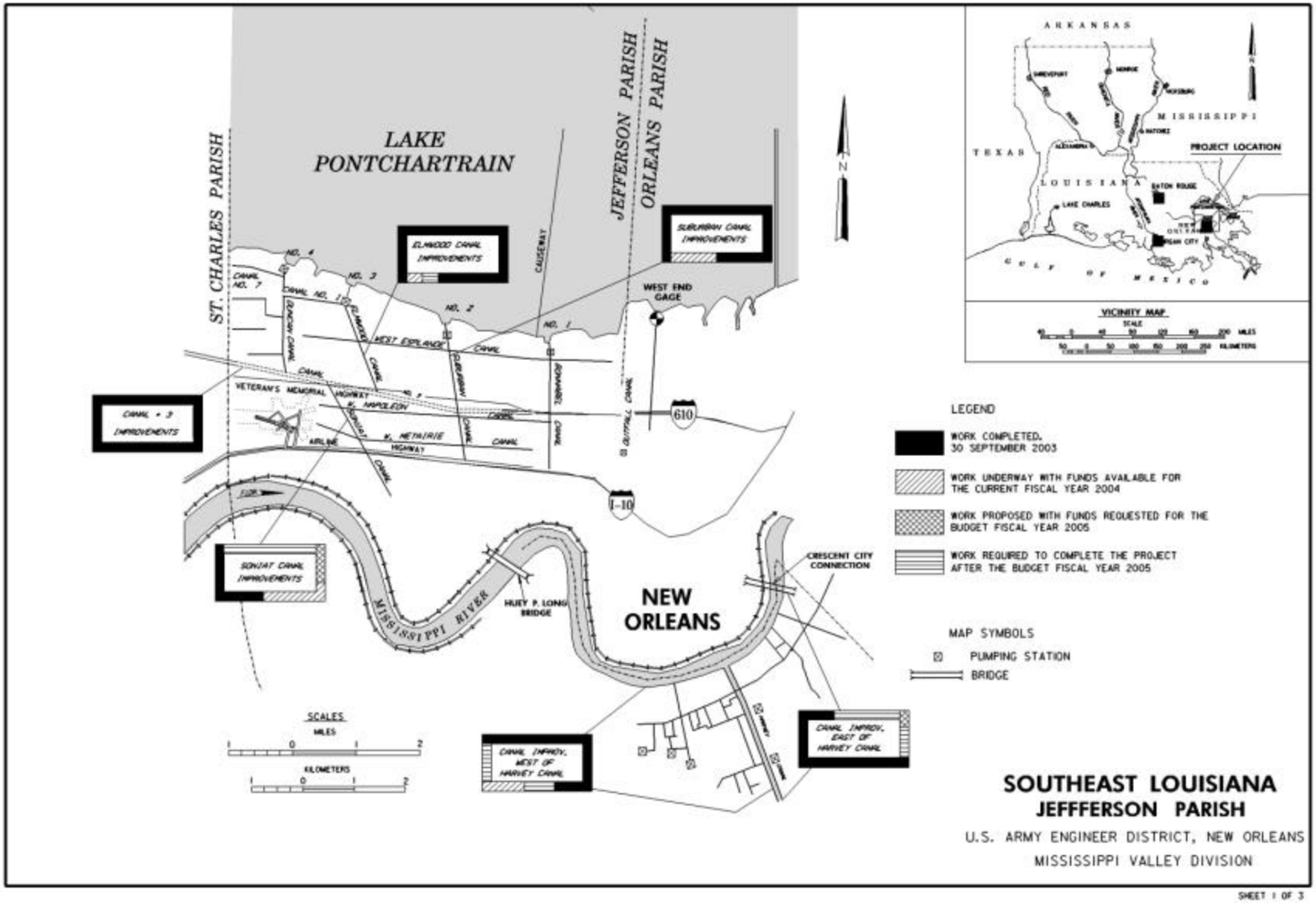
STATUS OF LOCAL COOPERATION: The Project Cooperation Agreements between the Federal Government and Jefferson and Orleans Parishes were executed on January 16, 1997, and January 23, 1997, respectively. The Project Cooperation Agreement for the authorized work in St. Tammany Parish is currently unscheduled. Local interests have accomplished significant work compatible and integral to the project. Actual credit for equivalent work in lieu of cash contributions will be given subject to technical evaluations and audit.

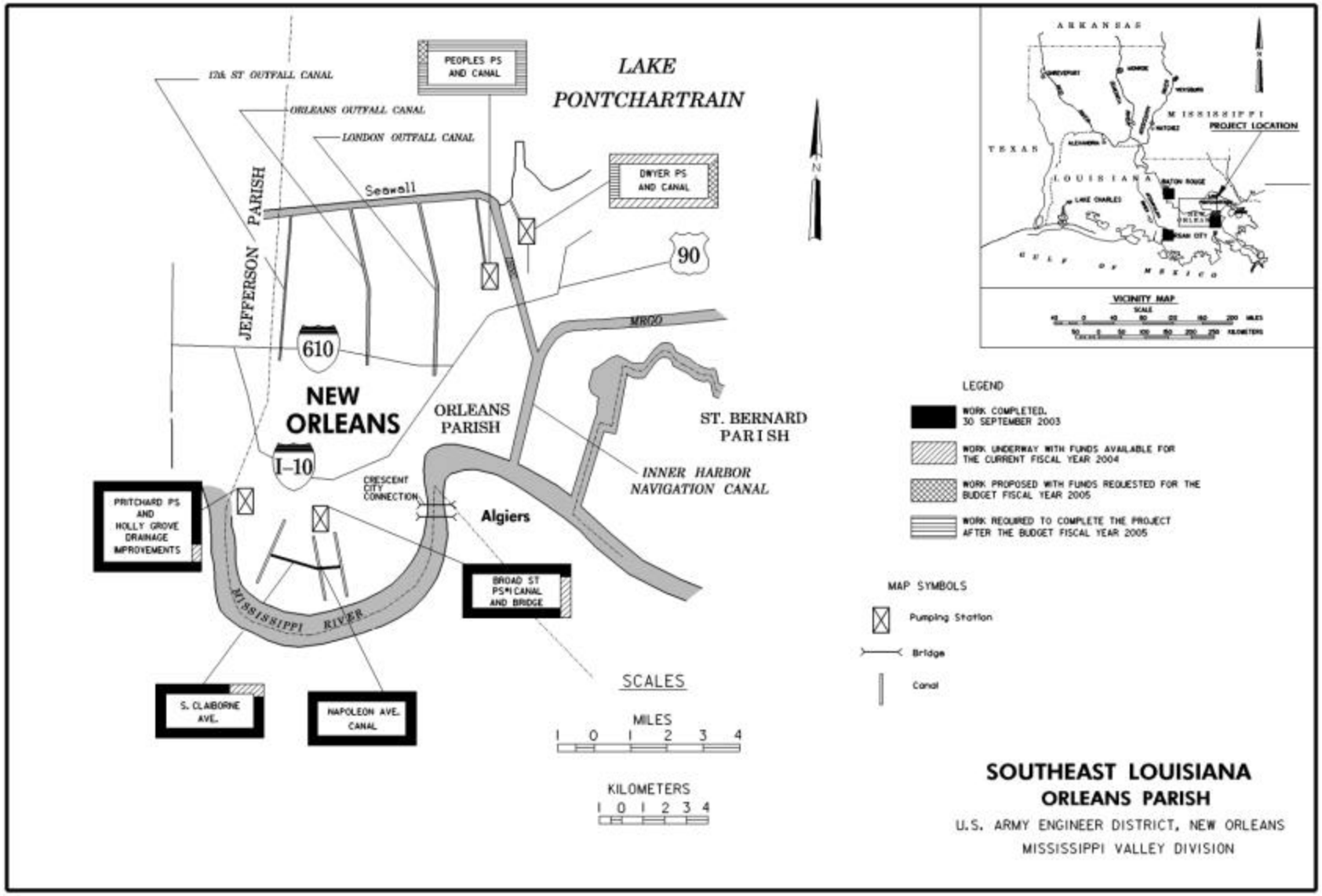
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $532,000,000 is an increase of $7,000,000 from the latest estimate ($525,000,000) presented to Congress (FY 2004). This change includes the following items:

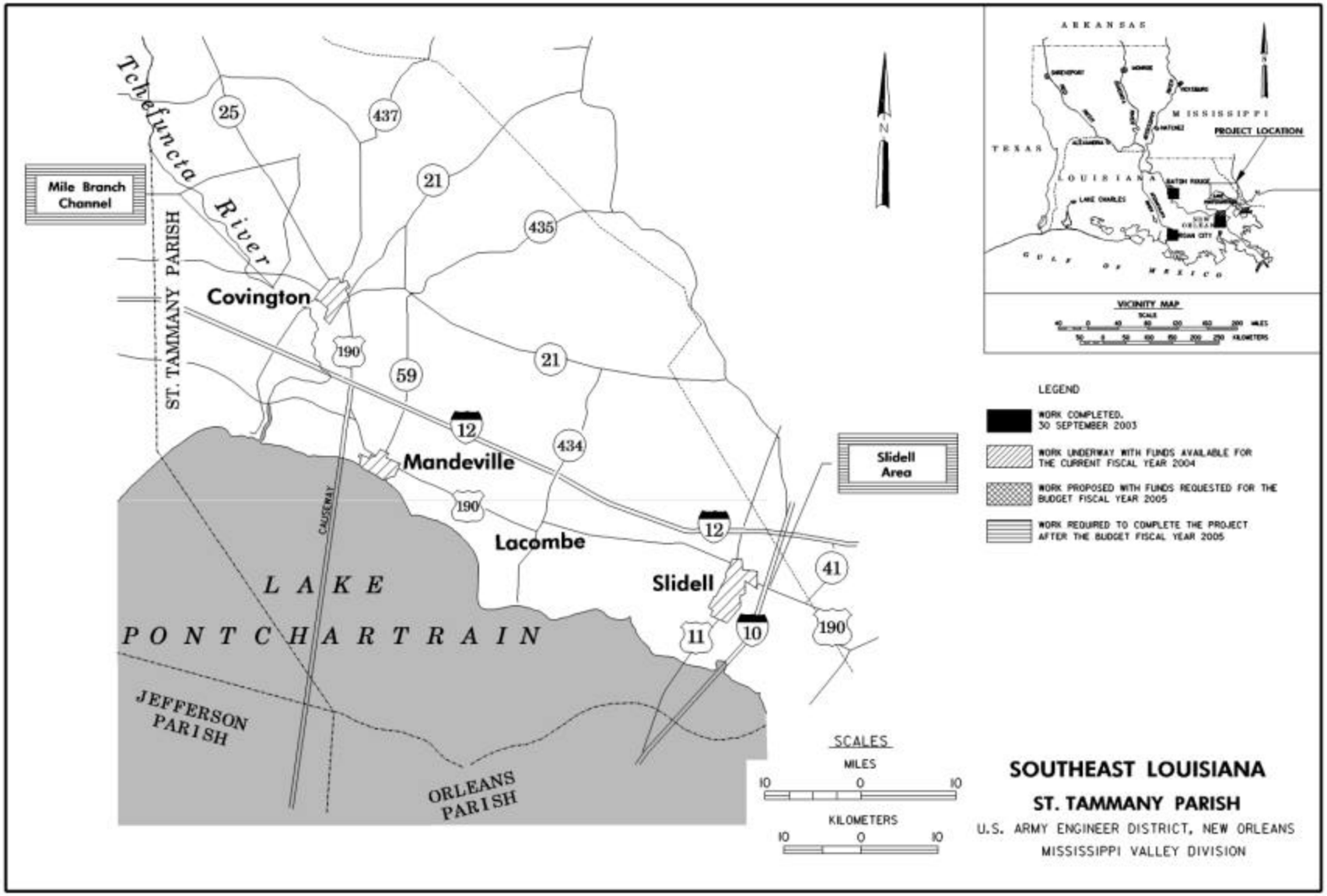
Item	Amount
Price Escalation on Construction Features	$ - 318,000
Design Changes	$ 7,318,000
Total	$ 7,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: All environmental documentation associated with the work planned in Jefferson and Orleans Parishes has been completed. The environmental documentation for work in St. Tammany Parish will be completed prior to initiation of construction.

OTHER INFORMATION: Funds to initiate engineering, design and construction were appropriated in Fiscal Year 1996. The total estimated cost for the work described in the reports cited in the authorizing language is $647,000,000. Construction funds for St. Tammany Parish are not programmed for lack of an approved Technical Report. The City of Slidell has indicated its intent to act as local sponsor for a project within the city limits. A Technical Report is being prepared with completion scheduled for June 2004.


LAKE PONTCHARTRAIN
ST. CHARLES PARISH
JEFFERSON PARISH
ORLEANS PARISH
ELMWOOD CANAL IMPROVEMENTS
SUBURBAN CANAL IMPROVEMENTS
CANAL # 3 IMPROVEMENTS
SONIAT CANAL IMPROVEMENTS
CANAL IMPROV. WEST OF HARVEY CANAL
CANAL IMPROV. EAST OF HARVEY CANAL
WEST END GAGE
CAUSEWAY
WEST ESPLANADE
VETERAN'S MEMORIAL HIGHWAY
NAPOLEON
N. METAIRIE HIGHWAY
AIRLINE HIGHWAY
MISSISSIPPI RIVER
HUEY P. LONG BRIDGE
NEW ORLEANS
CRESCENT CITY CONNECTION
I-10
610
N
SCALES
MILES
KILOMETERS
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
GULF OF MEXICO
PROJECT LOCATION
VICINITY MAP
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
PUMPING STATION
BRIDGE
SOUTHEAST LOUISIANA
JEFFFERSON PARISH
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION
SHEET 1 OF 3


LAKE PONTCHARTRAIN
PEOPLES PS AND CANAL
12th ST OUTFALL CANAL
ORLEANS OUTFALL CANAL
LONDON OUTFALL CANAL
DWYER PS AND CANAL
Seawall
JEFFERSON PARISH
90
610
MRGO
NEW ORLEANS
ORLEANS PARISH
ST. BERNARD PARISH
I-10
INNER HARBOR NAVIGATION CANAL
CRESCENT CITY CONNECTION
Algiers
PRITCHARD PS AND HOLLY GROVE DRAINAGE IMPROVEMENTS
BROAD ST PS#1 CANAL AND BRIDGE
MISSISSIPPI RIVER
S. CLAIBORNE AVE.
NAPOLEON AVE. CANAL
SCALES
MILES
1 0 1 2 3 4
KILOMETERS
1 0 1 2 3 4
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
Pumping Station
Bridge
Canal
SOUTHEAST LOUISIANA
ORLEANS PARISH
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION
SHEET 2 OF 3


Tchefuncta River
Mile Branch Channel
ST. TAMMANY PARISH
Covington
Mandeville
Lacombe
Slidell
Slidell Area
CAUSEWAY
LAKE PONTCHARTRAIN
JEFFERSON PARISH
ORLEANS PARISH
25
437
21
435
190
59
12
434
41
11
10
N
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
LEGEND
WORK COMPLETED. 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
SCALES
MILES
KILOMETERS
SOUTHEAST LOUISIANA
ST. TAMMANY PARISH
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION
SHEET 3 OF 3

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

PROJECT: West Bank and Vicinity, New Orleans, LA (Hurricane Protection) (Continuing)

LOCATION: The project is located along the west bank of the Mississippi River in the Vicinity of New Orleans in Jefferson, Orleans and Plaquemines Parishes.

DESCRIPTION: The recommended plan consists of new and enlarged levees along the permitted alignment which generally extends from the St. Charles/Jefferson Parish boundary line east along the existing Lake Cataouatche Levee to the Westwego/Bayou Segnette area, from the Westwego area along the existing V-levee alignment to the vicinity of the old Estelle Pumping Station and along the existing Harvey Canal-Bayou Barataria Levee tying into the floodwall at the Cousins Pump Station, then from the pump station to the navigable sector floodgate complex which is to be constructed in the Harvey Canal near the Cousins Pumping Station. Floodwalls will be used along the levee alignment mentioned above when tying into pumping stations and when land constraints dictate. The plan also provides for the construction of a navigable floodgate in the Harvey Canal just south of Lapalco Boulevard, and the construction of floodwalls along the east bank of the Harvey Canal generally along Peters Road south of Lapalco Boulevard. The existing levees adjacent to Algiers and Hero Canals will be raised, and the levee along the north bank of the Hero Canal will include a wave berm. Mitigation of significant environmental losses to bottomland hardwood and cypress swamp will be accomplished by acquisition of 1,282 acres of high quality wooded lands including wetlands and implementation of measures designed to primarily improve habitat quality. Deferred construction to address future changes in flood stages due to regional subsidence and sea level rise is unprogrammed.

AUTHORIZATION: Water Resources Development Acts of 1986, 1996 and 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 10.1 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 3.8 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 3.8 to 1 at 7 1/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available economic analysis provided in the West Bank - East of Harvey Canal Feasibility Report approved in September 1994, updated to October 1998 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST
Estimated Federal Cost			$204,000,000	
Programmed Construction		$195,296,000		
Unprogrammed Construction		8,704,000		
Estimated Non-Federal Cost			110,000,000	
Programmed Construction		105,313,000		
Cash Contribution/WIK	$105,313,000			
Other	0			
Estimated Non-Federal Cost				
Unprogrammed Construction		4,687,000		
Cash Contribution/WIK	4,687,000			
Other	0			
Total Estimated Programmed Construction Cost			300,609,000	
Total Estimated Unprogrammed Construction Cost			13,391,000	
Total Estimated Project Cost			314,000,000	
Allocations to 30 September 2003			82,190,700	
Conference Allowance for FY 2004			28,500,000	
Allocations for FY 2004			21,363,000 [2]	
Allocations through FY 2004			103,553,700	51
Allocation Requested for FY 2005			37,000,000	69
Programmed Balance to Complete After FY 2005			54,742,300	
Unprogrammed Balance to Complete After FY 2005			8,704,000	

STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Westwego to Harvey	79	TBD
West of Algiers Canal	15	TBD
East of Algiers Canal	16	TBD
Lake Cataouatche	23	TBD
Entire Project [1]	36	TBD

PHYSICAL DATA

Westwego to Harvey Canal Area

Construct approximately 22 miles of levee and 2 miles of floodwall.

West of Algiers Canal Area

Construct approximately 11 miles of levee and 5 miles of floodwalls.

Construct a sector floodgate in the Harvey Canal

Increase capacity of the Cousins Pumping Station and the discharge channel by 1000 cfs.

East of Algiers Canal Area

Construct approximately 14 miles of levee and about ½ mile of floodwall.

Lake Cataouatche Area

Construct approximately 10 miles of levee and 2.5 miles of floodwall.

[1] Deferred construction to address future changes in flood stages due to regional subsidence and sea level rise is assumed to occur in 2021.

[2] Reflects $6,307,000 reduction assigned as savings and slippage, $169,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004, and $661,000 reprogrammed from the project.

JUSTIFICATION: The project area is generally bounded by the St. Charles/Jefferson Parish line to the west, the Mississippi River to north and east, and Barataria Bay and Lake Salvador to the south. Tidal waters can be carried into the project area through Lakes Cataouatche, Salvador and Barataria Bay which connect to the Gulf of Mexico through Barataria Bay, and into Bayou Segnette, Harvey Canal and Algiers Canal. Fresh water comes into the area from the Mississippi River via the Harvey and Algiers Locks, direct rainfall, and pumpage from leveed areas.

Several hurricanes and tropical storms have passed through or near the project area, including the following major storms: the 1915 hurricane, the 1947 hurricane, and Hurricanes Flossy (1956), Hilda (1964), Betsy (1965), Carmen (1974), Babe (1977), Bob (1979), Danny (1985), Juan (1985), Andrew (1992), and Frances (1998). Hurricane Flossy brought torrential rains and tidal flooding to the project area, with nearby areas recording 16.7 inches of rain in a 24-hour period. Hurricane Hilda raised water levels at Barataria and Lafitte to 3.6 and 4.04 feet National Geodetic Vertical Datum, respectively. Hurricanes Betsy and Carmen also caused flooding to some parts of the project area. Hurricane Juan, generally characteristic of a storm event of approximately 25 years, broke high water records throughout the area, with stages in the Harvey Canal estimated to be the equivalent of a 60-year event. On the west bank, three local levees were breached and several subdivisions were flooded by tidal inundation and the long duration of the high stages. Extensive flooding occurred west of the Harvey Canal. The total precipitation from Hurricane Juan ranged from 8 to 12 inches over the project area. This storm clearly illustrated that the present local levee system is unable to provide protection against a tidal surge. The quick action and massive flood fighting efforts by the West Jefferson Levee District, the Parish of Jefferson, the National Guard, and thousands of volunteers prevented flooding of potentially catastrophic proportions. The project will provide Standard Project Hurricane (SPH) (about a 500-year event) protection to approximately 77,908 acres of mostly urban land with a population of 201,000 (1990 census). The average annual benefits, all flood control, are $71,199,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Westwego to Harvey Canal Area	
Continue:	
Reach 3 Structures (MTK/Ames/Oak Cove F/W)	$ 1,000,000
Surveys and Layouts	50,000
Lands and Damages	5,000
Planning, Engineering and Design	500,000
Supervision and Administration	400,000
Subtotal	$ 1,955,000

West of Algiers Canal Area	
Initiate:	
Contract 1 – Sector Gate – Boomtown	$ 2,000,000
Contract 2 – Boomtown – Hero Pump Sta.	2,000,000
Contract 3 – Hero Pump Sta – Algiers Canal	1,500,000
Belle Chasse Hwy to Hero Cutoff, West	2,000,000
Continue:	
Sector Gate (Harvey Canal)	12,000,000
Cousins Pump Sta. Exp. and Front Prot	2,000,000
Complete:	
Cousins P/S Disch Channel/FW/Culvert	1,000,000
Surveys and Layouts	100,000
Lands and Damages	50,000
Planning, Engineering and Design	1,000,000
Supervision and Administration	1,500,000
Subtotal	25,150,000
East of Algiers Canal Area	
Initiate:	
Hero Canal to Oakville, Reach 2	500,000
Continue:	
Belle Chasse Hwy – Algiers Lock, East	2,000,000
Plaquemines P/S to Belle Chasse Hwy East	500,000
Surveys and Layouts	50,000
Lands and Damages	50,000
Planning, Engineering and Design	500,000
Supervision and Administration	600,000
Subtotal	4,200,000
Lake Cataouatche Area	
Initiate:	
Segnette Pump Sta to Company Canal	500,000
Continue:	
Lake Cataouatche P/S to Segnette St Park	4,000,000
Surveys and Layouts	50,000
Lands and Damages	25,000
Planning, Engineering and Design	595,000
Supervision and Administration	525,000
Subtotal	5,695,000
Total	$ 37,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 (PL 99-662), the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights-of-way, and borrow and excavated material disposal areas.	$ 25,409,000	
Accomplish all alterations and relocations to utilities and facilities (other than railroad bridges) necessary for construction of the project.	12,135,000	
Pay 35 percent of the cost allocated to hurricane protection. Funds provided by non-Federal interests for the interim hurricane protection may be considered beneficial expenditures and may be credited as a part of the non-Federal contribution of the project pursuant to the Water Resources Development Act of 1986.	72,456,000	
Bear all costs of operation, maintenance, repair, rehabilitation, and replacement of all features of hurricane protection facilities.		$ 350,000
Total Non-Federal Costs	$110,000,000	$ 350,000

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement between the West Jefferson Levee District, previous local sponsor for the project, and the Federal Government was executed on 18 December 1990. Subsequent Memorandum of Agreement between the Louisiana Department of Transportation and Development (LADOTD) and the Federal Government, dated 16 May 1995, designated LADOTD as the project local sponsor. An amended Project Cooperation Agreement between LADOTD and the Federal Government was required for the east and west of the Algiers Canal and Lake Cataouatche area. The amended Project Cooperation Agreement (PCA) was executed 26 April 1999.

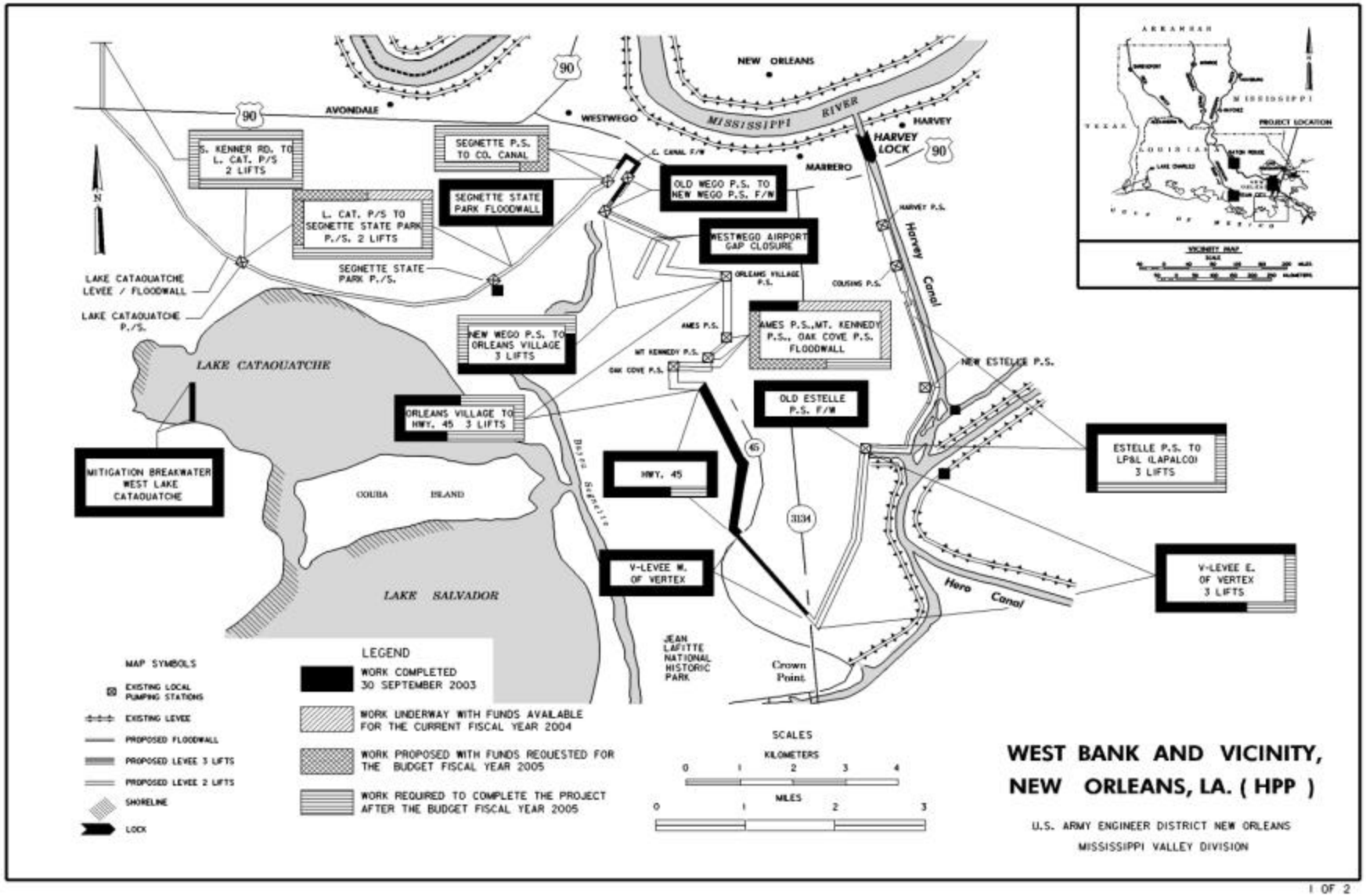
Local interests have accomplished engineering and design work and constructed numerous reaches of levee. Specifically, about $21,400,000 has been recommended in tentative credit to local interests for work accomplished or to be accomplished, subsequent to project authorization. Actual credit for equivalent work in lieu of cash contribution is given upon verification of engineering and design work and evaluation of the construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $204,000,000 is an increase of $1,000,000 from the latest estimate ($203,000,000) presented to Congress (FY 2004). This change includes the following items:

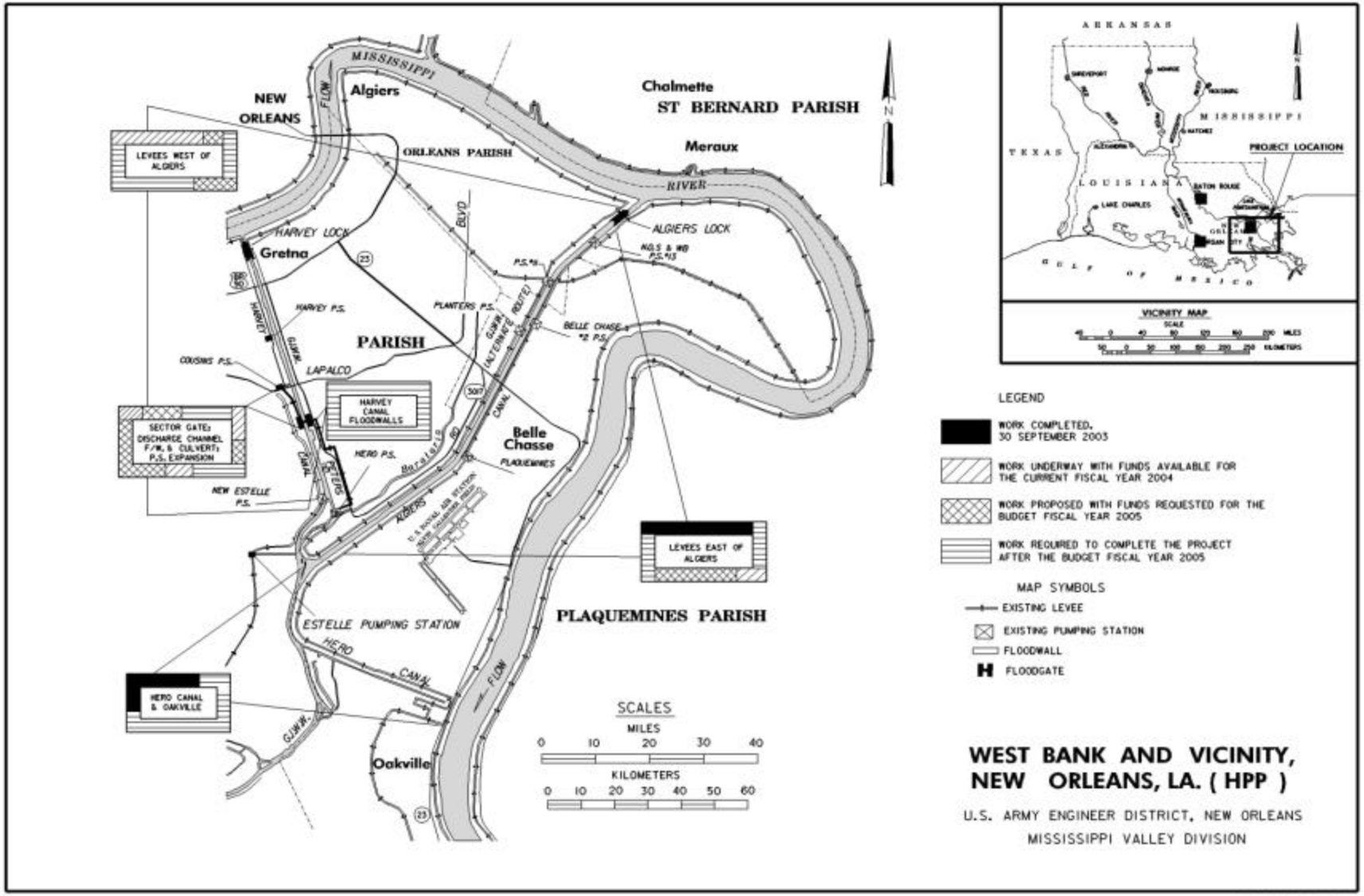
Item	Amount
Price Escalation on Construction Features	$ -10,000
Post Contract Award and Other Estimating Adjustments	1,010,000
Total	$ 1,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement Westwego Area was filed with the Environmental Protection Agency on 23 October 1987. The Record of Decision (ROD) was signed 28 March 1989. Environmental Assessments to address refinements in project design were prepared on 23 February 1990, June 1991, March 1992 and August 1993. A Finding of No Significant Impact (FONSI) was signed by the District Commander in each assessment. The final Environmental Impact Statement for the east and west of the Algiers Canal area was filed with Environmental Protection Agency on 30 September 1994. The ROD for East and West of Algiers Canal and Lake Cataouatche were signed on 28 September 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design for the east and west of the Algiers Canal area were appropriated in Fiscal Year 1995, and funds to initiate construction were appropriated in Fiscal Year 1997. Funds to initiate preconstruction engineering and design for the Westwego Area were appropriated in Fiscal Year 1988 and funds to initiate construction were appropriated in Fiscal Year 1990. Construction was initiated in March 1991. A post-authorization change report to expand the scope of this project to include the Lake Cataouatche area was approved in December 1996 and funds to initiate construction were appropriated in Fiscal Year 1999.


NEW ORLEANS
MISSISSIPPI RIVER
AVONDALE
WESTWEGO
HARVEY
HARVEY LOCK
MARRERO
90
S. KENNER RD. TO L. CAT. P/S 2 LIFTS
SEGNETTE P.S. TO CO. CANAL
SEGNETTE STATE PARK FLOODWALL
L. CAT. P/S TO SEGNETTE STATE PARK P./S. 2 LIFTS
SEGNETTE STATE PARK P./S.
OLD WEGO P.S. TO NEW WEGO P.S. F/W
WESTWEGO AIRPORT GAP CLOSURE
HARVEY P.S.
Harvey Canal
ORLEANS VILLAGE P.S.
COUSINS P.S.
AMES P.S.
MT KENNEDY P.S.
OAK COVE P.S.
AMES P.S.,MT. KENNEDY P.S., OAK COVE P.S. FLOODWALL
NEW ESTELLE P.S.
OLD ESTELLE P.S. F/W
LAKE CATAOUATCHE LEVEE / FLOODWALL
LAKE CATAOUATCHE P./S.
LAKE CATAOUATCHE
NEW WEGO P.S. TO ORLEANS VILLAGE 3 LIFTS
ORLEANS VILLAGE TO HWY. 45 3 LIFTS
MITIGATION BREAKWATER WEST LAKE CATAOUATCHE
COUBA ISLAND
HWY. 45
45
3134
Bayou Segnette
ESTELLE P.S. TO LP&L (LAPALCO) 3 LIFTS
V-LEVEE W. OF VERTEX
V-LEVEE E. OF VERTEX 3 LIFTS
LAKE SALVADOR
Hero Canal
JEAN LAFITTE NATIONAL HISTORIC PARK
Crown Point
MAP SYMBOLS
EXISTING LOCAL PUMPING STATIONS
EXISTING LEVEE
PROPOSED FLOODWALL
PROPOSED LEVEE 3 LIFTS
PROPOSED LEVEE 2 LIFTS
SHORELINE
LOCK
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
SCALES
KILOMETERS
0 1 2 3 4
MILES
0 1 2 3
WEST BANK AND VICINITY, NEW ORLEANS, LA. (HPP)
U.S. ARMY ENGINEER DISTRICT NEW ORLEANS
MISSISSIPPI VALLEY DIVISION
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
VICINITY MAP

1 OF 2


MISSISSIPPI
FLOW
NEW ORLEANS
Algiers
Chalmette
ST BERNARD PARISH
Meraux
ORLEANS PARISH
RIVER
LEVEES WEST OF ALGIERS
HARVEY LOCK
Gretna
ALGIERS LOCK
BLVD
HARVEY P.S.
PLANTERS P.S.
PARISH
COUSINS P.S.
LAPALCO
HARVEY CANAL FLOODWALLS
SECTOR GATE; DISCHARGE CHANNEL F/W, & CULVERT; P.S. EXPANSION
HERO P.S.
NEW ESTELLE P.S.
Belle Chasse
PLAQUEMINES
LEVEES EAST OF ALGIERS
ESTELLE PUMPING STATION
HERO CANAL
PLAQUEMINES PARISH
HERO CANAL & OAKVILLE
Oakville
SCALES
MILES
0 10 20 30 40
KILOMETERS
0 10 20 30 40 50 60
ARKANSAS
TEXAS
MISSISSIPPI
LOUISIANA
GULF OF MEXICO
PROJECT LOCATION
VICINITY MAP
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
EXISTING LEVEE
EXISTING PUMPING STATION
FLOODWALL
FLOODGATE
WEST BANK AND VICINITY, NEW ORLEANS, LA. (HPP)
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI VALLEY DIVISION

SHEET 2 OF 2

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Meramec River Basin, Valley Park Levee, Missouri (Continuing)

LOCATION: The project is located in St. Louis County, Missouri, adjacent to the left bank of the Meramec River between miles 20.7 and 22.1 above the confluence with the Mississippi River.

DESCRIPTION: The project provides for construction of 3.2 miles of levee with 3 feet of freeboard above the 100-year flood profile (including about 0.6 miles of engineered fill that provides flood protection and disposal of material from an abandoned glass plant), 6 gravity drains, 3 closure structures, interior drainage facilities including 5 ponding areas, and 41 relief wells for underseepage control. All work is programmed.

AUTHORIZATION: Public Law 97-128, Section 2(h); Water Resources Development Acts of 1986 and 1999; and the Energy and Water Development Appropriation Act, 2004, Section 146.

REMAINING BENEFIT-REMAINING COST RATIO: 2.8 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: .7 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.1 to 1 at 8 7/8 percent (FY 1991).

BASIS OF BENEFIT-COST RATIO: Benefits are based on a Engineering Documentation Report dated 8 November 2001 at October 2001 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$33,724,000	Entire Project	60	TBD
Estimated Non-Federal Cost		15,571,000			
Cash Contribution	$5,722,000[1]			PHYSICAL DATA	
Other Costs	9,849,000		Levee:		3.2 miles
			Gravity Drains:		6
Total Estimated Project Cost		$49,295,000	Closure Structures:		3
			Ponding Areas:		5
			Relief Wells:		41

[1] Includes Flood Control Contribution of $5,715,000 and Recreation Contribution of $7,000.

SUMMARIZED FINANCIAL DATA (Continued)

			ACCUM PCT OF EST FED COST
Allocations to 30 September 2003	$20,525,000		
Conference Allowance for FY 2004	2,750,000		
Allocation for FY 2004	2,125,000	1/	
Allocations through FY 2004	22,650,000		67
Allocation Requested for FY 2005	$ 2,060,000		73
Programmed Balance to Complete After FY 2005	9,014,000		
Unprogrammed Balance to Complete After FY 2005	0		

1/ Reflects $609,000 reduction assigned as savings and slippage and $16,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The City of Valley Park, Missouri, has experienced severe flooding from the Meramec River nine times since the early 1900's. The flood of record occurred in December 1982 and caused an estimated $21,624,000 in damages to 108 residential structures and 142 business establishments. This flood had a recurrence interval of approximately once in 70 years. The recommended project will provide 100-year protection to 499 residences and 168 non-residential structures, including City Hall and Valley Park High School. In order to finance the non-Federal portion of project costs, city officials instituted a number of innovative techniques including solicitation for the donation of right-of-way required for construction and establishment of a Tax Increment Financing (TIF) District. City residents strongly support the project as demonstrated by attendance at rallies, signs posted in yards and at businesses, and participation in letter-writing campaigns. There are no significant adverse environmental impacts associated with the project. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Damage Reduction	$2,507,900
Recreation	264,200
Total	$2,772,100

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue Levee IVB	$1,010,000
Planning, Engineering, and Design	560,000
Supervision and Administration	490,000
Total	$2,060,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts contained in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way.	$8,655,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	1,194,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.	7,000	
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of the project.	5,715,000	$ 63,000
Total Non-Federal Costs	$15,571,000	$ 63,000

STATUS OF LOCAL COOPERATION: A Local Cooperation Agreement (LCA) was executed by the City of Valley Park and the Corps of Engineers on 12 August 1992, and an amendment was executed on 23 September 1997 to incorporate administrative language since the initial LCA. A second amendment which addresses the $50,000,000 limitation on Federal expenditures is under review. Valley Park is funding their lands, relocations, and cash contributions with Tax Increment Financing revenues and general city tax revenues as needed. Operation and maintenance costs will be funded by the city's sales tax, including a ½ cent tax for stormwater, a ½ cent tax for capital improvements, and, if needed, a 1 cent tax for general purposes.

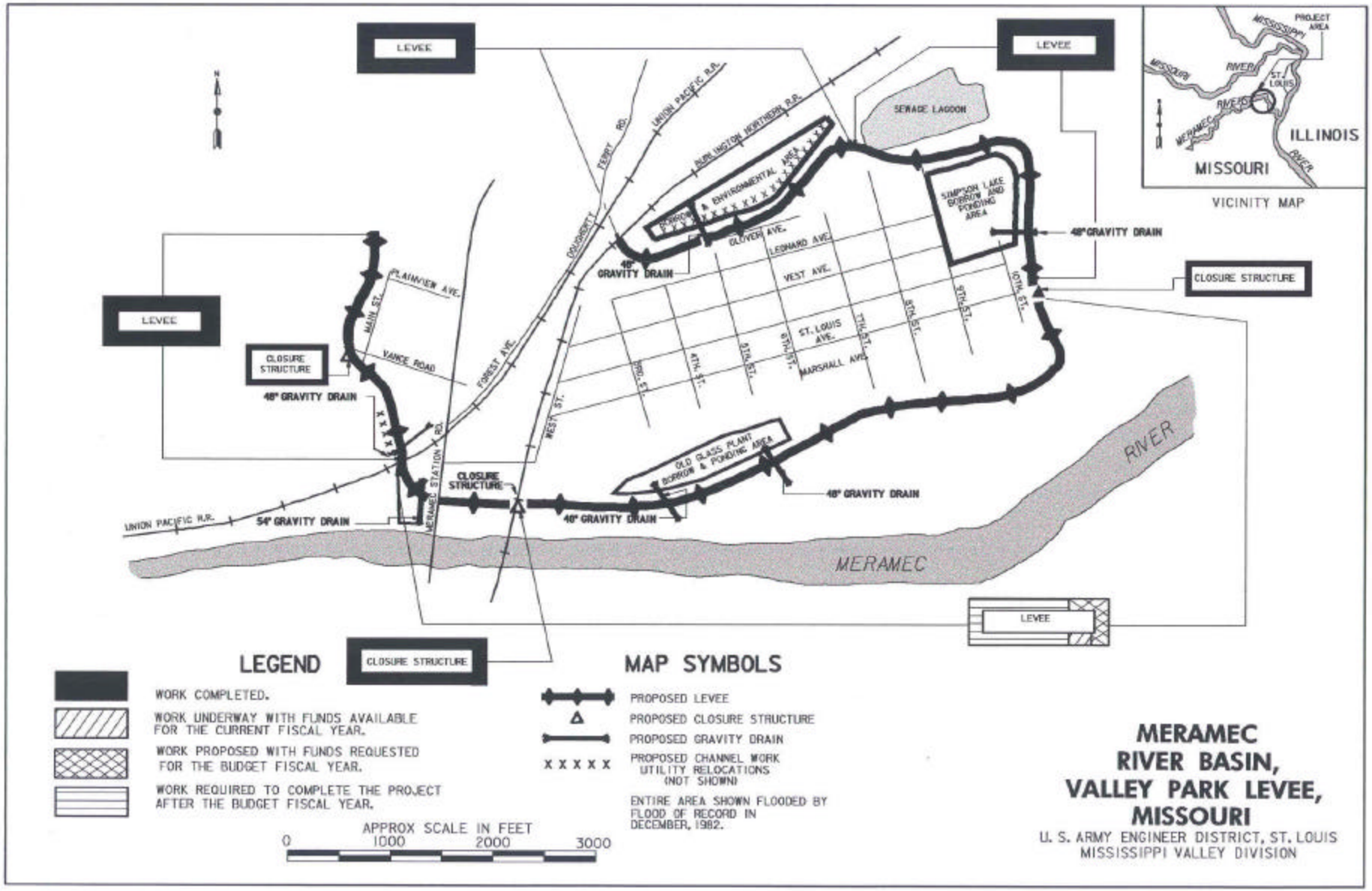
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $33,724,000 is an increase of $468,000 from the latest estimate ($33,256,000) presented to Congress (FY 2004). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ -625,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	1,093,000
Total	$ 468,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: During preparation of the Plan Formulation Report and General Design Memorandum, Main Report, and Environmental Assessment, it was determined that implementation of the recommended plan would not have significant adverse effects on the quality of the human environment. A Finding of No Significant Impact was signed by the District Commander on 9 March 1987.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1983, and funds to initiate construction were appropriated in FY 1991. The project was modified by the Water Resources Development Act of 1999, which authorized the Secretary to construct works on the Lower Meramec River at maximum Federal expenditure of $35,000,000. Section 146 of the Energy and Water Development Appropriation Act of 2004 increases the maximum Federal expenditure to $50,000,000.

Fish and wildlife mitigation costs total $881,000.


LEVEE
LEVEE
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CLOSURE STRUCTURE
CLOSURE STRUCTURE
CLOSURE STRUCTURE
CLOSURE STRUCTURE
48" GRAVITY DRAIN
48" GRAVITY DRAIN
48" GRAVITY DRAIN
48" GRAVITY DRAIN
48" GRAVITY DRAIN
54" GRAVITY DRAIN
UNION PACIFIC R.R.
BURLINGTON NORTHERN R.R.
ENVIRONMENTAL AREA
SEWAGE LAGOON
SIMPSON LAKE BORROW AND PONDING AREA
OLD GLASS PLANT BORROW & PONDING AREA
PLAINVIEW AVE.
MAIN ST.
VANCE ROAD
FORREST AVE.
DOUGHERTY FERRY RD.
MERAMEC STATION RD.
WEST ST.
OLIVER AVE.
LEONARD AVE.
VEST AVE.
ST. LOUIS AVE.
MARSHALL AVE.
RIVER
MERAMEC
PROJECT AREA
MISSISSIPPI
MISSOURI
RIVER
ST. LOUIS
ILLINOIS
MISSOURI
VICINITY MAP
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
MAP SYMBOLS
PROPOSED LEVEE
PROPOSED CLOSURE STRUCTURE
PROPOSED GRAVITY DRAIN
X X X X X
PROPOSED CHANNEL WORK UTILITY RELOCATIONS (NOT SHOWN)
ENTIRE AREA SHOWN FLOODED BY FLOOD OF RECORD IN DECEMBER, 1982.
APPROX SCALE IN FEET
0 1000 2000 3000
MERAMEC RIVER BASIN, VALLEY PARK LEVEE, MISSOURI
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General – Local Protection (Flood Control)

PROJECT: Grand Forks, North Dakota – East Grand Forks, Minnesota (Continuing)

LOCATION: Grand Forks is located in Grand Forks County in eastern North Dakota along the Red River of the North about 70 miles south of the Canadian border. East Grand Forks is located in Polk County in northwestern Minnesota across the river from Grand Forks.

DESCRIPTION: The National Economic Development and Locally Preferred Plan is a set-back flood barrier project with a level of protection for the 0.47 percent exceedence frequency event. This level of protection is equivalent to the 1997 flood. The project will consist of 30.0 miles of levees, floodwalls, and road raises. Approximately 260 residential structures will need to be acquired for project construction. All work is programmed.

AUTHORIZATION: Omnibus Consolidated and Emergency Supplemental Appropriations Act 1999, Section 137 (Public Law 105-277).

REMAINING BENEFIT-REMAINING COST RATIO: 2.37 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.0 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 1.12 to 1 at 7 1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1998 at December 1997 price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$208,800,000		Entire Project	45	TBD
Estimated Non-Federal Cost		195,100,000				
Cash Contribution	$ 29,096,000					
Other	166,004,000					
Total Estimated Project Cost		$403,900,000				
Allocations to 30 September 2003		$108,189,000				
Conference Amount for FY 2004		36,000,000				
Allocation for FY 2004		27,820,000	1/			
Allocations through FY 2004		136,009,000	65			
Allocation Requested for FY 2005		$ 31,190,000	80			
Programmed Balance to Complete after FY 2005		41,601,000				
Unprogrammed Balance to Complete after FY 2005		0				

PHYSICAL DATA

Permanent Levees	26.6 miles	Pumping Stations	16
Tieback Levees	3.3 miles	Major Gatewells	2
Road Raises	9	English Coulee Diversion Channel	4.5 miles
Heartsville Coulee Diversion Channel	1.2 miles		

1/ Reflects $7,967,000 reduction assigned as savings and slippage and $213,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: Since 1950, twelve floods have threatened the Grand Forks-East Grand Forks area. Until 1997, a permanent levee in one short reach of Grand Forks, plus flood fight efforts in other areas of the two cities have prevented significant damages. The catastrophic flood of 1997 was the largest ever experienced in the area. Despite major emergency flood fight efforts, both cities were inundated. Estimates indicate that over $1.5 billion in damages were sustained in the two cities as a result of the 1997 flood. The threat of future flooding has led to a sense of urgency for an expedited permanent solution. The recommended plan would provide reliable flood control for residents of Grand Forks and East Grand Forks. Average annual benefits are as follows:

Annual Benefits	Amount (1 October 2003)
Flood Control	$30,514,000
Recreation	2,106,400
Total	$32,620,400

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
East Grand Forks (Phase III)	$ 9,700,000
Grand Forks (Phase III)	10,840,000
Heartsville Coulee	4,000,000
Lands and Damages	150,000
Planning, Engineering and Design	2,500,000
Supervision and Administration	4,000,000
Total	$31,190,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Provide lands, easements, and rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 99,641,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	66,363,000	
Pay 5 percent of the costs allocated to flood control, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	19,130,000	$ 1,012,250
Pay one-half of the separable and joint costs allocated to recreation and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	9,966,000	346,750
Federal reimbursement to non-Federal sponsor for costs incurred in excess of 50 percent of the costs allocated to flood control.	0	
Total Non-Federal Costs	$ 195,100,000	$ 1,359,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

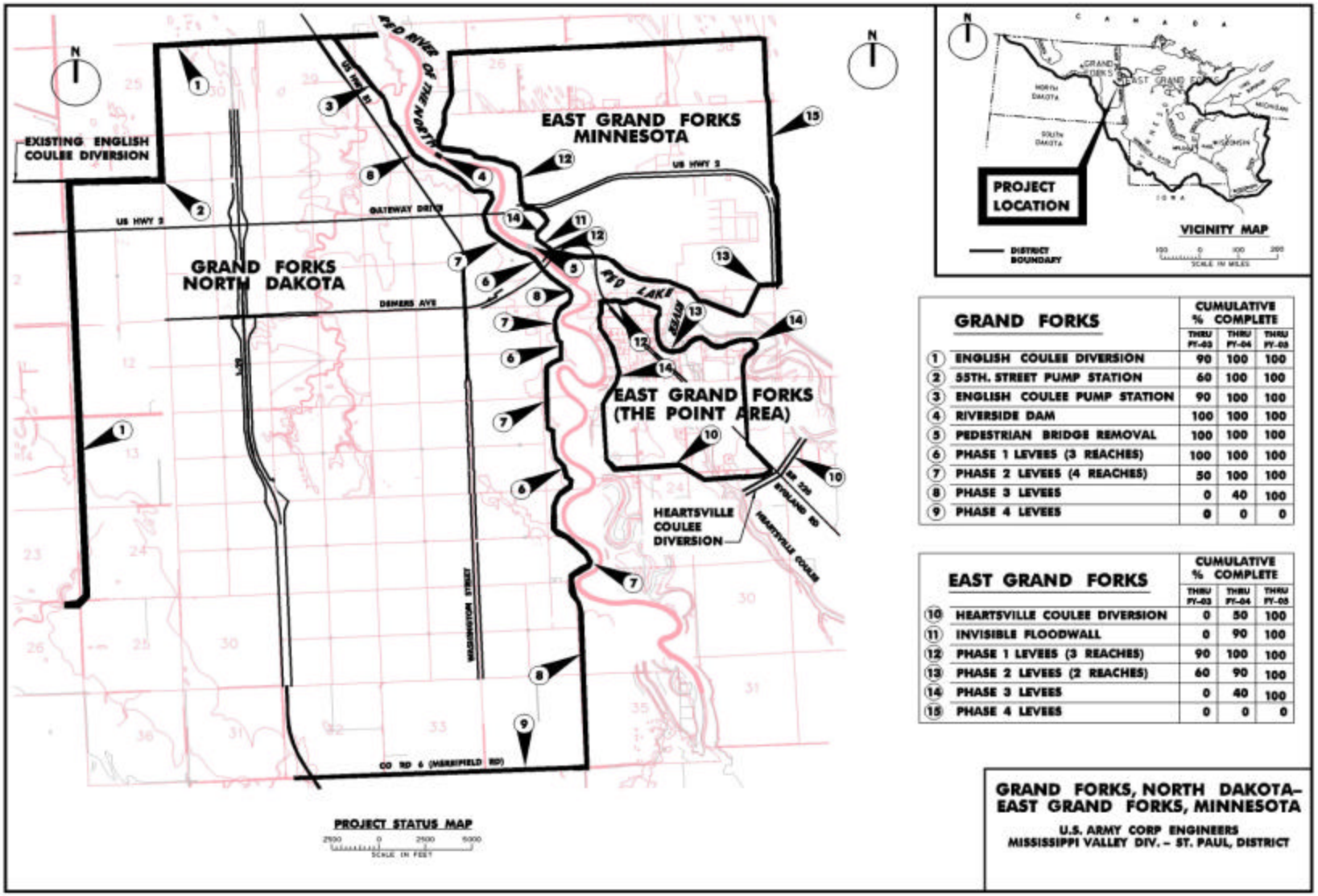
STATUS OF LOCAL COOPERATION: The non-Federal sponsors are the cities of Grand Forks, North Dakota and East Grand Forks, Minnesota. A Project Cooperation Agreement was executed in January 2000. The non-Federal funding requirements will be met using reallocation of existing taxes, implementation of a new use tax, a city-wide assessment, and state bond funds. The District Commander approved the sponsors financing plans on 21 October 1999.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $208,800,000 is a decrease of $2,500,000 from the latest estimate ($211,300,000) presented to Congress (FY 2004). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ - 2,408,000
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	- 92,000
Total	$ - 2,500,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Impact Statement was prepared in conjunction with the General Reevaluation Report which was completed in December 1998. The Record of Decision was signed 17 February 1999.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1997. Funds to initiate construction were appropriated in Fiscal Year 2000. The removal of the Pedestrian Bridge, the Riverside Dam bank stabilization, Grand Forks Phase I Levees, East Grand Forks Phase I Levees, English Coulee Diversion and Pump Station, and supply contracts for pumps and equipment are all essentially complete. Construction continues on the Grand Forks and East Grand Forks Phase II Levees. Advertising of the East Grand Forks Phase III Levees, the Grand Forks Phase III Levees, and Heartsville Coulee Diversion is now underway. Design is continuing on the Grand Forks and East Grand Forks Phase 4 Levees.



GRAND FORKS	CUMULATIVE % COMPLETE		
	THRU FY-03	THRU FY-04	THRU FY-05
1 ENGLISH COULEE DIVERSION	90	100	100
2 55TH. STREET PUMP STATION	60	100	100
3 ENGLISH COULEE PUMP STATION	90	100	100
4 RIVERSIDE DAM	100	100	100
5 PEDESTRIAN BRIDGE REMOVAL	100	100	100
6 PHASE 1 LEVEES (3 REACHES)	100	100	100
7 PHASE 2 LEVEES (4 REACHES)	50	100	100
8 PHASE 3 LEVEES	0	40	100
9 PHASE 4 LEVEES	0	0	0

EAST GRAND FORKS	CUMULATIVE % COMPLETE		
	THRU FY-03	THRU FY-04	THRU FY-05
10 HEARTSVILLE COULEE DIVERSION	0	50	100
11 INVISIBLE FLOODWALL	0	90	100
12 PHASE 1 LEVEES (3 REACHES)	90	100	100
13 PHASE 2 LEVEES (2 REACHES)	60	90	100
14 PHASE 3 LEVEES	0	40	100
15 PHASE 4 LEVEES	0	0	0

APPROPRIATION TITLE: Construction, General – Environmental Mitigation, Restoration, and Protection

PROJECT: Upper Mississippi River System Environmental Management Program, Illinois, Iowa, Minnesota, Missouri, and Wisconsin (Continuing)

LOCATION: The Program is authorized for those river reaches having commercial navigation channels on the Upper Mississippi River, Illinois River, Minnesota River, St. Croix River, and Kaskaskia River in the states of Illinois, Iowa, Minnesota, Missouri, and Wisconsin. The following counties are included: (Illinois) Jo Daviess, Carroll, Whiteside, Rock Island, Mercer, Henderson, Hancock, Adams, Pike, Calhoun, Jersey, Madison, St. Clair, Monroe, Randolph, Jackson, Union, Alexander, Pulaski, Brown, Cass, Schuyler, Fulton, Mason, Peoria, Tazewell, Woodford, Marshall, Putnam, Bureau, LaSalle, Grundy, Will; (Iowa) Allamakee, Clayton, Dubuque, Jackson, Clinton, Scott, Muscatine, Louisa, Des Moines, Lee; (Wisconsin) St. Croix, Pierce, Pepin, Buffalo, Trempealeau, La Cross, Vernon, Crawford, Grant; (Minnesota) Anoka, Hennepin, Scott, Dakota, Ramsey, Washington, Goodhue, Wabasha, Winona, Houston; (Missouri) Clark, Lewis, Marion, Ralls, Pike, Lincoln, St. Charles, St. Louis, Jefferson, Ste. Genevieve, Perry, Cape Girardeau, Scott, Mississippi.

DESCRIPTION: The purpose of the Upper Mississippi River System Environmental Management Program (UMRS-EMP) is to ensure the coordinated development and enhancement of the ecosystem of the Upper Mississippi River. Habitat rehabilitation and enhancement projects are effectively preserving and improving fish and wildlife habitat on the Upper Mississippi River System and are designed to counteract the effects of backwater sedimentation through dike construction to limit sedimentation of prime habitat and dredging to restore aquatic habitat; provide water level control and optimal food growth for waterfowl; create islands to decrease wind generated disturbances, thereby reducing turbidity; alter the flow of water to side channels and backwaters to decrease flows of sediment-laden water during high water and to increase dissolved oxygen levels during low water; increase the diversity and abundance of mast (nut) producing trees and prairies to benefit wildlife. Long-Term Resource Monitoring provides scientific information for more informed management of the UMRS. Ninety-seven percent of authorized UMRS-EMP appropriations have been used to design and construct habitat rehabilitation and enhancement projects and for Long-Term Resource Monitoring. Recreation development is an authorized program element. All work is programmed.

AUTHORIZATION: Fiscal Year 1985 Supplemental Appropriations Act, P.L. 99-88; Water Resources Development Act of 1986, PL 99-662, Section 1103; Water Resources Development Act of 1990, P.L. 101-640, Section 405; and the Water Resources Development Act of 1992, P.L. 102-580, Section 107, and the Water Resources Development Act of 1999, P.L. 106-53, Section 509.

REMAINING BENEFIT-REMAINING COST: The remaining benefit-remaining cost ratio for the entire project is not applicable because monetary benefits are not quantified.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio for the entire project is not applicable because monetary benefits are not quantified. Projects within the UMRS-EMP Program are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio for the entire project is not applicable because monetary benefits are not quantified.

BASIS OF BENEFIT-COST RATIO: The basis for the benefit-cost ratio for the entire project is not applicable because monetary benefits are not quantified.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST
Estimated Federal Cost		$ 766,195,000	
Estimated Non-Federal Cost		7,833,000	
Cash Contribution	$ 7,833,000		
Other Costs	0		
Total Estimated Project Cost		$ 774,028,000	
Allocations to 30 September 2003		$ 247,039,000	
Conference Allowance for FY 2004		19,000,000	
Allocation for FY 2004		14,683,000	
Allocations through FY 2004		261,722,000	34
Allocation Requested for FY 2005		$ 28,000,000	38
Programmed Balance to Complete After FY 2005		476,473,000	
Unprogrammed Balance to Complete After FY 2005		0	

STATUS: (1 January 2004)		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE [1/]
Long Term Resource Monitoring		NA	NA
Economic Impacts of Recreation Study		100	(Sep 92)
Traffic Monitoring		100	(Sep 90)
Habitat Rehabilitation and Enhancement Projects (Construction)			
Angle Blackburn, MO	ST. LOUIS DISTRICT	0	Deferred
Batchtown Mgt. Area, IL	ST. LOUIS DISTRICT	65	TBD
Calhoun Point, IL	ST. LOUIS DISTRICT	40	TBD
Clarksville Refuge, MO	ST. LOUIS DISTRICT	100	(Apr 90)
Cuivre Island, MO	ST. LOUIS DISTRICT	100	(Jul 99)
Dresser Island, MO	ST. LOUIS DISTRICT	100	(Sep 91)
Establishment Chute, MO	ST. LOUIS DISTRICT	0	TBD
Jefferson Barracks Side Channel	ST. LOUIS DISTRICT	0	TBD
Least Tern, MO	ST. LOUIS DISTRICT	22	Deferred
Norton Woods, MO	ST. LOUIS DISTRICT	0	Deferred
Pharrs Island, Phase I, MO	ST. LOUIS DISTRICT	100	(Jun 92)
Pools 25 and 26, MO	ST. LOUIS DISTRICT	22	TBD
Reds Landing, IL	ST. LOUIS DISTRICT	0	TBD
Salt Lake/Ft Chartres S.C., IL	ST. LOUIS DISTRICT	7	TBD
Stag & Keaton Is., MO	ST. LOUIS DISTRICT	100	(Sep 98)
Stump Lake, IL	ST. LOUIS DISTRICT	100	(Nov 98)
Schenimann, MO	ST. LOUIS DISTRICT	15	TBD
Stone Dike Alteration, IL/MO	ST. LOUIS DISTRICT	10	TBD
Swan Lake, IL	ST. LOUIS DISTRICT	99	TBD
Ted Shanks, MO	ST. LOUIS DISTRICT	1	TBD
Andalusia Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 94)
Banner Marsh, IL	ROCK ISLAND DISTRICT	100	(Dec 03)
Bay Island, MO	ROCK ISLAND DISTRICT	100	(Nov 94)
Bertom Lake, WI	ROCK ISLAND DISTRICT	100	(Jun 92)
Big Timber, IA	ROCK ISLAND DISTRICT	100	(Jun 95)
Brown's Lake, IA	ROCK ISLAND DISTRICT	100	(Sep 94)
Chautauqua Refuge, IL	ROCK ISLAND DISTRICT	100	(Dec 03)

STATUS: (1 January 2004) (Continued)

		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE [1/]
Cottonwood Island, MO	ROCK ISLAND DISTRICT	100	(Dec 99)
Gardner Div., IL	ROCK ISLAND DISTRICT	70	TBD
Huron Island, IA	ROCK ISLAND DISTRICT	0	Deferred
Lake Odessa, IA	ROCK ISLAND DISTRICT	2	TBD
Pool 11 Islands, WI/IA	ROCK ISLAND DISTRICT	20	TBD
Pleasant Creek, IA	ROCK ISLAND DISTRICT	100	(Jan 03)
Monkey Chute, MO	ROCK ISLAND DISTRICT	100	(Aug 89)
Peoria Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 97)
Peosta Channel, IA	ROCK ISLAND DISTRICT	0	Deferred
Pool 12 Overwintering IA/IL	ROCK ISLAND DISTRICT	0	TBD
Potters Marsh, IL	ROCK ISLAND DISTRICT	100	(Jun 96)
Princeton, IA	ROCK ISLAND DISTRICT	100	(Dec 01)
Rice Lake, IL	ROCK ISLAND DISTRICT	16	TBD
Smith's Creek, IA	ROCK ISLAND DISTRICT	9	TBD
Spring Lake, IL	ROCK ISLAND DISTRICT	100	(Sep 01)
Ambrough Slough, WI	ST. PAUL DISTRICT	45	TBD
Blackbird Slough, MN	ST. PAUL DISTRICT	0	Deferred
Blackhawk Park, WI	ST. PAUL DISTRICT	100	(Nov 90)
Bussey Lake, IA	ST. PAUL DISTRICT	100	(Jun 96)
Capoli Slough, WI	ST. PAUL DISTRICT	15	TBD
Cold Springs, WI	ST. PAUL DISTRICT	100	(Jun 94)
Conway Lake, IA	ST. PAUL DISTRICT	5	TBD
East Channel, WI, MN	ST. PAUL DISTRICT	100	(Jun 97)
Finger Lakes, MN	ST. PAUL DISTRICT	100	(Jul 94)
Guttenberg Fish Ponds, IA	ST. PAUL DISTRICT	100	(Nov 89)
Harpers Slough, WI	ST. PAUL DISTRICT	15	TBD
Indian Slough, WI	ST. PAUL DISTRICT	100	(Jun 93)
Island 42, MN	ST. PAUL DISTRICT	100	(May 87)
Lake Onalaska, WI	ST. PAUL DISTRICT	100	(Oct 89)
Lake Winneshiek, WI	ST. PAUL DISTRICT	0	TBD
Lansing Big Lake, IA	ST. PAUL DISTRICT	100	(Nov 94)
Long Lake, WI	ST. PAUL DISTRICT	100	(May 00)
Long Meadow Lake, MN	ST. PAUL DISTRICT	30	TBD

STATUS: (1 January 2004) (Continued)

		PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE [1]
Miss. Rvr Bank			
Stabilization, MN/WI	ST. PAUL DISTRICT	100	(Sep 99)
Peterson Lake, MN	ST. PAUL DISTRICT	100	(Jun 96)
Polander Lake, MN	ST. PAUL DISTRICT	100	(Apr 02)
Pool 8 Isl, Phase I, WI	ST. PAUL DISTRICT	100	(Jun 93)
Pool 8 Isl, Phase II, WI	ST. PAUL DISTRICT	100	(Sep 99)
Pool 9 Isl Protection, WI	ST. PAUL DISTRICT	100	(Jun 95)
Pool 8 Isl, Phase III, WI	ST. PAUL DISTRICT	30	TBD
Pool Slough, IA/MN	ST. PAUL DISTRICT	55	TBD
Rice Lake, MN	ST. PAUL DISTRICT	100	(Nov 98)
Small Scale Drawdown, WI	ST. PAUL DISTRICT	100	(Sep 97)
Spring Lake, WI	ST. PAUL DISTRICT	100	(Nov 94)
Spring Lake Isl, WI	ST. PAUL DISTRICT	50	TBD
Trempealeau NWR, WI	ST. PAUL DISTRICT	100	(Sep 99)
Whitewater River, MN	ST. PAUL DISTRICT	2	Deferred
Recreation		0	Unscheduled
Habitat Need Assessment		100	(Sep 00)

JUSTIFICATION: Implementation of the Upper Mississippi River System Environmental Management Program is essential to the continued viability of the ecosystem of the Upper Mississippi River and important to the long-term public acceptance and support of Upper Mississippi River System (UMRS) navigation. Habitat Rehabilitation and Enhancement projects help reduce the negative effects of natural and human-induced factors on the system's backwaters and side channels. Projects are selected for design and construction based on continued assessment of habitat restoration and enhancement opportunities as determined by the involved Federal and non-Federal partners. Long-Term Resource Monitoring provides data to indicate trends in key environmental parameters, analyzing sedimentation and other UMRS resource problems, and producing a spatial information database. An Economic Impacts of Recreation Study has been conducted to enable Federal and non-Federal management decisions to better consider impacts on recreation and the consequent changes in recreation-related expenditures in the local and regional economies.

[1] Parentheses indicate actual date.

FISCAL YEAR 2005: The requested amount of $28,000,000 will be applied as follows:

PROJECT	DISTRICT	AMOUNT	STATUS
Batchtown Mgmt Area III, IL	ST. LOUIS DISTRICT	200,000	Complete Design
Batchtown Mgmt Area III, IL	ST. LOUIS DISTRICT	1,508,000	Initiate Construction
Calhoun Point Stg 1, IL	ST. LOUIS DISTRICT	1,500,000	Complete Construction
Calhoun Point Stg II, IL	ST. LOUIS DISTRICT	700,000	Initiate Construction
Establishment Chute, MO	ST. LOUIS DISTRICT	75,000	Continue Design
Pools 25 & 26, MO	ST. LOUIS DISTRICT	50,000	Complete Design
Pools 25 & 26, MO	ST. LOUIS DISTRICT	313,000	Initiate Construction
Salt Lake/Ft. Chartres SC, IL	ST. LOUIS DISTRICT	50,000	Complete Design
Schienimann Chute, MO	ST. LOUIS DISTRICT	500,000	Continue Construction
Stone Dike Alterations MO/IL	ST. LOUIS DISTRICT	80,000	Continue Design
Ted Shanks, MO	ST. LOUIS DISTRICT	116,000	Continue Design
Wilkerson Island	ST. LOUIS DISTRICT	70,000	Continue Design
Fox Island, MO	ROCK ISLAND DISTRICT	200,000	Continue Design
Gardner Division, IL	ROCK ISLAND DISTRICT	1,450,000	Continue Construction
Lake Odessa, IA	ROCK ISLAND DISTRICT	350,000	Complete Design
Lake Odessa, IA	ROCK ISLAND DISTRICT	305,000	Initiate Construction
Pool 11 Islands Stg 1, WI	ROCK ISLAND DISTRICT	100,000	Continue Construction
Pool 11 Islands Stg 2, WI	ROCK ISLAND DISTRICT	4,000,000	Continue Construction
Pool 12 Overwintering	ROCK ISLAND DISTRICT	350,000	Continue Design
Rice Lake, IA	ROCK ISLAND DISTRICT	400,000	Complete Design
Rice Lake, IA	ROCK ISLAND DISTRICT	100,000	Initiate Construction
Smith Creek, IA	ROCK ISLAND DISTRICT	200,000	Continue Design
Ambrough Slough, WI	ST. PAUL DISTRICT	10,000	Complete Construction
Capoli Slough, WI	ST. PAUL DISTRICT	130,000	Complete Design
Capoli Slough, WI	ST. PAUL DISTRICT	500,000	Initiate Construction
Conway Lake, IA	ST. PAUL DISTRICT	100,000	Continue Design
Harpers Slough, WI	ST. PAUL DISTRICT	120,000	Complete Design
Harpers Slough, WI	ST. PAUL DISTRICT	800,000	Initiate Construction
Lake Winneshiek, WI	ST. PAUL DISTRICT	125,000	Initiate Design
Long Meadow Lake, MN	ST. PAUL DISTRICT	350,000	Complete Construction
Pool 8 Phase III Stg 1, WI	ST. PAUL DISTRICT	500,000	Complete Construction
Pool 8 Phase III Stg 2, WI	ST. PAUL DISTRICT	100,000	Complete Design
Pool 8 Phase III Stg 2, WI	ST. PAUL DISTRICT	500,000	Initiate Construction
Pool 8 Phase III Stg 3, WI	ST. PAUL DISTRICT	130,000	Complete Design
Pool Slough, IA	ST. PAUL DISTRICT	20,000	Complete Construction

PROJECT	DISTRICT	AMOUNT	STATUS
Spring Lake Islands, WI	ST. PAUL DISTRICT	1,650,000	Continue Construction
Sturgeon Lake	ST. PAUL DISTRICT	10,000	Initiate Design
Zumbro River	ST. PAUL DISTRICT	10,000	Initiate Design
Habitat Evaluation/Monitoring		650,000	Continue
Other Habitat		150,000	Continue
Public Involvement		75,000	Continue
Long Term Resource Monitoring		8,703,000	Continue
Independent Technical Review Committee		150,000	Initiate
Program Management		600,000	Continue
TOTAL		$ 28,000,000	

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986 and amended by Section 107(b) of the Water Resources Development Act of 1999, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay 25 percent of the first costs allocated to fish and wildlife enhancement for the following projects:		
Baldwin Backwater, IL	$ 623,000	
Banner Marsh, IL	1,780,000	
Batchtown, IL	146,000	
Blackhawk Park, WI	77,000	
Bussey Lake, IA	162,000	
Cuivre Island, MO	498,000	
Osborne Channel, IL	190,000	
Peoria Lake, IL	42,000	
Princeton, IA	54,000	
Swan Lake, IL	262,000	
Subtotal	$ 3,834,000	$ 0
Pay 35 percent of the first costs allocated to fish and wildlife enhancement for the following projects:		
Ambrough Slough, WI	$ 166,000	
Pool Slough, IA, MN	155,000	
Rice Lake, IL	3,378,000	
Smith Creek, IA	300,000	
Subtotal	$ 3,999,000	$ 0
Pay 50 percent of the first costs allocated to recreation projects.	0 [1]	
Total Non-Federal Construction Costs	$ 7,833,000	$ 0

[1] No recreation projects scheduled.

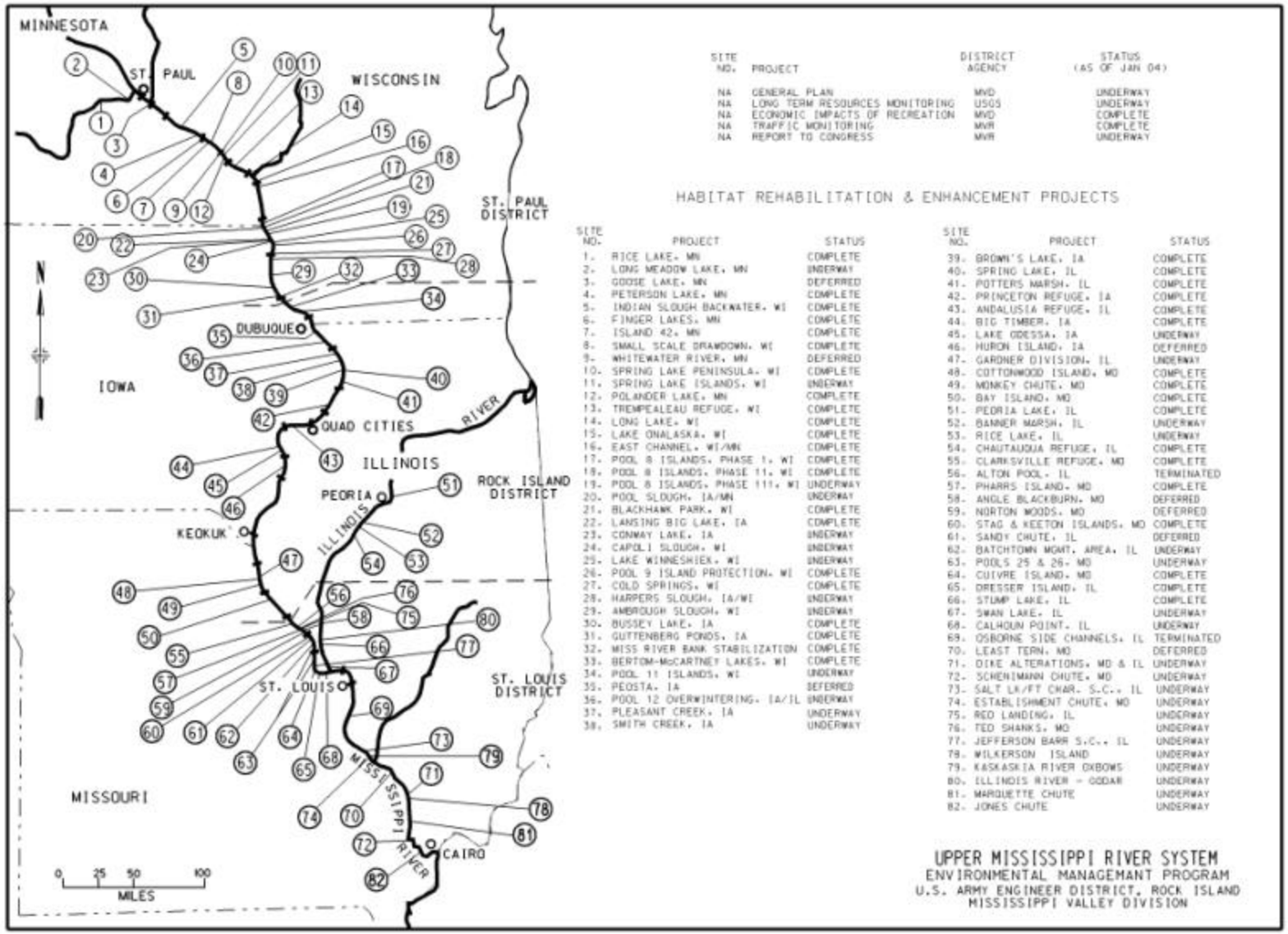
The non-Federal sponsors have agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement is required only for Program projects that are not located on lands managed as a national wildlife refuge.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of $766,195,000 is the same as the latest estimate presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: National Environmental Policy Act compliance is accomplished prior to implementation of each individual project within the Program.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1985. The Water Resources Development Act of 1999, P.L. 106-53, amends the previous authority to increase annual appropriation limits available to the program; require submission of a report to Congress on a 6 year cycle beginning in December 2004 that evaluates programs, accomplishments, systemic habitat needs, and identifies any needed changes to the program authorization; and authorizes an independent technical review committee. Technical Review Committee will be established in Fiscal Year 2005.



SITE NO.	PROJECT	DISTRICT AGENCY	STATUS (AS OF JAN 04)
NA	GENERAL PLAN	MVD	UNDERWAY
NA	LONG TERM RESOURCES MONITORING	USGS	UNDERWAY
NA	ECONOMIC IMPACTS OF RECREATION	MVD	COMPLETE
NA	TRAFFIC MONITORING	MVR	COMPLETE
NA	REPORT TO CONGRESS	MVR	UNDERWAY

HABITAT REHABILITATION & ENHANCEMENT PROJECTS

SITE NO.	PROJECT	STATUS
1.	RICE LAKE, MN	COMPLETE
2.	LONG MEADOW LAKE, MN	UNDERWAY
3.	GOOSE LAKE, MN	DEFERRED
4.	PETERSON LAKE, MN	COMPLETE
5.	INDIAN SLOUGH BACKWATER, WI	COMPLETE
6.	FINGER LAKES, MN	COMPLETE
7.	ISLAND 42, MN	COMPLETE
8.	SMALL SCALE DRAWDOWN, WI	COMPLETE
9.	WHITEWATER RIVER, MN	DEFERRED
10.	SPRING LAKE PENINSULA, WI	COMPLETE
11.	SPRING LAKE ISLANDS, WI	UNDERWAY
12.	POLANDER LAKE, MN	COMPLETE
13.	TREMPEALEAU REFUGE, WI	COMPLETE
14.	LONG LAKE, WI	COMPLETE
15.	LAKE ONALASKA, WI	COMPLETE
16.	EAST CHANNEL, WI/MN	COMPLETE
17.	POOL 8 ISLANDS, PHASE I, WI	COMPLETE
18.	POOL 8 ISLANDS, PHASE II, WI	COMPLETE
19.	POOL 8 ISLANDS, PHASE III, WI	UNDERWAY
20.	POOL SLOUGH, IA/MN	UNDERWAY
21.	BLACKHAWK PARK, WI	COMPLETE
22.	LANSING BIG LAKE, IA	COMPLETE
23.	CONWAY LAKE, IA	UNDERWAY
24.	CAPOLI SLOUGH, WI	UNDERWAY
25.	LAKE WINNESHIEK, WI	UNDERWAY
26.	POOL 9 ISLAND PROTECTION, WI	COMPLETE
27.	COLD SPRINGS, WI	COMPLETE
28.	HARPERS SLOUGH, IA/WI	UNDERWAY
29.	AMBROUGH SLOUGH, WI	UNDERWAY
30.	BUSSEY LAKE, IA	COMPLETE
31.	GUTTENBERG PONDS, IA	COMPLETE
32.	MISS RIVER BANK STABILIZATION	COMPLETE
33.	BERTOM-McCARTNEY LAKES, WI	COMPLETE
34.	POOL 11 ISLANDS, WI	UNDERWAY
35.	PEOSTA, IA	DEFERRED
36.	POOL 12 OVERWINTERING, IA/IL	UNDERWAY
37.	PLEASANT CREEK, IA	UNDERWAY
38.	SMITH CREEK, IA	UNDERWAY
39.	BROWN'S LAKE, IA	COMPLETE
40.	SPRING LAKE, IL	COMPLETE
41.	POTTERS MARSH, IL	COMPLETE
42.	PRINCETON REFUGE, IA	COMPLETE
43.	ANDALUSIA REFUGE, IL	COMPLETE
44.	BIG TIMBER, IA	COMPLETE
45.	LAKE ODESSA, IA	UNDERWAY
46.	HURON ISLAND, IA	DEFERRED
47.	GARDNER DIVISION, IL	UNDERWAY
48.	COTTONWOOD ISLAND, MO	COMPLETE
49.	MONKEY CHUTE, MO	COMPLETE
50.	BAY ISLAND, MO	COMPLETE
51.	PEORIA LAKE, IL	COMPLETE
52.	BANNER MARSH, IL	UNDERWAY
53.	RICE LAKE, IL	UNDERWAY
54.	CHAUTAUQUA REFUGE, IL	COMPLETE
55.	CLARKSVILLE REFUGE, MO	COMPLETE
56.	ALTON POOL, IL	TERMINATED
57.	PHARRS ISLAND, MO	COMPLETE
58.	ANGLE BLACKBURN, MO	DEFERRED
59.	NORTON WOODS, MO	DEFERRED
60.	STAG & KEETON ISLANDS, MO	COMPLETE
61.	SANDY CHUTE, IL	DEFERRED
62.	BATCHTOWN MGMT. AREA, IL	UNDERWAY
63.	POOLS 25 & 26, MO	UNDERWAY
64.	CUIVRE ISLAND, MO	COMPLETE
65.	DRESSER ISLAND, IL	COMPLETE
66.	STUMP LAKE, IL	COMPLETE
67.	SWAN LAKE, IL	UNDERWAY
68.	CALHOUN POINT, IL	UNDERWAY
69.	OSBORNE SIDE CHANNELS, IL	TERMINATED
70.	LEAST TERN, MO	DEFERRED
71.	DIKE ALTERATIONS, MO & IL	UNDERWAY
72.	SCHENIMANN CHUTE, MO	UNDERWAY
73.	SALT LK/FT CHAR. S.C., IL	UNDERWAY
74.	ESTABLISHMENT CHUTE, MO	UNDERWAY
75.	RED LANDING, IL	UNDERWAY
76.	TED SHANKS, MO	UNDERWAY
77.	JEFFERSON BARR S.C., IL	UNDERWAY
78.	WILKERSON ISLAND	UNDERWAY
79.	KASKASKIA RIVER OXBOWS	UNDERWAY
80.	ILLINOIS RIVER - GODAR	UNDERWAY
81.	MARQUETTE CHUTE	UNDERWAY
82.	JONES CHUTE	UNDERWAY

UPPER MISSISSIPPI RIVER SYSTEM
ENVIRONMENTAL MANAGEMANT PROGRAM
U.S. ARMY ENGINEER DISTRICT, ROCK ISLAND
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General – Major Rehabilitation – Locks and Dams (Navigation)

PROJECT: Lock and Dam 24, Mississippi River, Illinois and Missouri (Major Rehabilitation) (Continuing)

LOCATION: Lock and Dam 24, is located in Calhoun County, Illinois, and Pike County, Missouri, at approximately Mile 273.5 above the mouth of the Ohio River in the vicinity of Clarksville, Missouri.

DESCRIPTION: The project plan provides for the rehabilitation of portions of the structure. The work will include replacement of miter gates, auxiliary lock closure structure, power distribution system, lock motors and controllers, control system, and miter gate machinery; addition of a protection cell, bendway weirs, and debris openings in the dam guard wall; repairs to several dam bridge columns; and rehabilitation of the lock landwall, intermediate wall, upstream and downstream guidewalls, dam tainter gates and anchorages, and the Illinois abutment. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1935, Water Resources Development Acts of 1986 and 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 4.8 to 1 at 8 percent (Rehabilitation Report, Part 1, June 1993); and 7 1/8 percent (Rehabilitation Report, Part 2, September 1997).

TOTAL BENEFIT-COST RATIO: 2.3 to 1 at 8 percent (Rehabilitation Report, Part 1, June 1993); 1.4 to 1 at 7 1/8 percent (Rehabilitation Report, Part 2, September 1997).

INITIAL BENEFIT-COST RATIO: 2.3 to 1 at 8 percent (FY 1996, Rehabilitation Report, Part 1, June 1993); 1.4 to 1 at 7 1/8 percent (FY 2000, Rehabilitation Report, Part 2, September 1997).

BASIS OF BENEFIT-COST RATIO: Based on two Major Rehabilitation Reports, Lock and Dam No. 24, Mississippi River, approved in June 1993 (Part 1, October 1992 price levels) and September 1997 (Part 2, October 1996 price levels). Benefit-cost ratio is a composite of all items analyzed for major rehabilitation.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$87,600,000		Entire Project	60	TBD
General Appropriation	$43,800,000					
Inland Waterways Trust Fund	43,800,000					
Estimated Non-Federal Cost		0				
Total Estimated Project Cost		$87,600,000				

SUMMARIZED FINANCIAL DATA (Continued)	GENERAL APPNS		INLAND WATERWAYS TRUST FUND		ACCUM PCT OF EST FED COST
Allocations to 30 September 2003	$23,971,000		$23,971,000		
Conference Allowance for FY 2004	7,500,000		7,500,000		
Allocation for FY 2004	5,797,000	1/	5,797,000	1/	
Allocations through FY 2004	29,768,000		29,768,000		68
Allocation Requested for FY 2005	4,400,000		4,400,000		78
Programmed Balance to Complete After FY 2005	9,632,000		9,632,000		
Unprogrammed Balance to Complete After FY 2005	0		0		

PHYSICAL DATA

Lock: Major rehabilitation of the existing lock will include replacement of miter gates, power distribution system, motors, controllers, and machinery; construction of a protection cell, bendway weirs, and debris openings in the guard wall; and rehabilitation of existing lock landwall, intermediate wall, and downstream guidewalls.

Dam: Major rehabilitation of the existing dam lock will include replacement of power distribution and control systems and auxiliary lock closure structure and rehabilitation of bridge columns and Illinois abutment.

JUSTIFICATION: Lock and Dam 24 has been operating for over 60 years. While ordinary maintenance has been performed to keep the facility operating, the wear and tear on some items is beyond ordinary maintenance. To provide an acceptable level of reliability, major rehabilitation of various structural, electrical, and mechanical components of the facility must be undertaken. The average annual benefits, all navigation, are $4,735,000 (Rehabilitation Report, Part 1, June 1993) and $5,384,000 (Rehabilitation Report, Part 2, September 1997).

1/ Reflects $3,318,000 reduction assigned as savings and slippage and $88,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004 (50/50 Construction, General and Inland Waterways Trust Fund).

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue: Tainter Gate	$ 4,810,000
Complete: Lock Concrete Rehabilitation	2,052,000
Planning, Engineering and Design	720,000
Supervision and Administration	1,218,000
Total	$ 8,800,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

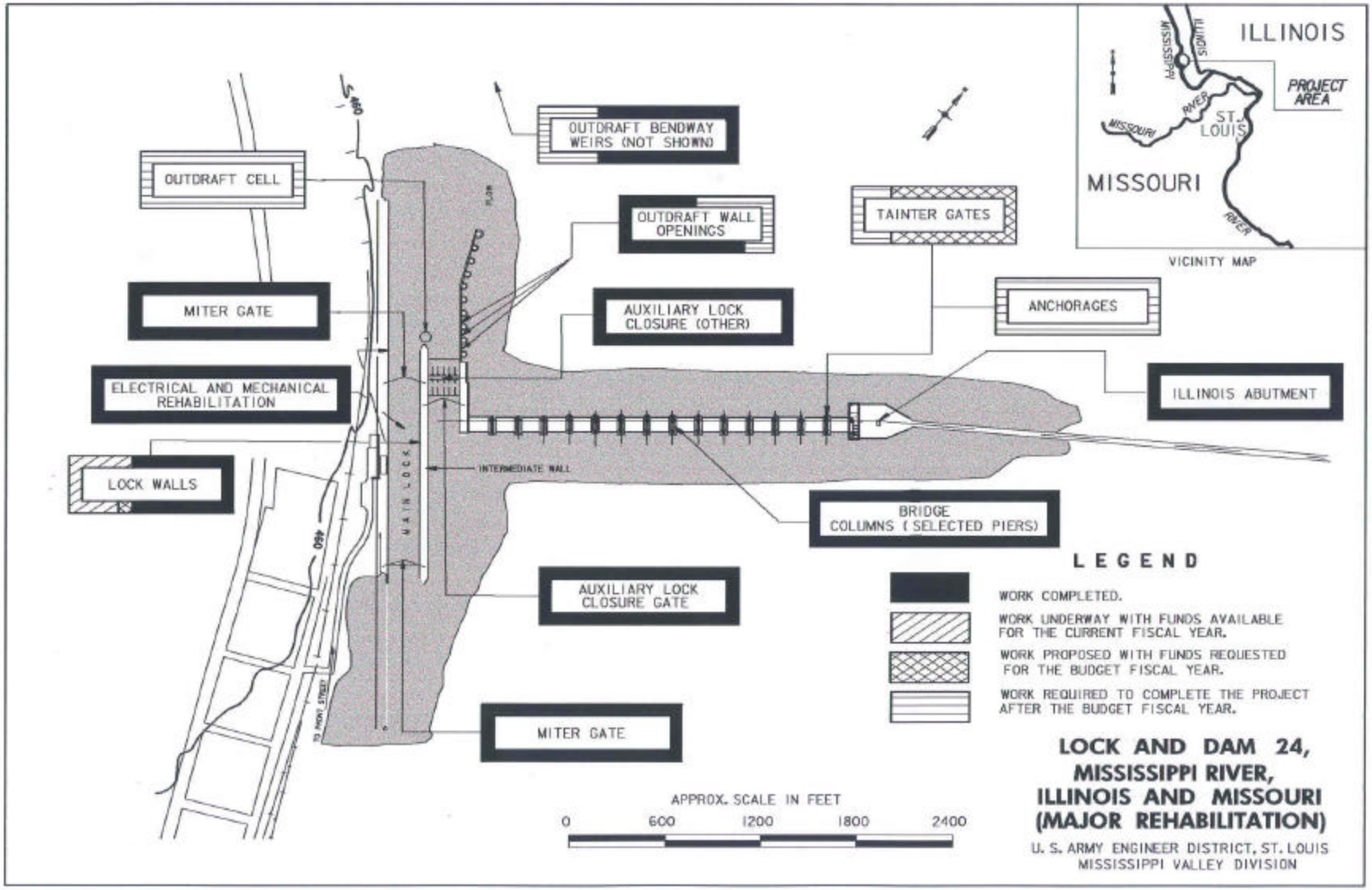
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $87,600,000 is an increase of $150,000 from the latest estimate ($87,450,000) submitted to Congress (FY 2004). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$ 150,000
Total	$ 150,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Two environmental assessments were conducted. Each one resulted in a Finding of No Significant Impact; the first one was signed 1 February 1993 and the second, 5 March 1997. The rehabilitation reports were coordinated with the U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and the Missouri and Illinois Departments of Conservation. The U.S. Fish and Wildlife Service concurred with the biological assessments contained in the environmental assessments.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1996.

The project requires no mitigation.


OUTDRAFT BENDWAY WEIRS (NOT SHOWN)
OUTDRAFT CELL
OUTDRAFT WALL OPENINGS
TAINTER GATES
MITER GATE
AUXILIARY LOCK CLOSURE (OTHER)
ANCHORAGES
ELECTRICAL AND MECHANICAL REHABILITATION
ILLINOIS ABUTMENT
LOCK WALLS
INTERMEDIATE WALL
MAIN LOCK
BRIDGE COLUMNS (SELECTED PIERS)
AUXILIARY LOCK CLOSURE GATE
MITER GATE
ILLINOIS
MISSISSIPPI
ILLINOIS
PROJECT AREA
MISSOURI
RIVER
ST. LOUIS
MISSOURI
RIVER
VICINITY MAP
LEGEND
WORK COMPLETED.
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR.
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR.
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR.
APPROX. SCALE IN FEET
0 600 1200 1800 2400
LOCK AND DAM 24, MISSISSIPPI RIVER, ILLINOIS AND MISSOURI (MAJOR REHABILITATION)
U. S. ARMY ENGINEER DISTRICT, ST. LOUIS
MISSISSIPPI VALLEY DIVISION

APPROPRIATION TITLE: Construction, General – Major Rehabilitation – Locks and Dams (Navigation)

PROJECT: Lock and Dam 19, Mississippi River, Iowa (Major Rehabilitation) (Continuing)

LOCATION: The project is located at Mississippi River Mile 364.0, at Keokuk, Iowa. The facility is a unit of the Inland Waterway Navigation System of the Upper Mississippi River Basin and is one of twenty-nine such facilities between Minneapolis, Minnesota, and St. Louis, Missouri.

DESCRIPTION: The lock chamber is 1200 feet long by 110 feet wide and has a maximum lift of 38.2 feet. The adjacent navigation dam has a total length of approximately 4,900 feet. AmerenUe, a privately owned utility company, owns the dam. Significant features of the work include replacement of the lower miter gates, electrical systems replacement, concrete lock wall repair, and replacement of the mechanical equipment for both upper lift gates and the lower miter gate. All work is programmed.

AUTHORIZATION: River and Harbor Act of 1930.

REMAINING BENEFIT-REMAINING COST RATIO: 4.6 to 1 at 5-7/8 percent.

TOTAL BENEFIT-COST RATIO: 4.6 to 1 at 5-7/8 percent

BASIS OF BENEFIT-COST RATIO: Benefits are based on the Mississippi River, Keokuk, Iowa, Lock and Dam No. 19 Rehabilitation Evaluation Report, dated February 2001, revised August 2001.

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost	$21,400,000[1]	Entire Project	2	TBD
General Appropriations	10,700,000			
Inland Waterways Trust Fund	10,700,000			
Estimated Non-Federal Cost	0			
Total Estimated Project Cost	$21,400,000			

PHYSICAL DATA

Lock Rehabilitation – 1200 feet long x 110 feet wide.

[1] Based on Rehabilitation Evaluation Report dated February 2001, revised August 2001. The estimate was updated to October 2003 price levels and an estimated inflation allowance through the construction period was applied.

SUMMARIZED FINANCIAL DATA (Continued)

	GENERAL APPROPRIATIONS	INLAND WATERWAYS TRUST FUND	ACCUM PCT OF EST FED COST
Allocations to 30 September 2003	$ 408,000 1/	$ 0 1/	
Conference Allowance for FY 2004	111,000 2/	639,000 2/	
Allocation for FY 2004	86,000 2/ 3/	494,000 2/ 3/	
Allocations through FY 2004	494,000	494,000	5
Allocation Requested for FY 2005	$ 2,400,000	$ 2,400,000	27
Programmed Balance to Complete after FY 2005	7,806,000	7,806,000	
Unprogrammed Balance to Complete after FY 2005	0	0	

1/ No funds provided for the Inland Waterways Trust Fund in the Consolidated Appropriations Resolution, 2003.
2/ Adjusted to bring the project into balance between Construction, General and the Inland Waterways Trust Fund.
3/ Reflects $166,000 reduction assigned as savings and slippage and $4,000 rescinded in accordance with the pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The Upper Mississippi River is a vital segment of the United States Inland Waterway Navigation System, serving as an economical transportation link from the Upper Midwest to the lower Mississippi River and the Gulf of Mexico. The Upper Mississippi River is essential to several of the most important economic sectors in the nation; namely agriculture, construction, and energy. The continued operation and maintenance of the locks and dams on the Upper Mississippi River in a safe and reliable mode is of sound economic importance.

Lock and Dam No. 19 was placed into operation in 1957, and has performed very well in the intervening 45 years of service. However, reliability and operational problems are occurring that have significant impacts to the navigation users of the Upper Mississippi River. These impacts, in the form of service disruptions leading to stalls and delays in traffic, result in increased transportation costs for grain, coal, petroleum products, and other bulk commodities. As stewards of inland navigation, the U.S. Army Corps of Engineers is addressing these reliability problems to ensure the lock and dam system continues satisfactory operations for current levels of traffic on the Upper Mississippi River.

The existing lock mechanical and electrical systems are original equipment installed in the 1950's. Most of the electrical components are not in compliance with the National Electric Code, and operation of the equipment is becoming a concern. Spare parts for the mechanical systems are also becoming increasingly difficult to obtain. Operation and maintenance costs will be increasing with a continued decrease in the reliability. The lock mechanical systems are the most critical components in keeping the lock operational. Loss of the mechanical systems could close the lock for periods of up to 90 days. Failure of the culvert valves that control entry and exit of water for the lock could reduce the efficiency or, in some cases, shut down the lock for an extended period. The lower miter gates have been declared unfit due to severe cracking and fatigue and have been temporarily replaced by the only spare miter gates on the Mississippi River. The spare gates are leaking, do not properly fit, and are not designed for ice loading. Failure of these gates could close the river for as much as a year. Repairs to the gates performed in 1998 did not resolve the problem. Complete replacement of the gates is recommended.

Additional rehabilitation work will be accomplished utilizing the Operation and Maintenance-Major Maintenance Program. These items include lock house and control station repair, widening of the service gate walkway, HVAC installation in tainter valve equipment rooms, installation of humidity control in access tunnels, dual mooring bitts, bubbler system, six foot chain link fence, upstream guidewall extension, landscaping, and rehabilitating public restrooms. The average annual benefits, all navigation, are $7,671,000. Lock tonnage figures for the last ten years are as follows:

Year	Tonnage	Year	Tonnage	Year	Tonnage	Year	Tonnage
2003	31,827,296	2000	34,097,581	1997	29,623,384	1994	26,677,268
2002	34,914,721	1999	35,803,139	1996	32,335,946	1993	22,775,079
2001	30,128,612	1998	31,076,726	1995	33,195,954	1992	35,982,699

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Lock Rehabilitation	$ 4,100,000
Planning, Engineering, and Design	300,000
Supervision and Administration	400,000
Total	$ 4,800,000

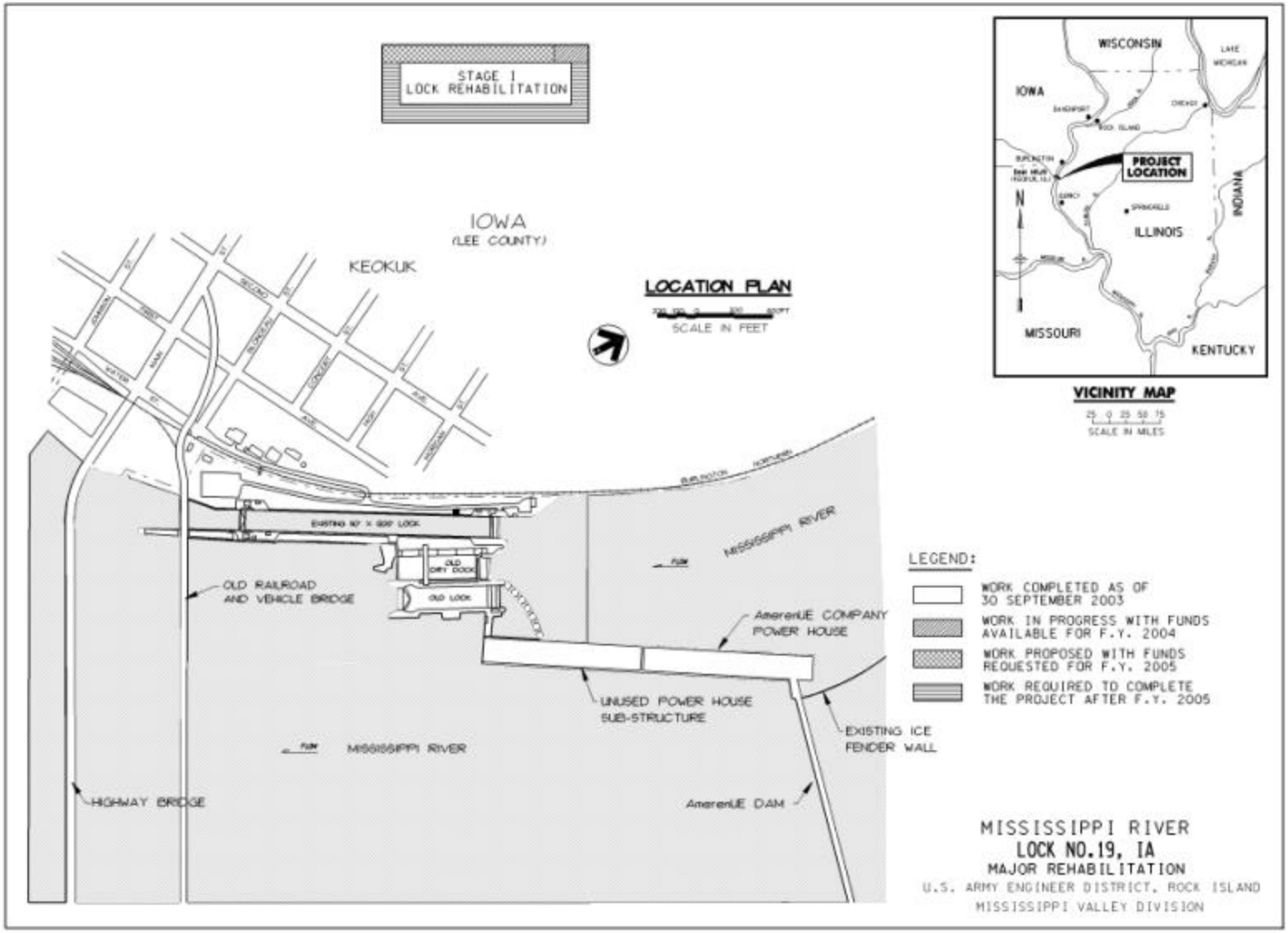
NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, 50 percent of the total cost of construction will be derived from the Inland Waterways Trust Fund.

STATUS OF LOCAL COOPERATION: None required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $21,400,000 is the initial cost estimate. No previous estimate has been presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment was distributed for public review in March 2001. Finalization of the environmental documentation was delayed in order to perform a hydroacoustic study requested by reviewing agencies. This study was necessary to confirm the absence of mussels in the area of the proposed upper guide wall. A Finding of No Significant Impact was signed on 11 Feb 2002.

OTHER INFORMATION: Operations and Maintenance, General, funds were allocated to initiate and complete the Rehabilitation Evaluation Report. Funds to initiate construction were appropriated in Fiscal Year 2003.


STAGE I
LOCK REHABILITATION
IOWA
(LEE COUNTY)
KEOKUK
LOCATION PLAN
SCALE IN FEET
WISCONSIN
IOWA
PROJECT LOCATION
ILLINOIS
INDIANA
MISSOURI
KENTUCKY
VICINITY MAP
SCALE IN MILES
MISSISSIPPI RIVER
OLD RAILROAD AND VEHICLE BRIDGE
OLD DRY DOCK
OLD LOCK
AmerenUE COMPANY POWER HOUSE
UNUSED POWER HOUSE SUB-STRUCTURE
EXISTING ICE FENDER WALL
HIGHWAY BRIDGE
AmerenUE DAM
LEGEND:
WORK COMPLETED AS OF 30 SEPTEMBER 2003
WORK IN PROGRESS WITH FUNDS AVAILABLE FOR F.Y. 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR F.Y. 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER F.Y. 2005
MISSISSIPPI RIVER
LOCK NO.19, IA
MAJOR REHABILITATION
U.S. ARMY ENGINEER DISTRICT, ROCK ISLAND
MISSISSIPPI VALLEY DIVISION

MISSISSIPPI VALLEY DIVISION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation

a. Channels and Harbors The budget estimate of $143,638,000 provides for essential operation and maintenance on 22 channel projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Arkansas			
Helena Harbor	328,000	0	None.
Osceola Harbor	547,000	20,000	None.
White River	1,295,000	0	None.
Yellow Bend Port	116,000	14,000	None.
Kentucky			
Elvis Stahr Harbor	382,000	19,000	None.
Mayfield Creek	75,000	0	None.
Iowa			
Muscatine Small Boat Harbor	312,000	0	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Louisiana			
Atchafalaya River, Bayous Chene, Boeuf and Black	15,411,000	13,813,000	Dredging.
Barataria Bay	1,841,000	0	None.
Bayou LaFourche And LaFourche Jump Waterway	829,000	0	None.
Bayou Segnette	736,000	0	None.
Calcasieu River	9,606,000	13,285,000	Dredging.
Freshwater Bayou	1,434,000	1,678,000	Dredging.
Gulf Intracoastal Waterway	15,875,000	17,476,000	Variation in maintenance requirements.
Houma Navigation Canal	1,143,000	3,070,000	Dredging.
Lake Providence	322,000	38,000	None.
Madison Parish Port	74,000	20,000	None.
Mississippi River Baton Rouge to Gulf of Mexico	48,748,000	59,125,000	Dredging.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Mississippi River - Gulf Outlet	12,414,000	13,004,000	Dredging.
Mississippi River Outlets at Venice	2,721,000	424,000	Dredging.
Bayou Lacombe	290,000	0	None.
Tangipahoe River	140,000	0	None.
Waterway Empire to Gulf of Mexico	184,000	0	None.
Waterway to Bayou Dulac	184,000	0	None.
Minnesota			
Minnesota River	175,000	178,000	None.
Mississippi			
Claiborne County Port	0	7,000	None.
Mouth of Yazoo River	47,000	24,000	None.
Rosedale Harbor	414,000	20,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Yazoo River, MS	6,000	140,000	None.
Missouri			
Caruthersville Harbor	287,000	12,000	None.
Mississippi River Between Ohio & Missouri Rivers	15,024,000	21,236,000	Dredging, dike construction and Lock 27 gate repair.
New Madrid Harbor	258,000	16,000	None.
Tennessee			
Wolf River Harbor	277,000	19,000	None.
TOTAL – Channels and Harbors	131,791,000	143,638,000	

JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation (Continued)

b. Locks and Dams The program request of $169,899,000 provides for the Operation and Maintenance requirements of thirteen canalized waterways including the Illinois Waterway and Mississippi River projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials and parts for day-to-day functioning, and periodic maintenance, repairs, and replacements.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Arkansas			
Ouachita and Black Rivers, AR and LA	8,418,000	1,974,000	Reduction in operation and maintenance activities.
Illinois			
St. Louis District Illinois Waterway	998,000	1,814,000	Dredging.
Rock Island District Illinois Waterway	24,063,000	33,273,000	Dredging.
Kaskaskia River	2,411,000	392,000	Reduction in operation and maintenance activities.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Illinois, Iowa, Minnesota, Missouri and Wisconsin			
St. Louis District Mississippi River between Missouri River & Minneapolis	12,833,000	17,907,000	Dredging, construct dike and revetment, lock repairs.
Rock Island District Mississippi River between Missouri River & Minneapolis	38,596,000	42,473,000	Dredging, additional maintenance requirement L/D 12.
St. Paul District Mississippi River between Missouri River & Minneapolis	42,185,000	51,030,000	Includes L/D 10 Lockwork, Stage 2, Building, Site and Control; L/D 2 thru 9 Guidewall Rehabilitation Lock Bulkhead slots; L/D 6 gate painting, service bridge repairs and Upper St. Anthony dewatering.
Louisiana			
Bayou Teche	1,138,000	0	None.
Bayou Teche and Vermilion River	33,000	0	None.
Mermentau River	2,762,000	4,410,000	Variation in structural maintenance requirements.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

1. Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Red River Waterway, Mississippi River to Shreveport, LA Shreveport, LA	11,888,000	10,600,000	Repairs to stoplogs.
Minnesota			
Reservoirs at Headwaters Mississippi River	5,032,000	6,026,000	Replace stoplogs at Pokegama.
Mississippi			
Pearl River, MS and LA	149,000	0	Reduction of operation.
TOTAL – Locks and Dams	150,506,000	169,899,000	
TOTAL - Navigation	282,297,000	313,537,000	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

2. Flood Control

a. Reservoirs The program request of $29,861,000 for the Operation and Maintenance of twenty flood control reservoir projects providing the amount necessary for operation requirements. Annual requirements are for the necessary operation and ordinary maintenance of project facilities; labor, supplies, materials and parts required for day-to-day functioning of the projects; and contact law enforcement. The requested amount also applications of special recreation user fees for recreation areas.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Illinois			
Carlyle Lake	4,192,000	4,366,000	None.
Farm Creek	199,000	192,000	None.
Lake Shelbyville	4,935,000	5,309,000	None.
Rend Lake	4,342,000	4,435,000	None.
Iowa			
Coralville Lake	3,284,000	2,806,000	None.
Red Rock Dam – Lake Red Rock	3,749,000	3,350,000	None.
Saylorville Lake	3,984,000	3,860,000	None.
Scheduling Reservoir Operations	312,000	0	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

2. Flood Control (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Ft. Madison	47,000	0	None.
Louisiana			
Bayou Bodcau Reservoir	807,000	776,000	None.
Caddo Lake	146,000	182,000	None.
Wallace Lake	137,000	290,000	None.
Minnesota			
Big Stone Lake – Whetstone River	252,000	228,000	None.
Lac Qui Parle Lake	627,000	565,000	None.
Lake Traverse, MN & SD	619,000	512,000	None.
Orwell Lake	372,000	361,000	None.
Red Lake Reservoir	98,000	98,000	None.
Mississippi			
Arkabutla Lake	96,000	0	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

2. Flood Control (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Missouri			
Union Lake	8,000	10,000	None.
Wappapello Lake	44,000	0	None.
North Dakota			
Lake Ashtabula - Baldhill Dam	1,278,000	1,216,000	None.
Homme Lake	179,000	196,000	None.
Souris River	340,000	387,000	None.
Wisconsin			
Eau Galle River Lake	699,000	722,000	None.
TOTAL - Reservoirs	30,746,000	29,861,000	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

2. Flood Control (Continued)

b. Channel Improvements, Inspections and Miscellaneous Maintenance The budget estimate of $2,136,000 provides for inspection of completed works during the budget year. All work is programmed.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Louisiana			
Bayou Pierre	29,000	28,000	None.
Inspection of Completed			
Arkansas	69,000	191,000	Variation in inspection requirements.
Illinois	410,000	605,000	
Iowa	94,000	191,000	
Kentucky	13,000	97,000	
Louisiana	744,000	747,000	
Minnesota	92,000	123,000	
Missouri	254,000	0	
Mississippi	7,000	0	
North Dakota	62,000	0	
Tennessee	119,000	116,000	
Wisconsin	16,000	38,000	
TOTAL - Channel Improvements Inspection and Misc Maintenance	1,909,000	2,136,000	
TOTAL - Flood Control	32,655,000	31,997,000	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

3. Multiple Purpose Power Projects The program request of $24,790,000 for the operation and maintenance of four multiple purpose projects provides the amount necessary for operation requirements. Annual requirements are for the necessary operation and ordinary maintenance of project facilities, labor, supplies, materials and parts required for day-to-day functioning of the project; and contract law enforcement. The requested amount also includes application of Special Recreation Use Fees for recreation areas.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Arkansas			
Blakely Mt. Dam Lake Ouachita	5,574,000	7,192,000	Variation in Hydropower maintenance.
Degray Lake	4,892,000	6,164,000	Variation in Hydropower maintenance.
Narrow Dam - Lake Greeson	5,253,000	5,613,000	Variation in Hydropower maintenance.
Missouri			
Clarence Cannon and Reservoir	5,404,000	5,821,000	Variation in recreation maintenance.
TOTAL - Multiple Purpose	21,193,000	24,790,000	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

4. Protection of Navigation The protection of navigation budget estimate of $2,316,000 provides for accomplishing the work necessary for the eradication of aquatic plant, project condition surveys and surveillance of northern boundary waters.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Aquatic Growth **Louisiana**	1,868,000	1,800,000	Variation in weed control.
Project Condition Surveys			
Arkansas	6,000	6,000	None.
Illinois	6,000	0	None.
Kentucky	6,000	6,000	None.
Louisiana	75,000	0	None.
Minnesota	15,000	0	None.
Mississippi	11,000	180,000	None.
Missouri	6,000	6,000	None.
Tennessee	6,000	6,000	None.
Wisconsin	10,000	0	None.

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

4. Protection of Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Surveillance of Northern Boundary Waters **Minnesota**	57,000	282,000	Increase due to implement International Watershed Board strategy.
North Dakota	30,000	30,000	None.
TOTAL - Protection of Navigation	2,095,000	2,316,000	

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2005

4. Protection of Navigation (Continued)

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
GRAND TOTAL - MISSISSIPPI VALLEY DIVISION	338,170,000	372,640,000	

Justification of Estimates for Civil Works Activities
Department of the Army, Corps of Engineers
Fiscal Year 2005

SUMMARY MISSISSIPPI RIVER COMMISSION

Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MO, MS, & TN

	FY 2004 Allocation	FY 2005 Request	Increase or Decrease
General Investigations	$ 8,345,000	$ 4,458,000	$ - 3,887,000
Survey	3,495,000	2,958,000	- 537,000
Preconstruction Engineering and Design	4,850,000	1,500,000	- 3,350,000
Construction	171,525,000	127,997,000	-43,528,000
Operation and Maintenance	174,290,000	151,855,000	-22,435,000
Less Reduction for Savings and Slippage	-29,938,000	-14,310,000	+15,628,000
Less Reduction for Rescission	-1,914,000	0	+ 1,914,000
GRAND TOTAL, MISSISSIPPI RIVER COMMISSION	$322,308,000	$270,000,000	-52,308,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
1. SURVEYS – NEW:					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: None.					
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Comprehensive Studies: None.					
f. Watershed/Ecosystem Studies: The amount of $100,000 is being requested to initiate and complete one reconnaissance study in Fiscal Year 2005.					
LOUISIANA					
Atchafalaya Basin Floodway System Land Study, Louisiana New Orleans District	100,000	0	0	100,000	0

The study area includes the Atchafalaya Basin Floodway System positioned between the west Atchafalaya Basin Levee and the east Atchafalaya Basin Levee from Simmesport, Louisiana at the north to below Morgan City, Louisiana to the south. The purpose of the study is to investigate further needs and opportunities in the acquisition of fee and easement lands for floodplain management, aquatic ecosystem restoration, and other purposes beyond the amount of land authorized for acquisition in the Supplemental Appropriations Act of 1985, Public Law 99-88 and WRDA of 1986, Public Law 99-662 which authorized the Atchafalaya Basin Floodway System Project, Louisiana. The study also will explore whether the acquisition of fee title is or is not preferable to the acquisition of easements. Proposed activities for Fiscal Year 2005 would include developing a project management plan and significantly advancing the reconnaissance study. The reconnaissance study is scheduled for completion in 12 months.

Total – Watershed/Ecosystem Studies	100,000	0	0	100,000	0
Total – SURVEYS - New	100,000	0	0	100,000	0

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
2. SURVEYS – CONTINUING:					
a. Navigation Studies: None.					
b. Flood Damage Prevention Studies: The amount of $1,455,000 is being requested to continue four and complete one feasibility studies in Fiscal Year 2005.					
LOUISIANA					
Alexandria, LA, to the Gulf of Mexico, LA New Orleans District	2,100,000	115,000	395,000	435,000	1,155,000

The study area is located in south-central Louisiana and encompasses an area of about 1,700 square miles extending through nine parishes from Alexandria, Louisiana, to the Gulf of Mexico. The area is the drainage basin for the West Atchafalaya Basin Floodway Levee intercepted drainage system, a feature of the Mississippi River and Tributaries project, that prevents overflow from the Atchafalaya Basin Floodway and intercepts flows from the areas major outlets. The largest urban area in the study area is Alexandria, which has experienced numerous floods in its metropolitan area. New Iberia and Opelousas are also in the study area. There have been extensive flooding problems in the Alexandria area and widespread flooding throughout the basin in the more rural and agricultural areas. Since 1953 there have been fifteen significant storm events with rainfall ranging from 5.4 to 18 inches in the study area. The lower portion of the study area is in the coastal zone and is comprised of wetlands subject to hurricane flooding and related problems including erosion, subsidence, saltwater intrusion, etc. The area is very rich in fish and wildlife resources. The local sponsor is the Louisiana Department of Transportation and Development and the Rapides Parish Gravity Drainage District No. 1. The sponsors have requested that flooding problems in the Alexandria, Louisiana area be addressed in the first phase of the feasibility study. The feasibility cost sharing agreement was executed 14 April 2003 and is currently being revised to include LADOTD's signature.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$4,100,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,000,000
Feasibility Phase (Non-Federal)	2,000,000

The reconnaissance phase was completed June 1999. The feasibility study completion date is being determined.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Donaldsonville, LA to the Gulf of Mexico New Orleans District	4,039,000	1,596,000	771,000	800,000	872,000

The study area is located in southeast Louisiana and includes portions of the Parishes of Ascension, Assumption, St. James, St. John the Baptist, Lafourche, St. Charles, Jefferson, and Plaquemines. The area is bounded on the west by Bayou Lafourche and on the east and north by the west bank Mississippi River levee, from Donaldsonville, Louisiana to the Gulf of Mexico. The basin is subject to rainfall, tidal, and hurricane flooding resulting in structural, agricultural, and environmental damages. Flooding damages are aggravated by the long duration of high stages due to conveyance obstructions. The prolonged stages destroy crops and stress the natural vegetation. Floods in June 1959, April 1980, November 1989, January 1991, and April/May 1991 produced near 100-year flood conditions with less than 100-year rainfall. Hurricane Juan in 1985 also produced near 100-year flood stages. This area has been declared a Federal disaster area four times since 1985 and has experienced several additional storms, causing FEMA to provide additional individual assistance. Red Cross surveys of the area after the April/May 1991 flood event indicated that some 300 residential structures were flooded to varying degrees. Flood damages also occurred in August 1992 as a result of Hurricane Andrew and in May 1995 due to heavy rainfall in the area. The expected study outcome will be to reduce flooding and flood duration by channel modifications, pumping, and water management such that structural and agricultural damages will be prevented and provide environmental restoration to stressed habitat. The local sponsors are the Louisiana Department of Transportation and Development and the Lafourche Basin Levee District. A feasibility cost sharing agreement was signed on 6 February 2002.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $7,000,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$7,539,000
Reconnaissance Phase (Federal)	539,000
Feasibility Phase (Federal)	3,500,000
Feasibility Phase (Non-Federal)	3,500,000

The reconnaissance phase was completed in February 2002. The feasibility study completion date is being determined.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Fletcher Creek, TN Memphis District	474,000	42,000	109,000	93,000	230,000

The study area is located in Shelby County, Tennessee within the Cities of Memphis, Bartlett and Cordova, Tennessee. Fletcher Creek is a major tributary of the Wolf River. The drainage basin encompasses approximately 32 square miles. The area is experiencing increased water surface elevations due to encroachment into the floodplain caused by the tremendous residential and commercial growth, including the Wolf-Chase Galleria Mall and related commercial development near the mall. The 100-year water surface elevation has increased 2 feet or more since the early 1990's. Several businesses and homes which were not originally in the 100-year floodplain are now in the floodplain. The situation is expected to worsen in the near future. Hundreds of residents were evacuated from the Hillshire Subdivision due to extensive flooding after a heavy rainfall in November 2001. Reconnaissance phase studies were accomplished as part of the Memphis Metropolitan Area reconnaissance study completed in April 2001. The feasibility study will address potential solutions to flooding problems and investigate opportunities for watershed management, ecosystem restoration and water quality improvements. Both the City of Memphis and Shelby County, Tennessee have indicated financial capability to cost share a feasibility study. Shelby County, Tennessee submitted a letter of intent in 2001. The scheduled date for execution of a feasibility cost sharing agreement is June 2004.

Fiscal Year 2004 funds are being used to complete a project management plan, execute a feasibility cost-sharing agreement and continue into the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $800,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$874,000
Reconnaissance Phase (Federal)	74,000
Feasibility Phase (Federal)	400,000
Feasibility Phase (Non-Federal)	400,000

The reconnaissance phase will be completed in June 2004. The feasibility study completion date is being determined.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
TENNESSEE					
Germantown, TN Memphis District	763,000	622,000	114,000	27,000	0

The study area is located in Shelby County, Tennessee, adjoining the City of Memphis. Three separate drainage basins are included in the study area. The Miller Farms Drainage Basin is located in northeast Germantown and is drained by two major channels, Laterals B and BA, which combine into one channel as a tributary to the Wolf River. This basin is experiencing rapid urbanization with associated increases in water elevations, property flooding, and erosion. During a 1996 storm event, approximately ten homes and several streets were flooded along Laterals B and BA. The lateral D Drainage Basin, a tributary to Wolf River, is also located in northeast Germantown. Headcutting associated with the main Wolf River channel is progressing up Lateral D and threatening major utilities , road crossing and public facilities. Erosion is undermining utility lines and roads and damaging residential properties along the stream. The Howard Road Outfall Drainage Basin is located in southwest Germantown and is a tributary to Nonconnah Creek. Inadequate capacity of the outfall channel and tributaries, undersized and obstructed culverts, increased property flooding, and decreased water quality are the primary problems in this basin. Reconnaissance phase studies were accomplished as part of the Memphis Metropolitan Area reconnaissance study. The principal purpose of the feasibility study is to identify an achievable solution to the flooding, erosion, and water quality problems plaguing this area. Analysis so far shows that a project on Lateral D would be feasible. The local sponsor is the City of Germantown, Tennessee. The feasibility cost sharing agreement was signed 29 October 2001. Section 456 of the Water Resources Development Act of 2000 directed the Secretary to include environmental and water quality benefits in the justification analysis for the project and to not reject the project under the feasibility study based solely on a minimum amount of stream runoff. In addition, the sponsor is to receive credit for the value of in-kind services provided relating to the planning, engineering, and design of the project, whether carried out before, on, or after the date of execution of the feasibility study cost-sharing agreement.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to complete the feasibility phase of the study. The estimated cost of the feasibility phase is $1,526,000, which is being shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$1,526,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	763,000
Feasibility Phase (Non-Federal)	763,000

The reconnaissance phase was completed in October 2001. The feasibility study completion date is scheduled for December 2004.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
Millington and Vicinity, TN Memphis District	310,000	35,000	77,000	100,000	98,000

The study area is located in Shelby County, Tennessee in the vicinity of Millington, Tennessee, just north of Memphis. One of the primary drainage channels is Big Creek, which is a major tributary to the Loosahatchie River. The Big Creek drainage basin encompasses approximately 154 square miles. The City of Millington and vicinity is experiencing increased water surface elevations and erosion along Big Creek and its tributaries due to urban development and runoff in the area. This situation is expected to worsen in the near future. The deterioration of the area's ecosystem and the lack of recreational opportunities are also of concern. The feasibility study will address potential solutions to flooding and erosion problems and investigate opportunities for ecosystem restoration and development of recreation features. The feasibility cost sharing agreement was executed with the City of Millington, on 16 September 2003.

Fiscal Year 2004 funds are being used to initiate the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $550,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$585,000
Reconnaissance Phase (Federal)	35,000
Feasibility Phase (Federal)	275,000
Feasibility Phase (Non-Federal)	275,000

The reconnaissance phase was completed in September 2003. The feasibility study completion date is being determined.

Total - Flood Damage Prevention Studies	7,686,000	2,410,000	1,466,000	1,455,000	2,355,000

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
c. Shoreline Protection Studies: None.					
d. Special Studies: None.					
e. Ecosystem Restoration Studies: The amount of $703,000 is required to continue two feasibility studies.					
LOUISIANA					
Spring Bayou, Louisiana Vicksburg District	1,800,000	550,000	453,000	500,000	297,000

The Spring Bayou area is located in east-central Louisiana about 20 miles west of the confluence of the Mississippi, Red, and Atchafalaya Rivers. The area encompasses at least 43 lakes and streams and includes two state wildlife management areas and two national wildlife refuges. Historically, the study area was a remote wilderness, a backwater bottom-land hardwoods wetlands with access limited to boats during the flood season. This ecosystem is being rapidly degraded from pollution of water, sedimentation, and rampant growth of aquatic plants. This has led to decreased fisheries production due to loss of spawning habitat, water quality degradation, and a general loss of wetland values. Primary alternatives under investigation include freshwater diversion from the Red River in conjunction with sediment removal from existing streams and various water control structures. Preliminary findings indicate that the improvements would provide positive environmental benefits. Improvements would reduce headwater flooding and provide positive stimulus to the area's ecosystem terrain. Representatives of the U.S. Fish and Wildlife Service and the Louisiana Department of Wildlife and Fisheries have expressed concern regarding the deteriorating conditions on the refuges and management areas and support further investigations. The proposed non-Federal sponsors are the Avoyelles Wildlife Federation, Avoyelles Parish Police Jury, and the Louisiana Department of Wildlife and Fisheries. The draft Project Management Plan is being negotiated with the non-Federal sponsors. The schedule for execution of a feasibility cost sharing agreement is July 2004.

Fiscal Year 2004 funds are being used to initiate the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $2,500,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	$3,050,000
Reconnaissance Phase (Federal)	550,000
Feasibility Phase (Federal)	1,250,000
Feasibility Phase (Non-Federal)	1,250,000

The reconnaissance phase is scheduled for completion in July 2004 . The feasibility study completion date is being determined.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
MISSISSIPPI					
Coldwater River Basin Below Arkabutla Lake, MS Vicksburg District	1,902,000	224,000	272,000	203,000	1,203,000

The study area is located in northwest Mississippi approximately 30 miles south of Memphis, Tennessee. Increased development has created adverse impacts on area streams in meeting water quality standards while maintaining flood damage reduction goals. The Yazoo Mississippi Delta Joint Water Management District in conjunction with Tunica County, Mississippi, has requested assistance in identifying measures to improve water management, water quality, flood control, and the wetland ecosystem throughout this watershed. The sponsors desire specific projects and guidelines for future development that will improve flood protection and the aquatic environment and conserve water resources. Projects will also be designed to prevent increases in downstream stages outside the study area. The sponsors are the Yazoo Mississippi Delta Joint Water Management District and Tunica County Soil and Water Conservation District. The feasibility cost sharing agreement was executed 18 June 2003.

Fiscal Year 2004 funds are being used to continue the feasibility phase of the study. Funds requested for Fiscal Year 2005 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is $3,524,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	$3,664,000
Reconnaissance Phase (Federal)	140,000
Feasibility Phase (Federal)	1,762,000
Feasibility Phase (Non-Federal)	1,762,000

The reconnaissance phase was completed June 2003. The feasibility study completion date is being determined.

Total - Ecosystem Restoration Studies	3,702,000	1,022,000	725,000	703,000	1,500,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Study	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
f. Watershed/Comprehensive Studies: None.					
g. Collection and Study of Basic Data	N/A	N/A	630,000	700,000	N/A

Surveys, Gages, and Observations. Funds requested for Fiscal Year 2005 are for collection of essential basic data which are subsequently used in the planning and design of flood control projects. The data collected under this activity are for authorized projects or units thereof for which funds have not been appropriated. The data to be collected will consist of information on stream flow, rainfall, floods, and other items of related hydrologic nature.

TOTAL – SURVEYS - Continuing	11,388,000	3,432,000	2,821,000	2,858,000	3,855,000
TOTAL - SURVEYS	11,488,000	3,432,000	2,821,000	2,958,000	3,855,000

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) – NEW: None.

4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING:

a. Navigation: None.

b. Flood Control: The amount of $1,500,000 is being requested to continue one PED activity in Fiscal Year 2005.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - General Investigations, Fiscal Year 2005

Project	Total Estimated Federal Cost $	Allocation Prior to FY 2004 $	Allocation FY 2004 $	Tentative Allocation FY 2005 $	Additional to Complete After FY 2005 $
LOUISIANA					
Morganza, LA, to the Gulf of Mexico New Orleans District	52,000,000	10,066,000	3,810,000	1,500,000	36,624,000

The study area is located in south Louisiana and includes portions of Terrebonne and Lafourche Parishes. The study area is subject to primarily backwater and tidal flooding. Extensive flooding occurred in the study area in 1973 and in 2001 and 2002 causing in excess of $200 million in damages. Less extensive, but still widespread flooding, has occurred since that time, notably in 1989, May 1991, and 1992. In the May 1991 event, damages in Lafourche and Terrebonne Parishes were estimated at $12,000,000. Between 1950 and 1990, the population increased from 61,000 to 97,000 or about 59 percent. Increases in population and other land use changes such as land clearing, subsidence and land loss have contributed to the increased stages. The feasibility study resulted in recommending hurricane protection for Terrebonne and Lafourche Parishes. The Water Resources Development Act of 1996 directed the Corps to perform a separate analysis of a lock in the Houma Navigation Canal for hurricane protection, saltwater intrusion, environmental preservation, safe harbor refuge, and potable water supply protection. This separate study was submitted to Congress in April 1997. The report recommended accomplishing preconstruction engineering and design (PED) concurrent with the feasibility study so that implementation would be advanced when construction is authorized. The preliminary benefit-cost ratio is 1.7 to 1 based upon the latest economic analysis dated October 2002. PED for the Houma Navigation Lock was authorized by Congress in Fiscal Year 1997. The Louisiana Department of Transportation and Development is the feasibility cost sharing sponsor and will continue as the project sponsor. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED phase at 25 percent non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction. The initial PED estimate is for the Houma Lock portion of the project; the ultimate estimate is for the entire project.

Total Estimated Preconstruction Engineering and Design Costs	$2,700,000	Total Estimated Preconstruction Engineering and Design Costs	$69,333,000
Initial Federal Share	2,025,000	Ultimate Federal Share	52,000,000
Initial Non-Federal Share	675,000	Ultimate Non-Federal Share	17,333,000

The project is not authorized for construction. Fiscal Year 2004 funds are being used to continue PED. The feasibility report was completed in March 2002. Funds requested for Fiscal Year 2005 will be used to continue PED. The PED completion date is being determined.

Total - Flood Control	52,000,000	10,066,000	3,810,000	1,500,000	36,624,000
TOTAL - PED	52,000,000	10,066,000	3,810,000	1,500,000	36,624,000
GRAND TOTAL - SURVEYS & PED	63,488,000	13,498,000	6,631,000	4,458,000	40,479,000

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, & TN - Construction

PROJECT: Mississippi River and Tributaries, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee (Continuing)

LOCATION: The comprehensive project for Flood Control, Mississippi River and Tributaries will provide flood protection for the alluvial valley of the Mississippi River from Cape Girardeau, Missouri, to the Head of Passes, Louisiana; and for improvement of the Mississippi River for navigation from Cairo, Illinois, to Baton Rouge, Louisiana. It includes the main river, the basins of the St. Francis, White, Arkansas, Tensas, Red, Yazoo and Atchafalaya Rivers, the alluvial lands around Lake Pontchartrain, and the tributary streams in Western Tennessee and Kentucky. The completed project will provide protection against a project design flood, which will amount to a flow of 2,360,000 cubic feet per second at Cairo, Illinois, and 3,030,000 cubic feet per second at the latitude of Old River above Baton Rouge, Louisiana. This flow will divide near this point with 1,530,000 cubic feet per second going down the Atchafalaya River and the West Atchafalaya and Morganza Floodways. The remaining 1,500,000 cubic feet per second will continue down the Mississippi River to a point above New Orleans, where 250,000 cubic feet per second will be diverted through the Bonnet Carre' Spillway to Lake Pontchartrain. The flow past New Orleans to the Gulf of Mexico will then be 1,250,000 cubic feet per second, which is the river's safe capacity.

The control of this large quantity of water will be accomplished by every practical means of flood control, especially reservoirs, levees, cutoffs, revetments, and floodways.

The justification of the funds requested is presented on separate sheets for each major feature of the project. These major features are termed "project" for the purposes of reporting, accounting and fiscal control, and where appropriate, are further separated into their separable units.

AUTHORIZATION: Flood Control Act of 1928, as amended.

SUMMARIZED FINANCIAL DATA		ACCUM PCT OF EST FED COST
Total Estimated Federal Cost	$13,775,953,000	
Allocations to 30 September 2003	7,743,124,000	
Allocations for FY 2004	159,973,000	57
Allocations through FY 2004	7,903,097,000	
Allocations Requested for FY 2005	129,497,000	58
Programmed Balance to Complete after FY 2005	4,302,351,000	
Unprogrammed Balance to Complete after FY 2005	1,441,008,000	

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $13,775,953,000 for the Mississippi River and Tributaries project is an increase of $22,657,000 from the latest estimate ($13,753,296,000) submitted to Congress (FY 2004). Details of the changes for features included in the Fiscal Year 2005 budget request are shown under the individual features on the following pages of the Justification Data.

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, TN - Construction

PROJECT: Mississippi River Levees, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The Mississippi River Levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to the vicinity of Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams. Included in the system are the levees which protect Mounds, Mound City and Cairo, Illinois, and the New Madrid Levee and Floodway.

DESCRIPTION: The plan of improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project flood. This feature includes 1,519.5 miles of levees and 14.8 miles of floodwall. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968, and PL 92-222.

REMAINING BENEFIT-REMAINING COST RATIO: 37.7 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The last comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Total Appropriation Requirement		$2,044,000,000		Entire Project	93	TBD
Future Non-Federal Reimbursement		674,000				
Estimated Federal Cost (Ultimate)		2,043,326,000				
Estimated Non-Federal Cost		$ 80,500,000				
Cash Contributions	$ 2,850,000					
Other Costs	76,976,000					
Reimbursement	674,000					
Recreation Facilities	$674,000					
Total Estimated Project Cost		$2,123,826,000				
Allocations to 30 September 2003		$ 1,010,893,000				
Conference Allowance for FY 2004		47,000,000				
Allocation for FY 2004		42,284,000	1/			
Allocations through FY 2004		1,053,177,000	52			
Allocation Requested for FY 2005		$ 38,960,000	53			
Programmed Balance to Complete After FY 2005		951,863,000				
Unprogrammed Balance to Complete After FY 2005		0				

PHYSICAL DATA	
Channel and Canals	72 miles
Levees:	
Average Height	20-35 feet
Length	1,519.5 miles
Floodwalls:	
Average Height	14-23 feet
Length	14.8 miles
Levee Berms	629.3 miles
Levee Roads	1,500.0 miles
Pumping Stations	5

1/ Reflects $4,113,000 reduction assigned as savings and slippages, and $253,000 rescinded in accordance with pending passage of The Consolidated Appropriations Act, 2004, and $350,000 reprogrammed from the project.

JUSTIFICATION: The Mississippi River Levee system is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River and a few miscellaneous items. Because the benefits of the Mississippi River Levees derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River Levee System provides protection to 23,620 square miles and partial protection to an additional 3,780 square miles in the alluvial valley subject to flooding by the project flood. The alluvial valley is over 650 miles long and varies in width from 20 to 90 miles. Numerous railroads, highways, and airfields connecting the major transportation centers lie within the protected area as do several major transcontinental communication routes. In addition to highly developed agricultural areas, the levees afford protection to urban areas and many industries.

The value of lands and improvements protected by authorized works against the design flood is $148.2 billion in 2003 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by the project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $347.0 million. This would be equivalent to $11.2 billion damages in 2003 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the Federal projects in place. Without the Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.5 billion and total damages prevented by projects amounted to $10.8 billion. Expressed in 2003 prices, damages without the projects would have been $40.6 billion and damages prevented would have been $38.1 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,433,000
Recreation	3,434,000
Total	$3,625,644,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Lands and Damages	$ 2,689,000
Miscellaneous Relocations	83,000
Miscellaneous Hired Labor	30,000
Trotter, MS, Berm, Parcel 1	800,000
Nash, MO, Relief Wells, Parcel 2	750,000
Island 8, KY, Relief Wells and Collector Ditches	1,018,000
Pecan Point, AR, Relief Wells	500,000
Cairo, IL, Slurry Trench Parcel 4	777,000
Mounds Creek, IL, Culvert	500,000
Birds Pint – New Madrid, MO, Box Culvert	500,000
Carlisle-Tallula, MS, Item 488-L	3,583,000
Willow Point-Youngs Point, LA, Item 445-R	750,000
Willow Point-Youngs Point, LA, Item 450-R	750,000
Willow Point-Youngs Point, LA, Item 453-R	1,800,000
Willow Point-Youngs Point, LA, Item 457-R	2,000,000
Willow Point-Youngs Point, LA, Item 461-R	2,000,000
Tallula-Magna Vista, MS, Item 477-L	1,636,000
Reid Bedfork-King, LA, Item 422-R	1,240,000
Gap Closure, East Bank, LA, Mile 230-44L	501,000
Alhambra-Hohen Solms, LA, Mile 191-185R	450,000
Hohen Solms-Modeste, LA, Mile 185-179R	450,000
Complete:	
Caruthersville, MO, Outlet Ditches	846,000
Hillhouse, MS, Relief Wells, Parcel 2	460,000
Tallula-Magna Vista, MS, Item 474-L	464,000
Valewood-Carlisle, MS, Item 496L	276,000
Birds Point – New Madrid, MO, Levee Closure, Parcel 1	79,000
Planning, Engineering and Design	11,608,000
Supervision and Administration	2,420,000
Total	$ 38,960,000

NON-FEDERAL COST: In accordance with the Flood Control Acts of 1928, 1936, 1938, 1941, 1946, 1950, 1954, 1962, 1965, 1968 and PL 92-222, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$76,654,000	
Minor maintenance of all flood control works after their completion, except controlling a regulating spillway structures, including special relief levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to mainline river levees.		$1,275,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	3,524,000	141,900
Other (levee and revetment construction)	322,000	
Total Non-Federal Costs	$80,500,000	$1,416,900

STATUS OF LOCAL COOPERATION: It is estimated that local interests had spent approximately $292,000,000 for flood protection prior to the Act of 15 May 1928. After passage of the Act, the 37 levee districts along the Mississippi River adopted resolutions assuring the United States that the requirements of local cooperation will be met. These local interests have acquired all rights-of-way for work completed and underway and will try to provide the rights-of-way for work scheduled for Fiscal Year 2005. Some levee boards are having difficulty in providing right-of-way when requested, even for construction work in areas where the existing levees are farthest below the authorized grade. Supplemental assurances covering the requirements of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) have been accepted for Main Stem Mississippi River Levees in Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee.

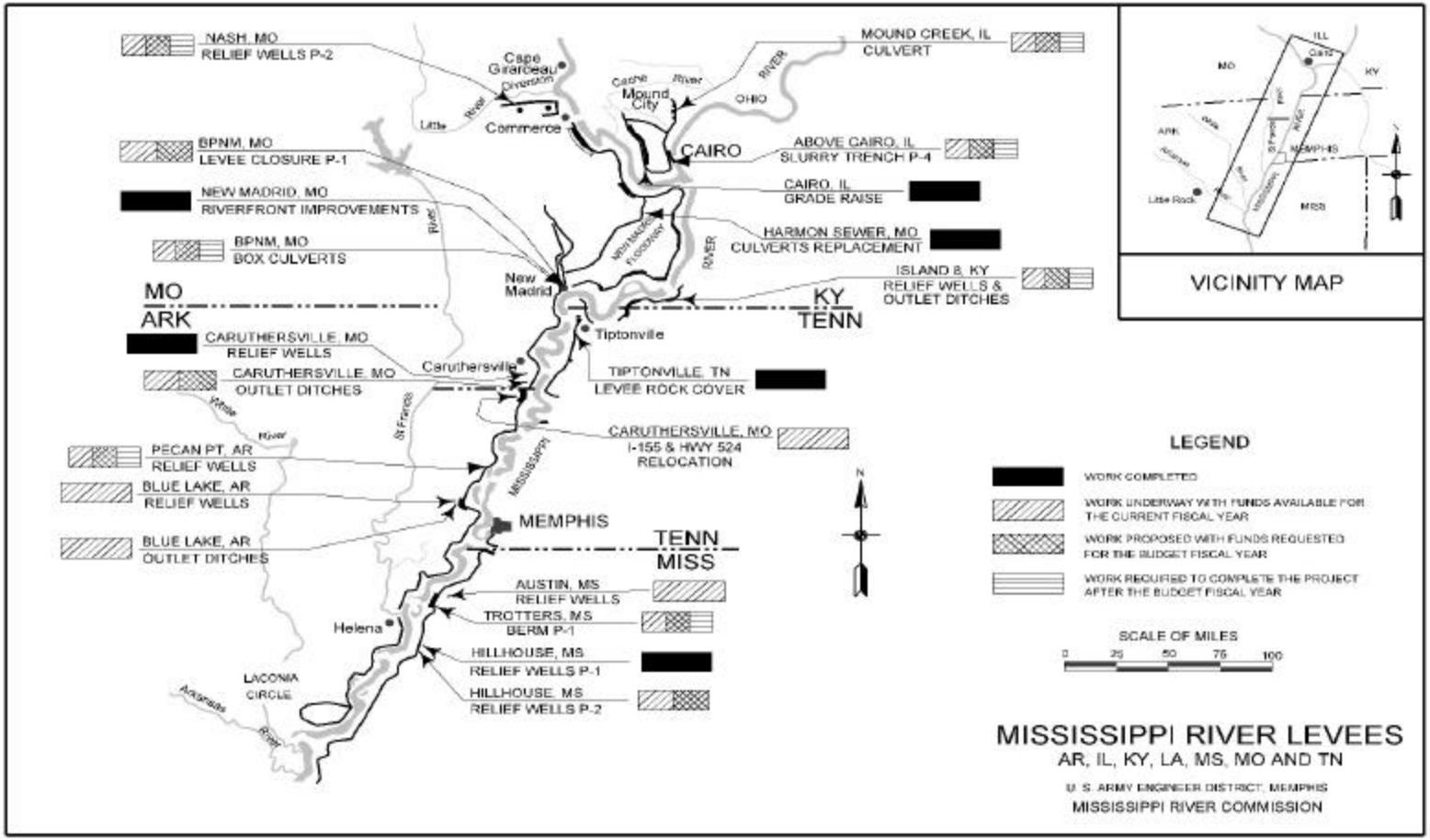
Assurances of local cooperation for the recreation facilities at Warfield Point, Mississippi, were accepted on 14 October 1969. Supplemental assurances covering the River and Harbor Act of 1970 (PL 91-611) and PL 91-646 were accepted 7 August 1972. Assurances have not as yet been requested for the recreation facilities at Mississippi River State Park, Arkansas.

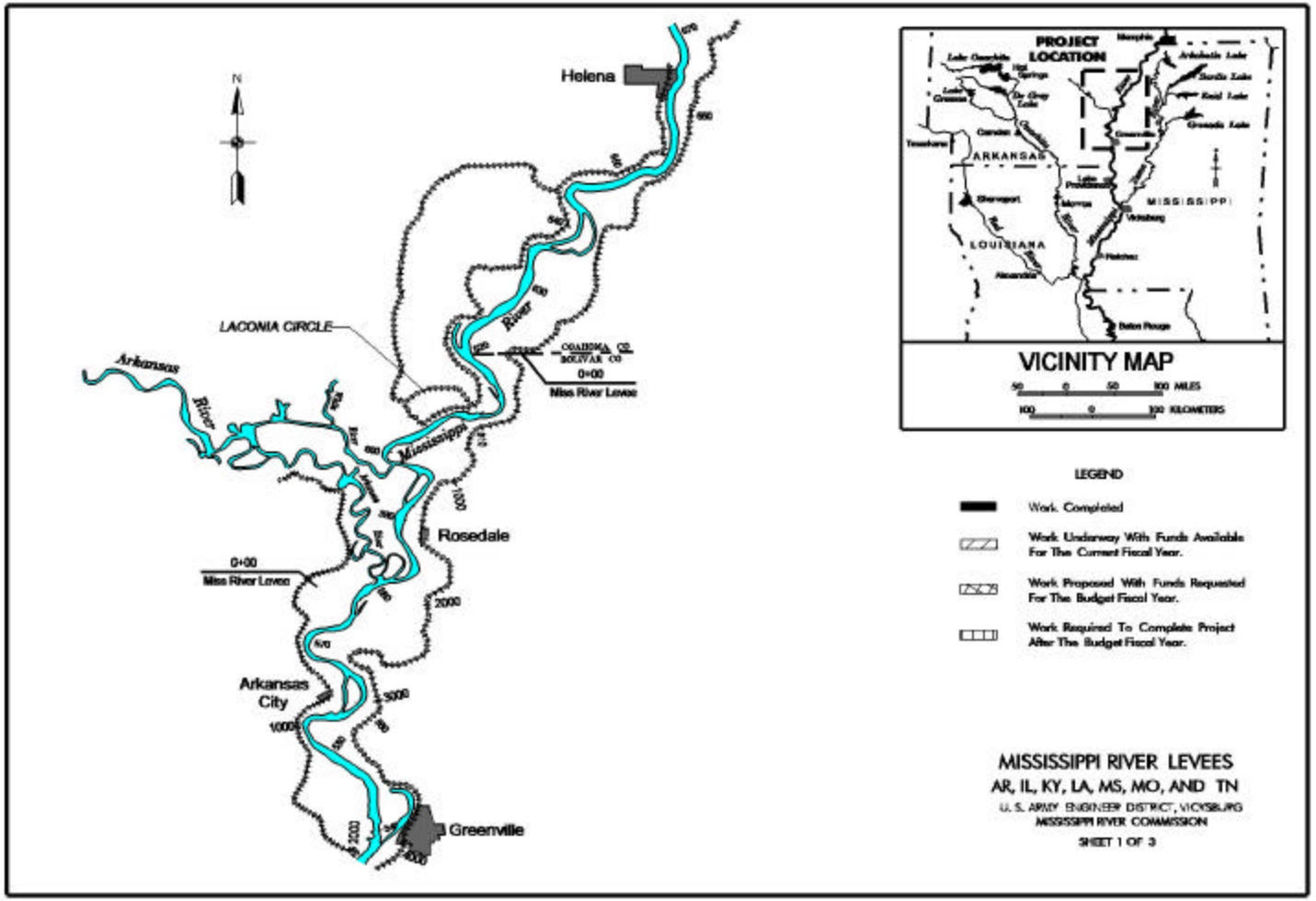
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $2,044,000,000 is a decrease of $50,000,000 from the latest estimate ($2,094,000,000) presented to Congress (FY 2004). This change includes the following items:

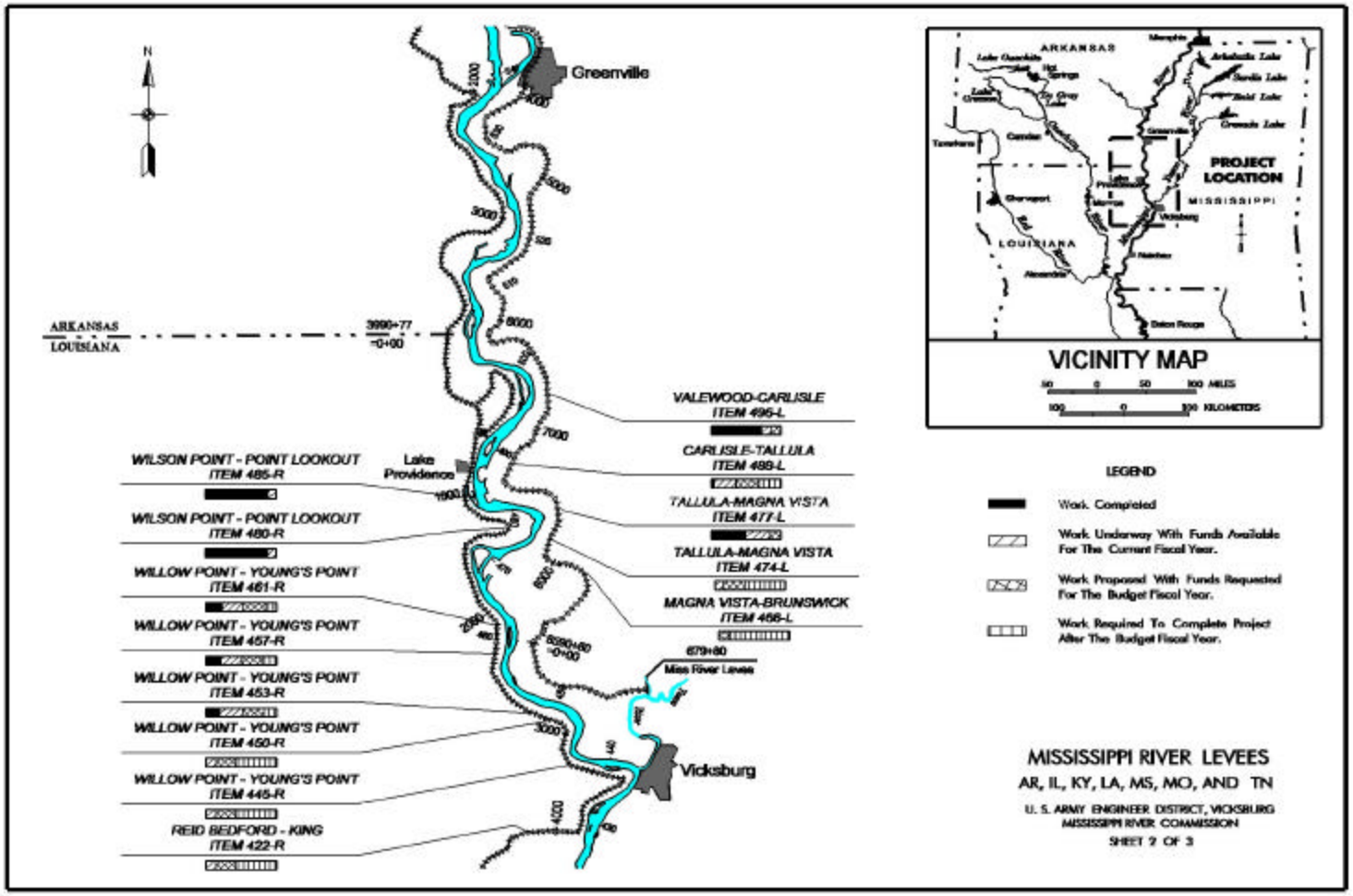
Item	Amount
Price Escalation on Construction Features	$ -63,637,000
Post Contract Award and Other Estimating Adjustments	6,934,000
Price Escalation on Real Estate	6,703,000
Total	$-50,000,000

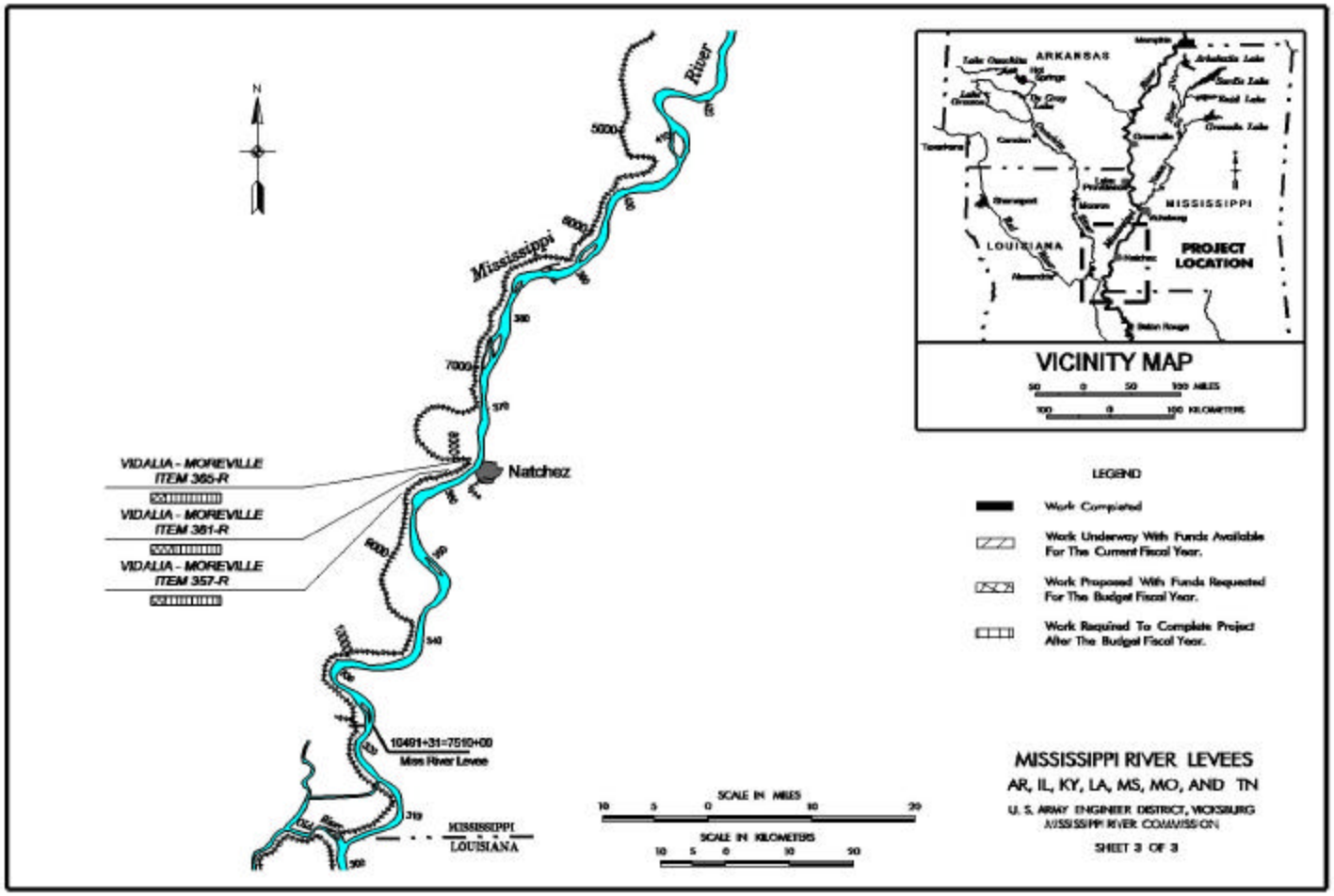
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976. A Supplemental Environmental Impact Statement for the project was completed and the Record of Decision was signed on 5 October 1998.
The adequacy of the Supplemental Environmental Impact Statement was challenged but upheld by the United States District Court for the Eastern District of Louisiana. The Fifth Circuit Court of Appeals on October 23, 2000, affirmed the district court's grant of summary judgment to the Government.

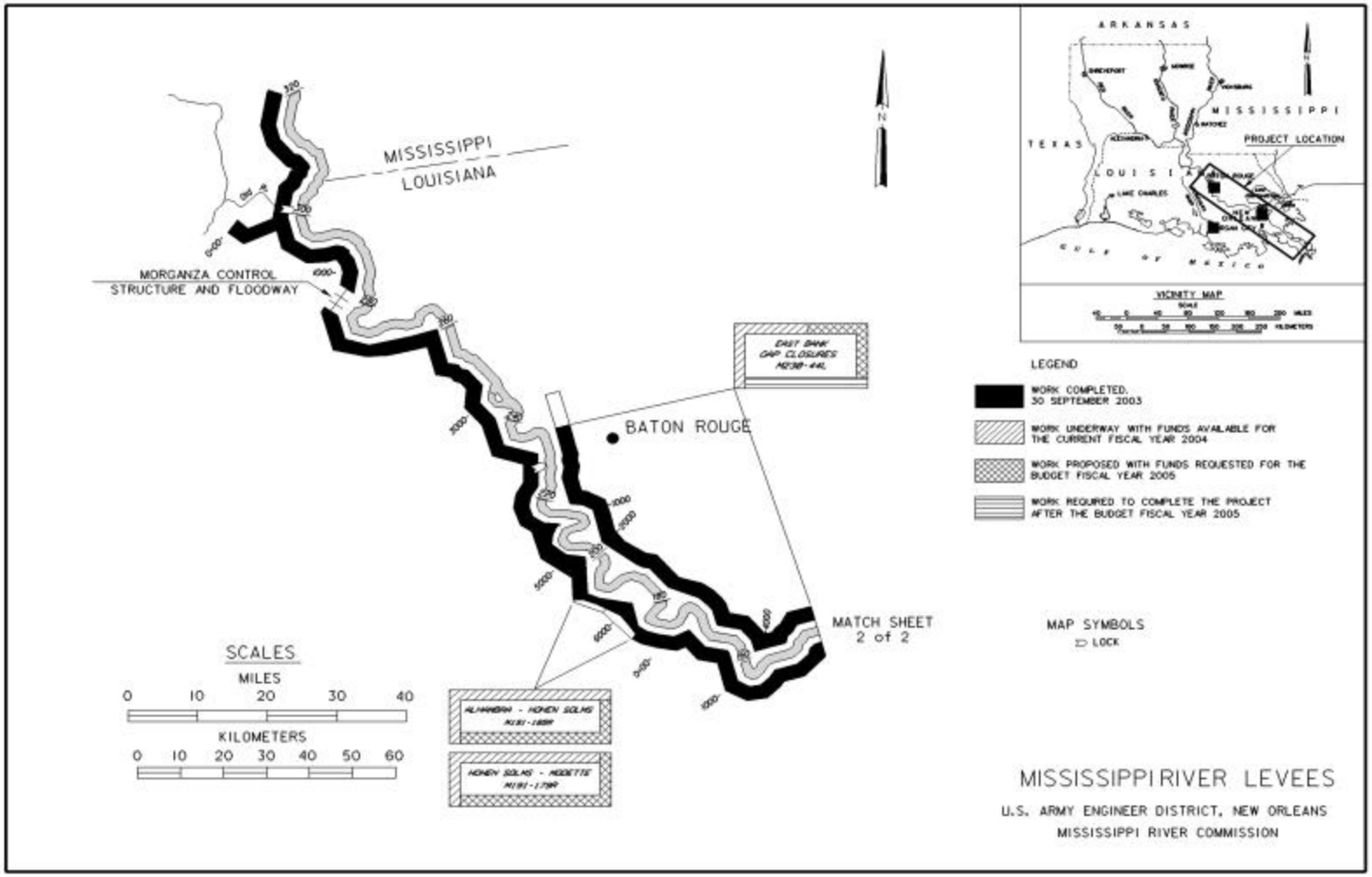
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.


NASH, MO
RELIEF WELLS P-2
Cape Girardeau
Diversion
Little River
Commerce
Cache River
Mound City
OHIO RIVER
MOUND CREEK, IL
CULVERT
CAIRO
ABOVE CAIRO, IL
SLURRY TRENCH P-4
BPNM, MO
LEVEE CLOSURE P-1
NEW MADRID, MO
RIVERFRONT IMPROVEMENTS
CAIRO, IL
GRADE RAISE
BPNM, MO
BOX CULVERTS
HARMON SEWER, MO
CULVERTS REPLACEMENT
New Madrid
MISSISSIPPI FLOODWAY
ISLAND 8, KY
RELIEF WELLS &
OUTLET DITCHES
MO
ARK
KY
TENN
Tiptonville
CARUTHERSVILLE, MO
RELIEF WELLS
Caruthersville
CARUTHERSVILLE, MO
OUTLET DITCHES
TIPTONVILLE, TN
LEVEE ROCK COVER
White River
St Francis
CARUTHERSVILLE, MO
I-155 & HWY 524
RELOCATION
PECAN PT, AR
RELIEF WELLS
BLUE LAKE, AR
RELIEF WELLS
BLUE LAKE, AR
OUTLET DITCHES
MISSISSIPPI
MEMPHIS
TENN
MISS
AUSTIN, MS
RELIEF WELLS
TROTTERS, MS
BERM P-1
Helena
HILLHOUSE, MS
RELIEF WELLS P-1
HILLHOUSE, MS
RELIEF WELLS P-2
LACONIA CIRCLE
Arkansas River
N
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
SCALE OF MILES
0 25 50 75 100
MISSISSIPPI RIVER LEVEES
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION
VICINITY MAP
ILL
MO
KY
ARK
MEMPHIS
Little Rock
MISS

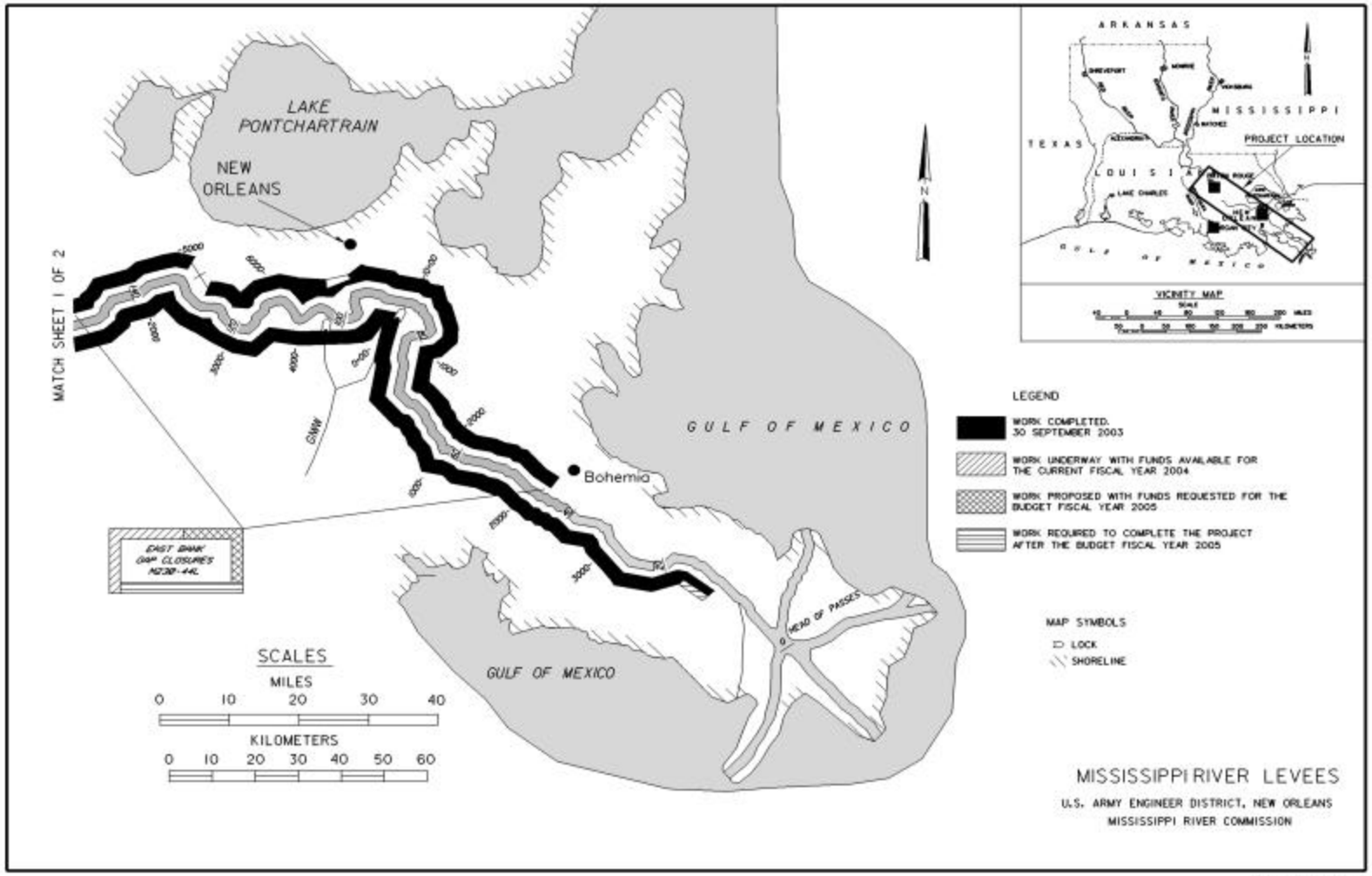

Helena
LACONIA CIRCLE
Arkansas
River
Mississippi
River
COAHOMA CO
BOLIVAR CO
0+00
Miss River Levee
Rosedale
0+00
Miss River Levee
Arkansas City
Greenville
PROJECT LOCATION
ARKANSAS
MISSISSIPPI
LOUISIANA
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
MISSISSIPPI RIVER LEVEES
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 3


Greenville
ARKANSAS
LOUISIANA
Lake Providence
Vicksburg
Miss River Levees
VALEWOOD-CARLISLE
ITEM 496-L
CARLISLE-TALLULA
ITEM 489-L
TALLULA-MAGNA VISTA
ITEM 477-L
TALLULA-MAGNA VISTA
ITEM 474-L
MAGNA VISTA-BRUNSWICK
ITEM 466-L
WILSON POINT - POINT LOOKOUT
ITEM 485-R
WILSON POINT - POINT LOOKOUT
ITEM 480-R
WILLOW POINT - YOUNG'S POINT
ITEM 461-R
WILLOW POINT - YOUNG'S POINT
ITEM 457-R
WILLOW POINT - YOUNG'S POINT
ITEM 453-R
WILLOW POINT - YOUNG'S POINT
ITEM 450-R
WILLOW POINT - YOUNG'S POINT
ITEM 445-R
REID BEDFORD - KING
ITEM 422-R
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
MISSISSIPPI RIVER LEVEES
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 3


Mississippi River
Natchez
VIDALIA - MOREVILLE
ITEM 365-R
VIDALIA - MOREVILLE
ITEM 361-R
VIDALIA - MOREVILLE
ITEM 357-R
10491+31=7510+00
Miss River Levee
MISSISSIPPI
LOUISIANA
SCALE IN MILES
SCALE IN KILOMETERS
ARKANSAS
MISSISSIPPI
LOUISIANA
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
MISSISSIPPI RIVER LEVEES
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 3 OF 3


MISSISSIPPI
LOUISIANA
MORGANZA CONTROL
STRUCTURE AND FLOODWAY
BATON ROUGE
MATCH SHEET
2 of 2
SCALES
MILES
0 10 20 30 40
KILOMETERS
0 10 20 30 40 50 60
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
LOCK
MISSISSIPPI RIVER LEVEES
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 1 OF 2


LAKE PONTCHARTRAIN
NEW ORLEANS
MATCH SHEET 1 OF 2
GNW
Bohemia
GULF OF MEXICO
GULF OF MEXICO
HEAD OF PASSES
EAST BANK GNW CLOSURES
SCALES
MILES
0 10 20 30 40
KILOMETERS
0 10 20 30 40 50 60
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
VICINITY MAP
LEGEND
WORK COMPLETED. 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
LOCK
SHORELINE
MISSISSIPPI RIVER LEVEES
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Channel Improvement, Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri and Tennessee (Continuing)

LOCATION: The project is located in the Mississippi River and along its banks from the vicinity of Cairo, Illinois, to the Head of Passes, Louisiana, a distance of approximately 966 miles.

DESCRIPTION: The plan of improvement consists of stabilizing the banks of the river in a desirable alignment and obtaining the most efficient flow characteristics for it for flood control and navigation by means of revetments, dikes, foreshore protection, and improvement dredging. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1962, 1965, 1966, and 1970.

REMAINING BENEFIT-REMAINING COST RATIO: 37.7 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$3,961,000,000		Entire Project	93	TBD
Estimated Non-Federal Cost		$ 1,900,000				
Cash Contributions	$1,800,000					
Other Costs	100,000					
Total Estimated Project Cost		$3,962,900,000				
Allocations to 30 September 2003		$2,686,749,000		Lands and Damages		19,135 acres
Conference Allowance for FY 2004		41,742,000		Revetments		1,085 miles
Allocation for FY 2004		37,865,000	1/	Dikes		339 miles
Allocations through FY 2004		$2,724,614,000	69	Dredging		As required
				Foreshore Protection		160 miles
Allocation Requested for FY 2005		$ 36,882,000	70	Pumping Station		1
Programmed Balance to Complete After FY 2005		$1,199,504,000				
Unprogrammed Balance to Complete After FY 2005		0				

1/ Reflects $3,652,000 reduction assigned as savings and slippage, and $225,000 rescinded in accordance with pending passage of The Consolidated Appropriation Act, 2004.

JUSTIFICATION: The Channel Improvement Project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of Channel Improvement derive from the way in which they operate together with the Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The Mississippi River, with a drainage area of about 1,245,000 square miles, has a wide range of flow, increasing from an approximate minimum of 90,000 cubic feet per second (675,000 gallons per second) to a maximum of 2,345,000 cubic feet per second (17,587,000 gallons per second) which occurred in 1927 at the latitude of Red River Landing. The project flood is 3,030,000 cubic feet per second (22,500,000 gallons per second). Part of the tremendous energy of this volume of flowing water is directed toward a relentless attack on the banks of the river, causing the unprotected banks to cave into the river. As this caving progresses, the attack becomes more direct, the bendway moves in toward the levee, and more sediment is placed in the river and deposited downstream in the form of a sandbar. This bar gradually builds out into the channel and deflects the river's attack to the opposite bank. As the cycle is repeated the river tends to meander and lengthen. Revetment is placed against the banks of the river at locations where mainline levees are being threatened with destruction or where unsatisfactory alignment and channel conditions are developing. Revetment serves a three-fold purpose in that the river is prevented from encroaching on the Main Stem levees, excess material is kept out of the stream, and a favorable channel alignment and depth are maintained. An objective of the plan is to preserve favorable alignments and efficient cross-sectional areas and to prevent the river from creating new meander patterns. In wide reaches of the river, dikes are used to contract the channel width so as to produce a single efficient channel for navigation and to insure the flood carrying capacity of the river. Chutes and secondary channels are controlled for the same purpose. Improvement dredging is employed to assist the river in removing natural obstructions which deflect the current into undesirable patterns of flow and to assist in developing an efficient channel. Foreshore protection is utilized to preserve the integrity of the Mississippi River Levees from attack by erosion of the batture. Erosion of the batture leads to steep slopes which, when undermined, result in considerable loss of batture and possible failure of the levee.

The value of lands and improvements protected by the Main Stem System authorized works against the design flood is $148.2 billion in 2003 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $347.0 million. This would be equivalent to $11.2 billion in damages in 2003 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.5 billion and total damages prevented by projects amounted to $10.8 billion. Expressed in 2003 prices, damages without the projects would have been $40.6 billion and damages prevented would have been $38.1 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$ 2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,433,000
Recreation	3,434,000
Total	$ 3,625,644,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Revetments	$ 27,712,000
Dikes	9,170,000
Total	$ 36,882,000

Revetments: The planned program consists of items of work for which funds will be required as follows:

Lands and Damages	$ 80,000
Construction of Revetments	19,732,000
Cultural Resources	40,000
Planning, Engineering, and Design	7,260,000
Supervision and Administration	600,000
Total	$ 27,712,000

The items of revetment work are:	Approximate length in feet:
Wickliffe, KY	2,500
Island 8, MO	2,000
Beckwith Bend, MO	2,000
Heloise, TN	2,000
Drivers Bar, TN	3,000
Old Town, AR	2,000
Racetrack, MS	1,500
Bougere, LA	3,000
Reinforcement	10,500

Dikes: The planned dike work consists of the following items:

Moore Island, MO / Below Williams, KY	$ 950,000
Drivers Bar, TN	1,657,000
Victoria Bend, AR	1,518,000
False Point, LA	850,000
Delta Point, LA	727,000
Ben Lomand, MS	370,000
Lands and Damages	20,000
Cultural Resources	20,000
Planning, Engineering, and Design	2,050,000
Supervision and Administration	1,008,000
Total	$9,170,000

NON-FEDERAL COST: In accordance with Section 4 of the Flood Control Act of 1944, as amended by Section 207 of the Flood Control Act of 1962, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal area.	$ 100,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	1,800,000	$ 180,505
Total Non-Federal Costs	$ 1,900,000	$ 180,505

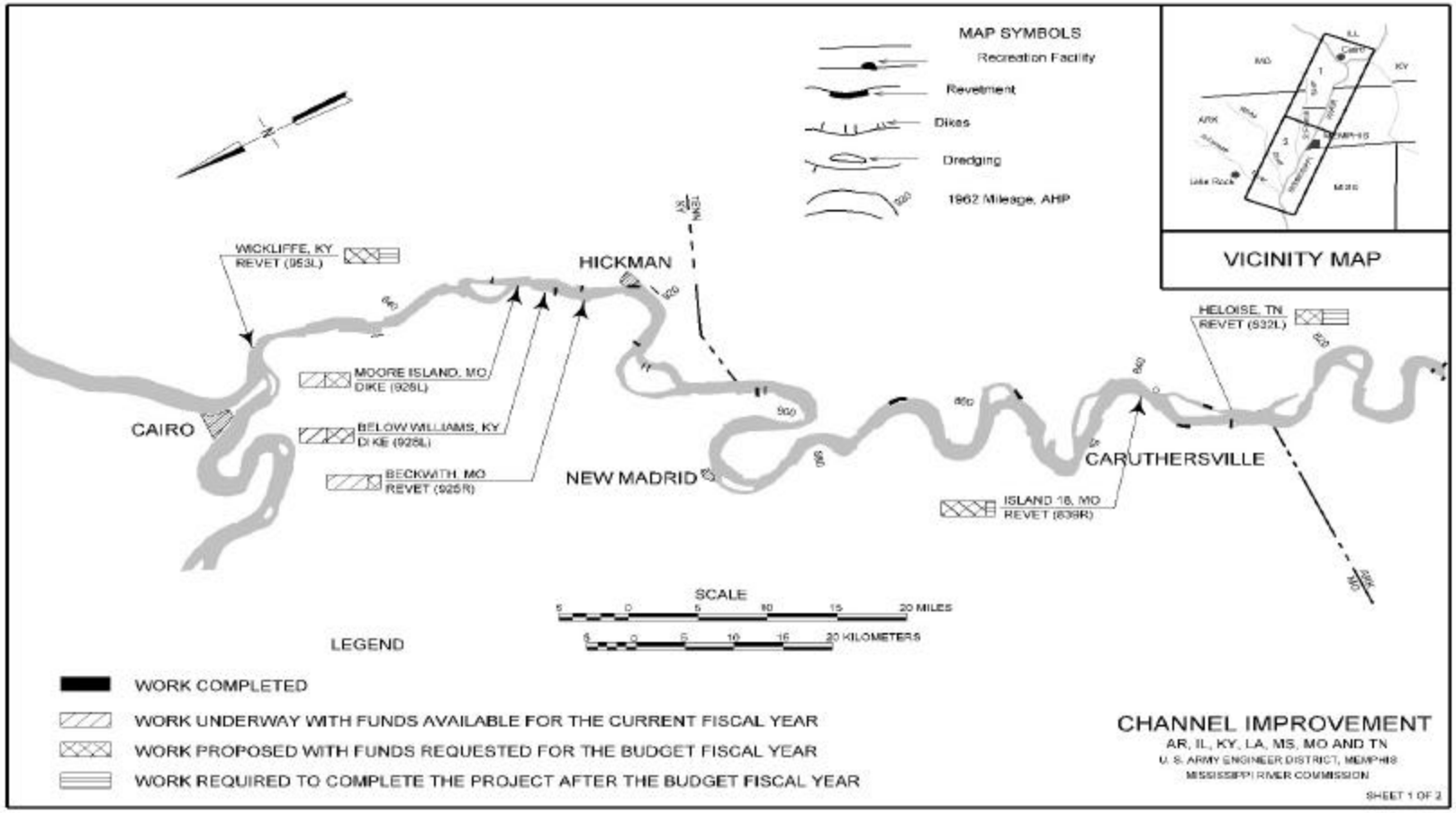
STATUS OF LOCAL COOPERATION: Assurances furnished by the Missouri Department of Conservation for the Dorena Recreation Facility were accepted 27 August 1971; assurances furnished by the Tennessee Department of Conservation for the Richardson Landing Recreation Facility were accepted 3 September 1976; and assurances furnished by the City of Memphis, Tennessee, for Volunteer Bicentennial Park were accepted 11 September 1975. Assurances furnished by the City of Osceola, Arkansas, for Lake Neark, Arkansas, are embodied in the contract for cost sharing approved on 19 September 1982. A Local Cooperation Agreement for the Ed Jones Boat Ramp with the State of Tennessee was signed 27 October 1988. A Local Cooperation Agreement for the Shelby Forest Boat Ramp with the State of Tennessee was signed 11 October 1990. A Local Cooperation Agreement for the Dyersburg, Tennessee, Boat Ramp with the State of Tennessee was signed 11 July 1994.

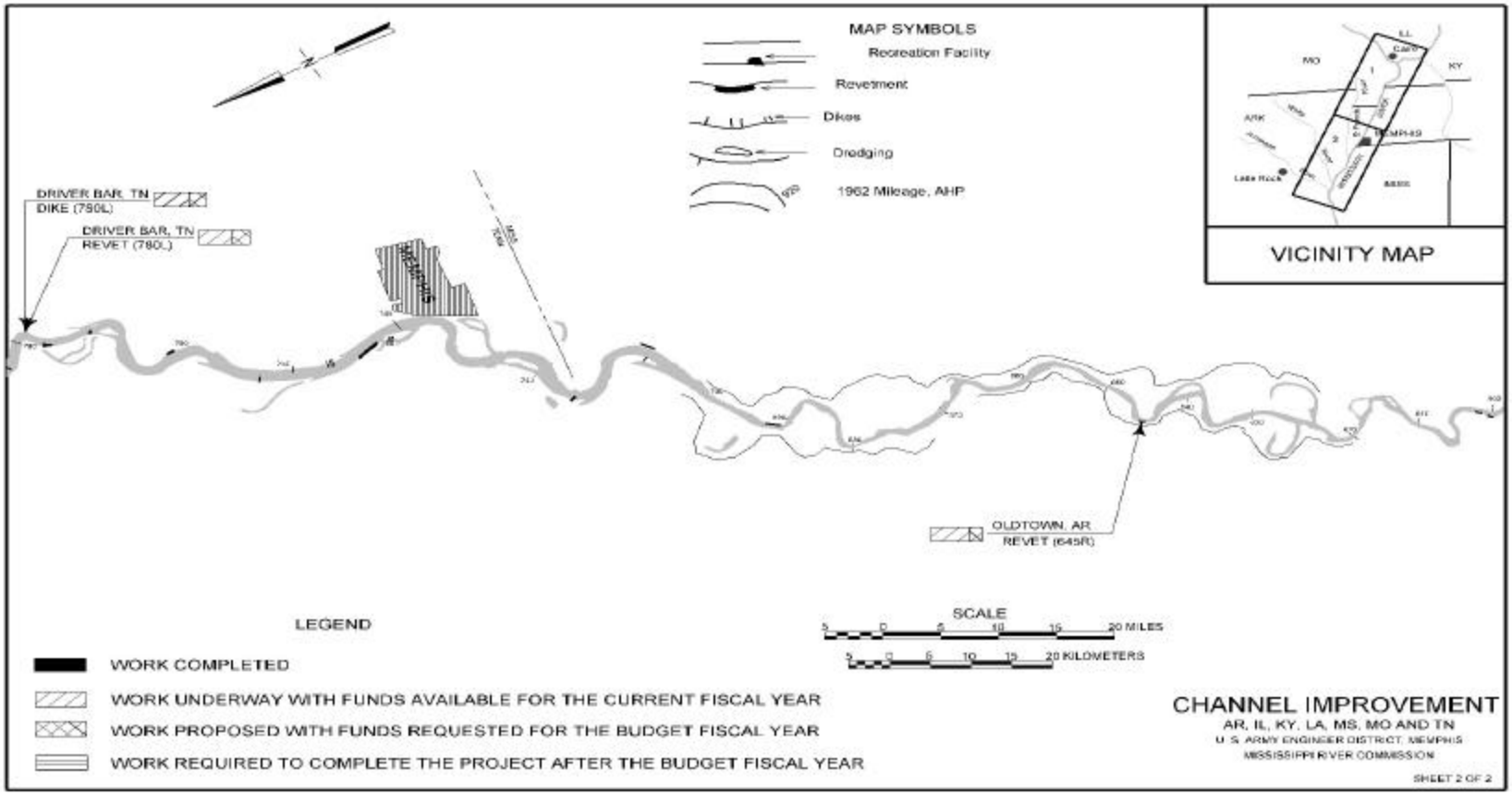
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $3,961,000,000 is a decrease of $2,000,000 from the latest estimate ($3,963,000,000) presented to Congress (FY 2004). This change includes the following items:

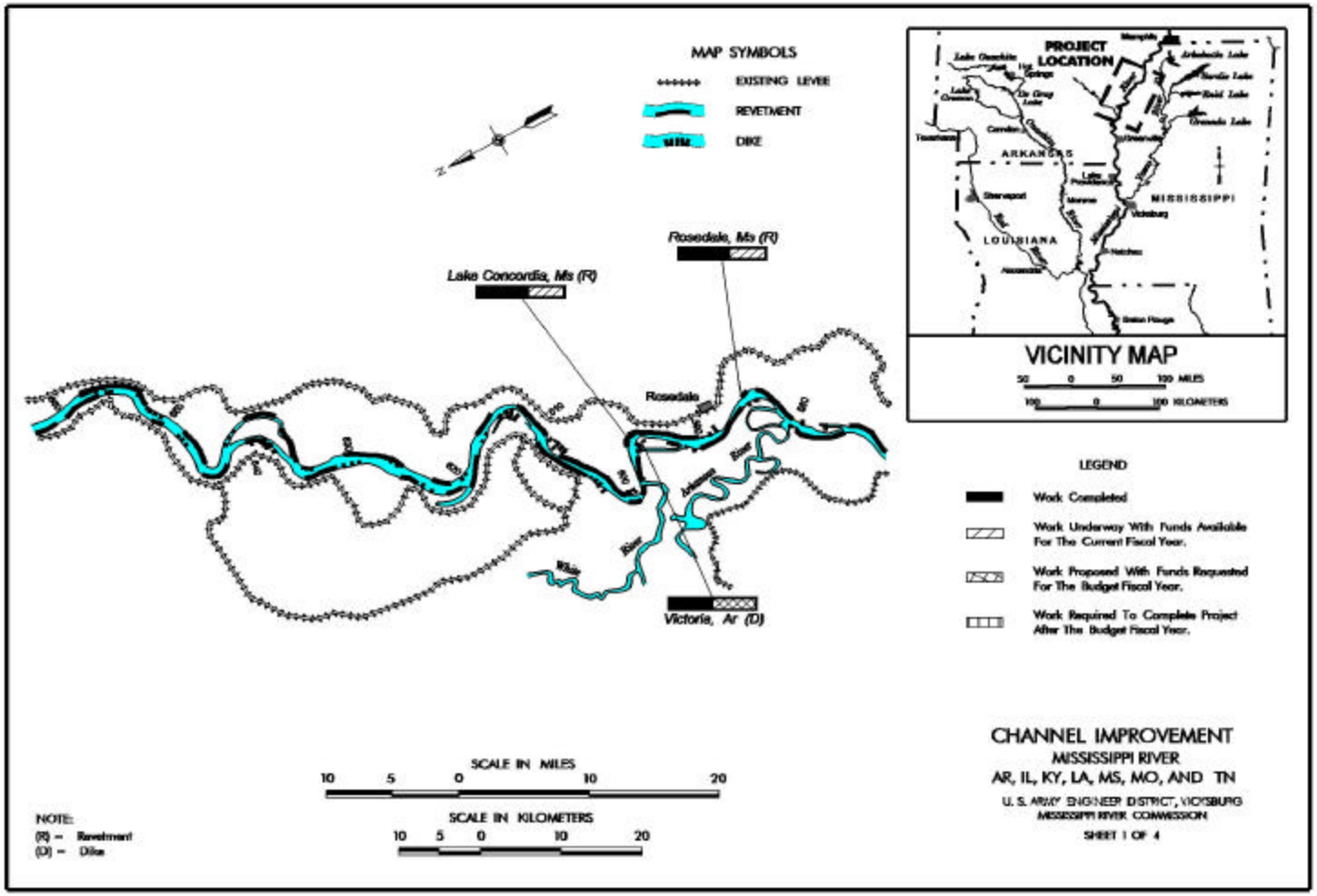
Item	Amount
Price Escalation on Construction Features	$ - 1,659,000
Post Contract Award and Other Estimating Adjustments	- 146,000
Price Escalation on Real Estate	- 195,000
Total	$ -2,000,000

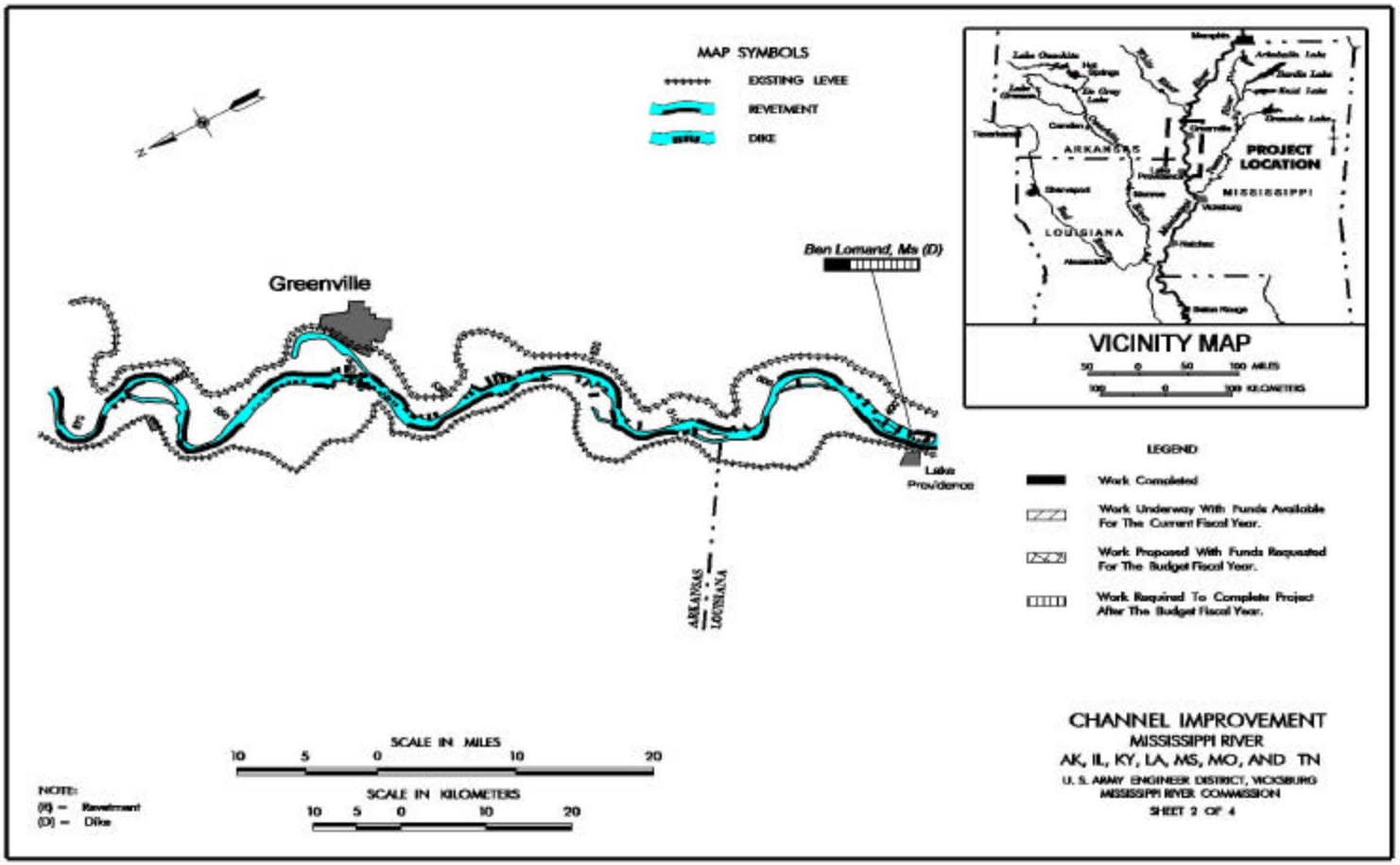
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 16 April 1976.

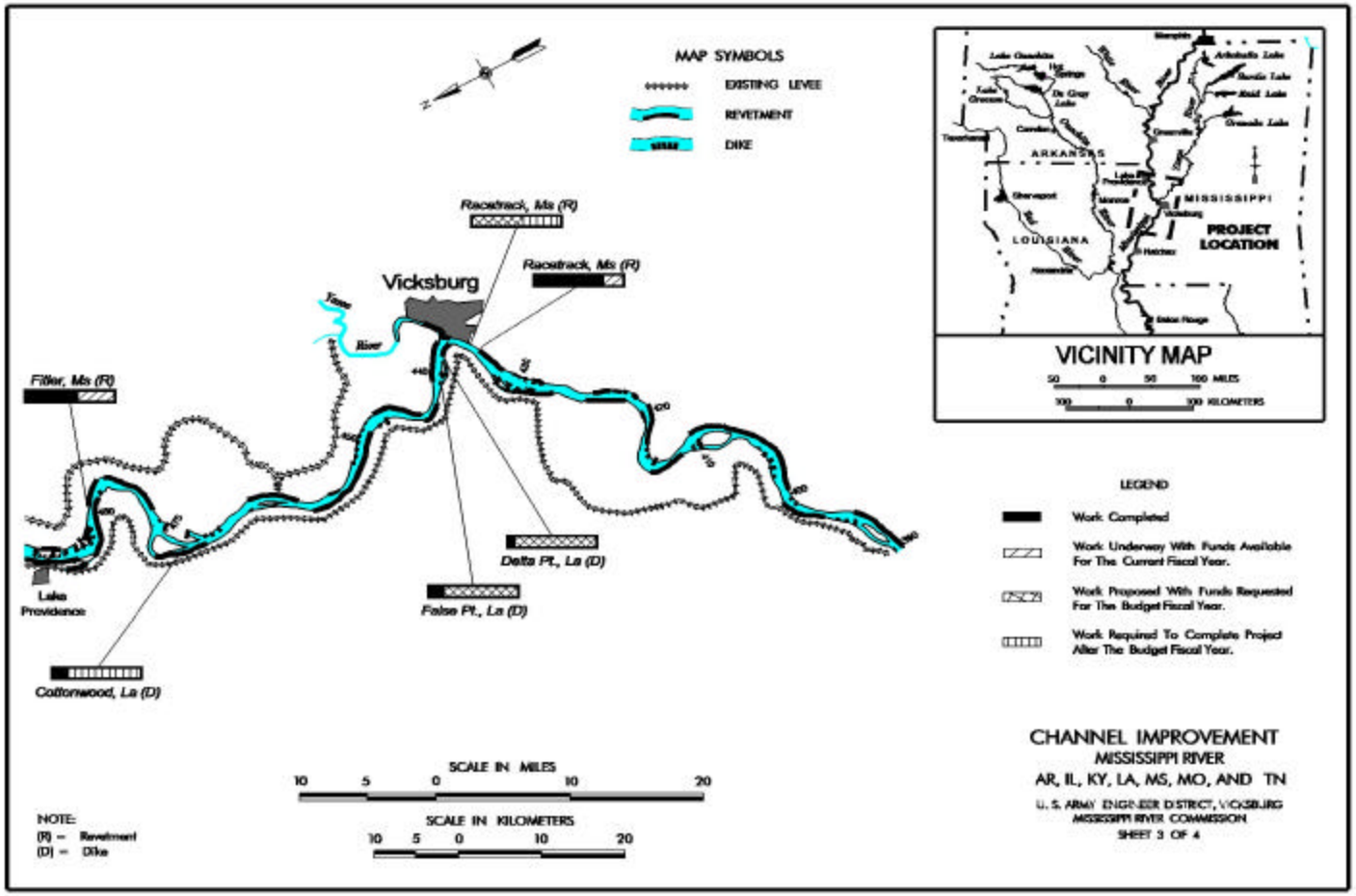
OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1928.


MAP SYMBOLS
Recreation Facility
Revetment
Dikes
Dredging
1962 Mileage, AHP
VICINITY MAP
WICKLIFFE, KY
REVET (953L)
HICKMAN
MOORE ISLAND, MO
DIKE (926L)
BELOW WILLIAMS, KY
DIKE (926L)
BECKWITH, MO
REVET (925R)
CAIRO
NEW MADRID
HELOISE, TN
REVET (932L)
CARUTHERSVILLE
ISLAND 18, MO
REVET (839R)
SCALE
20 MILES
20 KILOMETERS
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 2


MAP SYMBOLS
Recreation Facility
Revetment
Dikes
Dredging
1962 Mileage, AHP
VICINITY MAP
DRIVER BAR, TN
DIKE (790L)
DRIVER BAR, TN
REVET (780L)
OLDTOWN, AR
REVET (645R)
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
SCALE
20 MILES
20 KILOMETERS
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U.S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 2


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Rosedale, Ms (R)
Lake Concordia, Ms (R)
Rosedale
Victoria, Ar (D)
PROJECT LOCATION
ARKANSAS
MISSISSIPPI
LOUISIANA
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
SCALE IN KILOMETERS
NOTE:
(R) – Revetment
(D) – Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 4


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Greenville
Ben Lomand, Ms (D)
Lake Providence
ARKANSAS
LOUISIANA
VICINITY MAP
PROJECT LOCATION
ARKANSAS
MISSISSIPPI
LOUISIANA
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
NOTE:
(R) – Revetment
(D) – Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AK, IL, KY, LA, MS, MO, AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 4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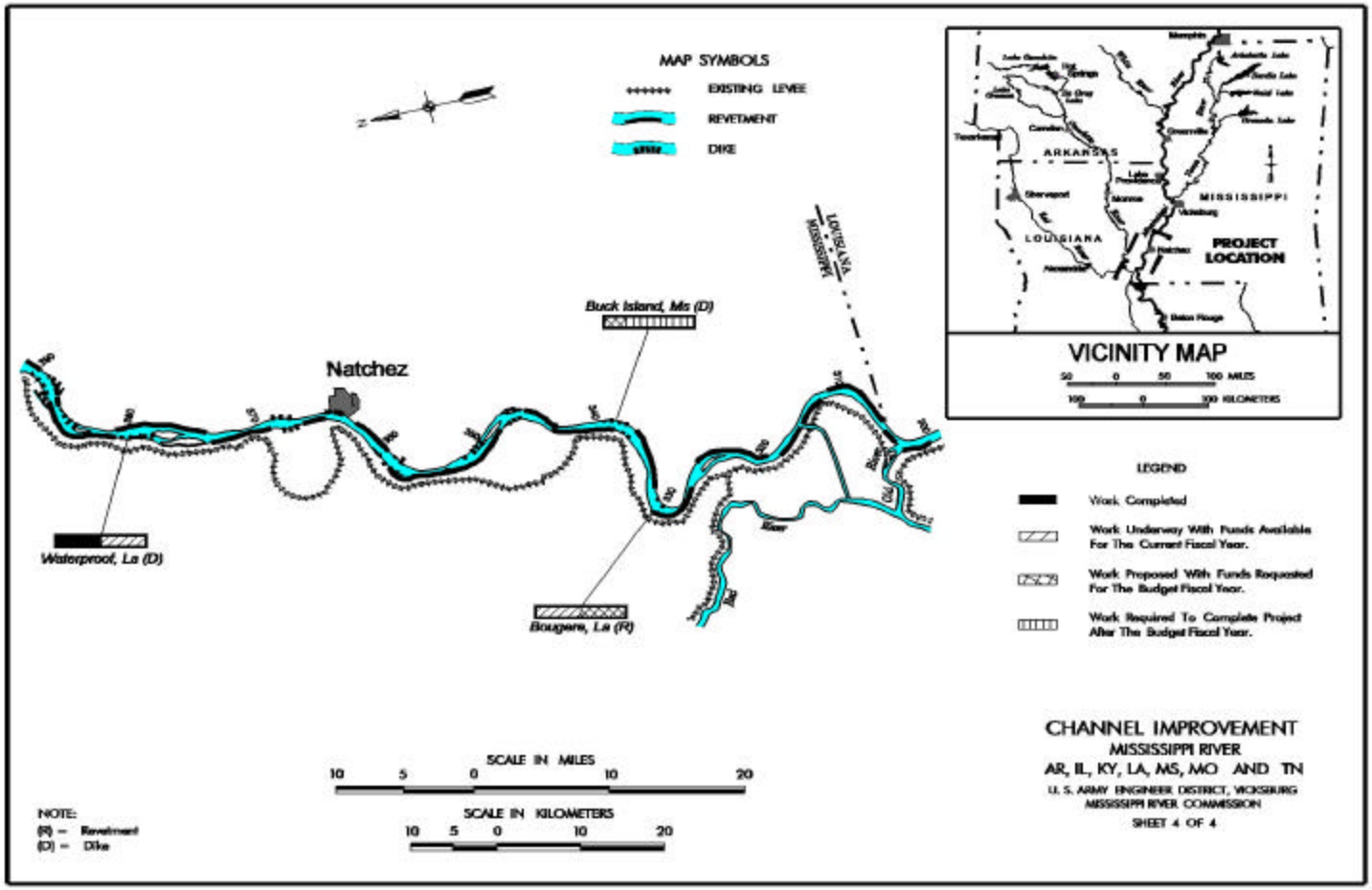
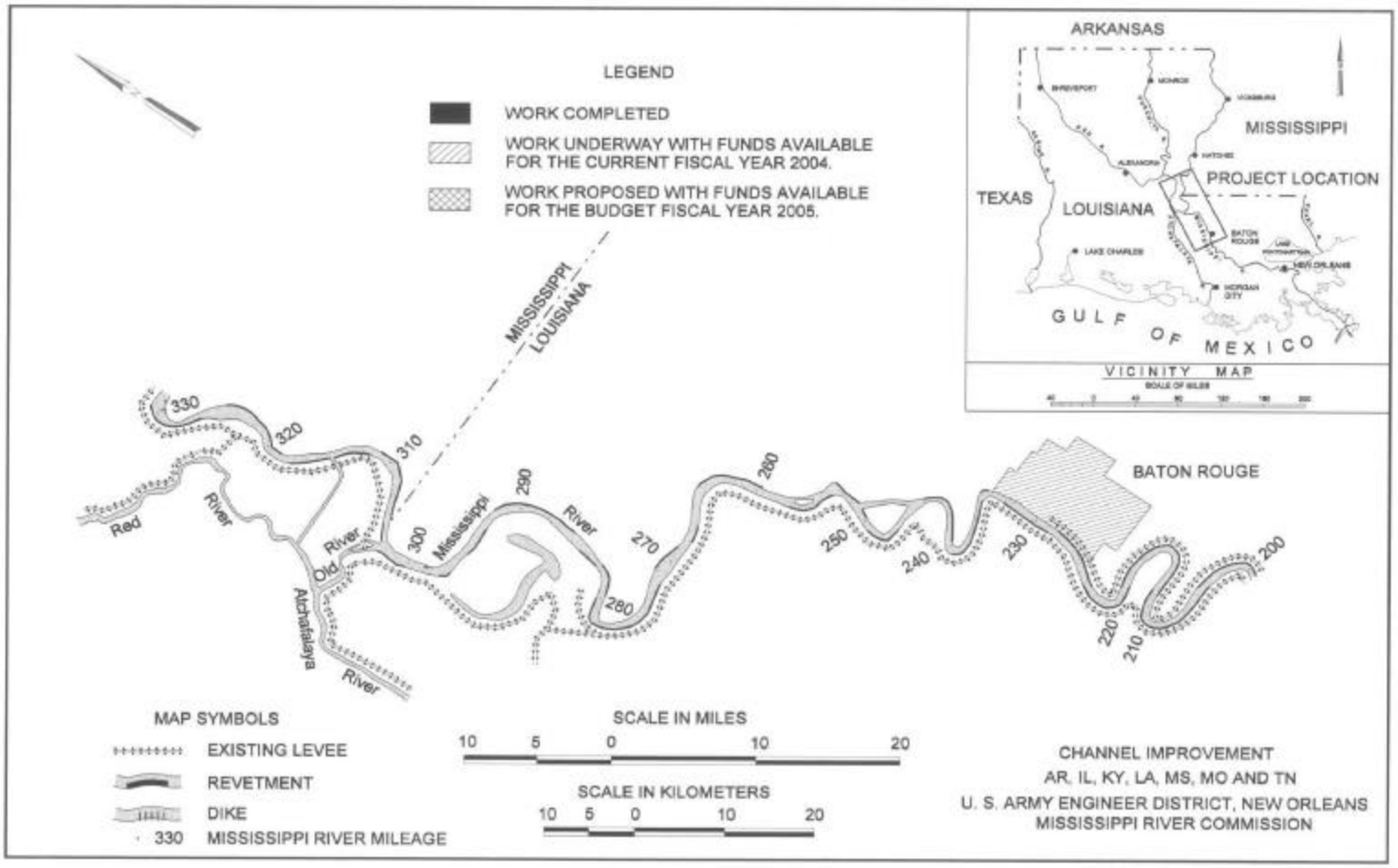
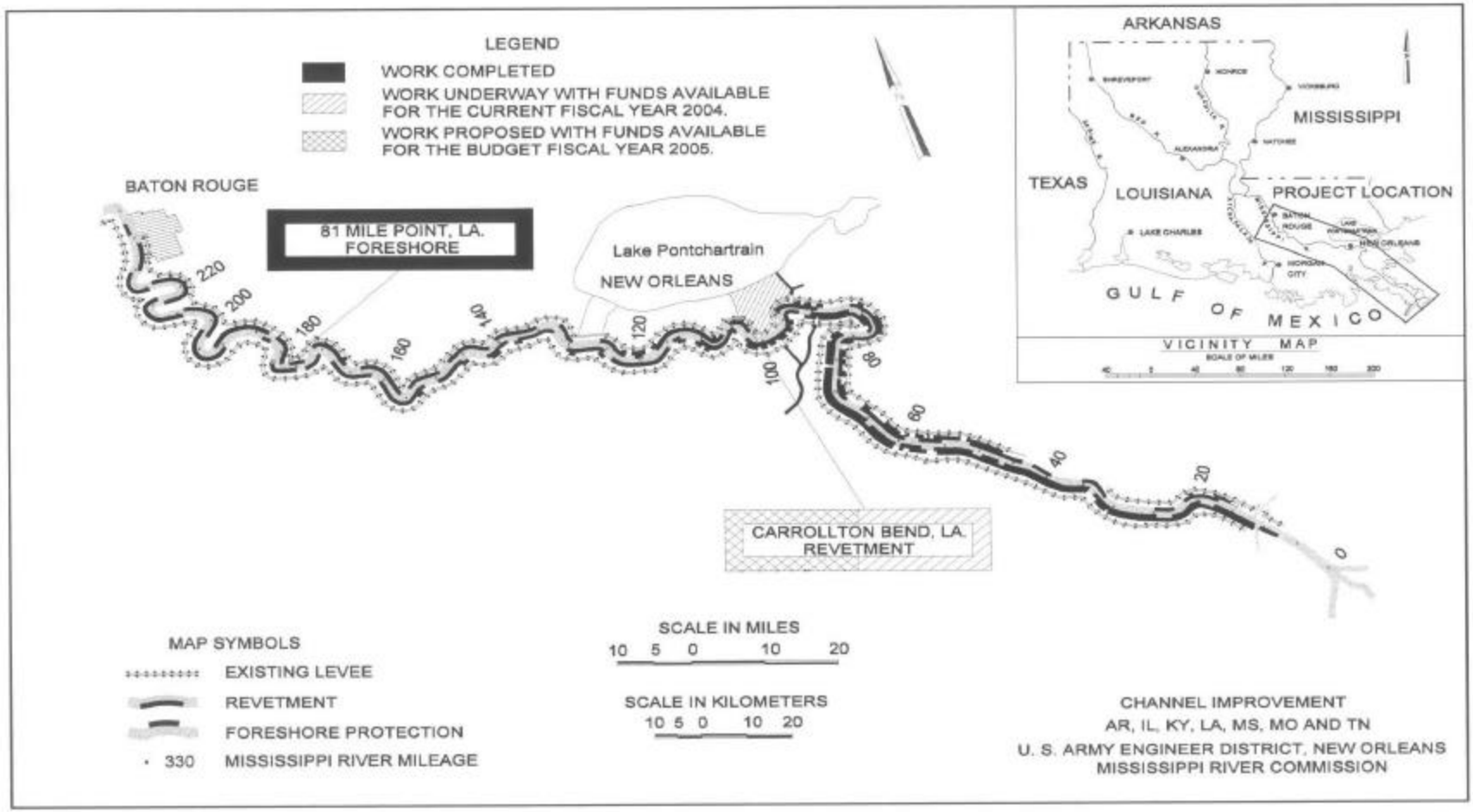
EXISTING LEVEE
REVETMENT
DIKE
Racetrack, Ms (R)
Racetrack, Ms (R)
Vicksburg
Yazoo
River
Filler, Ms (R)
Lake Providence
Cottonwood, La (D)
False Pt., La (D)
Delta Pt., La (D)
VICINITY MAP
ARKANSAS
MISSISSIPPI
LOUISIANA
PROJECT LOCATION
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
SCALE IN KILOMETERS
NOTE:
(R) = Revetment
(D) = Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO, AND TN
U.S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 3 OF 4


MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
Natchez
Buck Island, Ms (D)
Waterproof, La (D)
Bougere, La (R)
LOUISIANA
MISSISSIPPI
VICINITY MAP
ARKANSAS
MISSISSIPPI
LOUISIANA
PROJECT LOCATION
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
SCALE IN KILOMETERS
NOTE:
(R) – Revetment
(D) – Dike
CHANNEL IMPROVEMENT
MISSISSIPPI RIVER
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
SHEET 4 OF 4


LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004.
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE BUDGET FISCAL YEAR 2005.
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
MISSISSIPPI
LOUISIANA
BATON ROUGE
Red River
Old River
Atchafalaya River
Mississippi River
330
320
310
300
290
280
270
280
250
240
230
220
210
200
MAP SYMBOLS
EXISTING LEVEE
REVETMENT
DIKE
330 MISSISSIPPI RIVER MILEAGE
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 1 OF 2


LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004.
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE BUDGET FISCAL YEAR 2005.
BATON ROUGE
81 MILE POINT, LA. FORESHORE
Lake Pontchartrain
NEW ORLEANS
CARROLLTON BEND, LA. REVETMENT
220
200
180
160
140
120
100
80
60
40
20
0
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
MAP SYMBOLS
EXISTING LEVEE
REVETMENT
FORESHORE PROTECTION
330 MISSISSIPPI RIVER MILEAGE
SCALE IN MILES
10 5 0 10 20
SCALE IN KILOMETERS
10 5 0 10 20
CHANNEL IMPROVEMENT
AR, IL, KY, LA, MS, MO AND TN
U. S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana below the latitude of Old River and west of and generally paralleling the Mississippi River. The Atchafalaya River flows through the middle of the basin.

DESCRIPTION: The plan of improvement consists of a leveed floodway about 15 miles wide and 110 miles long that extends generally from the latitude of Old River to the Gulf of Mexico. The upper half of the basin is divided by the leveed Atchafalaya River. The Morganza Floodway is to the east of the Atchafalaya River and has a capacity of 600,000 cubic feet per second, which is introduced into the floodway by a gated control structure. The West Atchafalaya Floodway, which is located to the west of the river, is placed into operation when the fuse plug sections are overtopped bringing flows from the river that will introduce 900,000 cubic feet per second into the lower basin. After passing through the floodways, the flood waters enter the Gulf of Mexico through the Lower Atchafalaya River at Morgan City and the Wax Lake Outlet channel constructed west of Patterson, Louisiana. The project is part of a system and all work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1934, 1936, 1938, 1941, 1946, 1950, 1954.

REMAINING BENEFIT - REMAINING COST RATIO: 37.7 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem System of the Mississippi River and Tributaries project.

TOTAL BENEFIT - COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: This project feature of the Main Stem system was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1928. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT - COST RATIO: Benefits are from latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$1,755,000,000					
					Entire Project	54	TBD
Estimated Non-Federal Cost							
Cash Contributions	$2,500,000						
Other Costs	8,500,000						
Total Estimated Project Cost		$1,766,000,000					
Allocations to 30 September 2003		$ 939,350,000					
Conference Allowance for FY 2004		15,000,000					
Allocation for FY 2004		13,607,000	1/				
Allocations through FY 2004		952,965,000		54			
Allocation Requested for FY 2005		$ 22,495,000		56			
Programmed Balance to Complete after FY 2005		779,540,000					
Unprogrammed Balance to Complete after FY 2005		0					

1/ Reflects $1,312,000 reduction assigned as savings and slippage, and $81,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

Levees:
- Average Height - 20 feet
- Length - 449 miles

Relocations:
- Roads - 15 miles
- Railroads - 20 miles

Drainage Structures:

Pointe Coupee	2 gates, 10.5 by 15 feet
Melville	2 - 72-inch corrugated metal pipe with vertical lift gate
Darbonne	10-foot by 10-foot barrel with vertical lift gate
Bayou des Glaises	72-inch corrugated metal pipe with flap gate
Bayou Courtableau	2 weirs, 503 feet long
Brushy Bayou	5-foot by 6-foot barrel with vertical lift gate
Bayou Courtableau	5-barrel, each 10 feet by 15 feet with vertical lift gate
Wax Lake East	25 pipes, 5 feet in diameter with slide gates
Wax Lake West	15 pipes, 5 feet in diameter with slide gates

Lands and Damages:
- 289,212 acres

Pumping Stations:
- Number - 11
- Capacity - Minimum - 50 cubic feet per second
  - Maximum - 1,500 cubic feet per second
  - Average - 400 cubic feet per second

Bank Stabilization:
- Length - 58 miles

Floodgates:
- Charenton - Sector-gated, 45 feet wide
- East Calumet - Sector-gated, 45 feet wide
- West Calumet - Sector-gated, 45 feet wide

Channels:
- Length: 147.1 miles

Locks:
- Bayou Boeuf, 75 feet by 1,156 feet, earth chamber
- Bayou Sorrel, 56 feet by 797 feet, earth chamber
- Berwick, 45 feet by 300 feet, concrete chamber

Atchafalaya River Navigation:
- New Channel-10.1 miles

Freshwater Control Structure:
- Sherburne - dual 10-foot by 10-foot reinforced concrete box culverts with gates
- Henderson - dual 10-foot by 10-foot reinforced concrete box culverts with gates

JUSTIFICATION: The Mississippi River below Morganza Floodway is capable of carrying 1,500,000 cubic feet per second without threatening the integrity of the lesser populated levees along its banks which protect densely populated areas, highly developed agricultural lands, industries, and the City of New Orleans, as well as a number of communities. Studies indicate that the project flood against which the flood control protection works are designed could be of such magnitude that 3,030,000 cubic feet per second will pass the latitude of Old River. Since the Mississippi River below the Morganza Floodway can carry only one-half this amount, the other one-half must be diverted from the main channel. The diversion is made through the Old River Control Structure, the Old River Auxiliary Structure, and the Atchafalaya River, and through the Morganza and West Atchafalaya Floodways. In order to prevent diverted waters from spreading over the rich and highly developed agricultural lands within the Atchafalaya Basin, these rivers and floodways have been leveed to confine the diverted flow.

This floodway system is, for all practical purposes, a part of the main river system, in as much as the integrity of the main river system depends upon its utilization. Since this construction began, farms and industries have developed in the areas adjacent to the floodway assuming that they would receive protection. Therefore, overtopping or crevassing of the levees would cause far more damage than anticipated at the start of project construction. The main protection levees in the lower reaches are deficient because of consolidation of the soft underlying soils, especially those below the latitude of Krotz Springs, LA. Early construction of these levees to the approved grade is essential, not only for flood protection, but as a means of access for the movement of manpower and equipment to any spot threatened by floods.

The Atchafalaya Basin project is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of the Atchafalaya Basin derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by authorized works against the design flood is $148.2 billion in 2003 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $347.0 million. This would be equivalent to $11.2 billion damages in 2003 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.5 billion and total damages prevented by projects amount to $10.8 billion. Expressed in 2003 prices, damages without the projects would have been $40.6 billion and damages prevented would have been $38.1 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$ 2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,433,000
Recreation	3,434,000
Total	$ 3,625,644,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Lands and Damages	$ 200,000
Surveys and Layouts	100,000
Planning, Engineering and Design	6,300,000
Supervision and Administration	1,800,000
Bank Stabilization	2,070,000
Melville Front and Ring Levee	2,160,000
Krotz Springs Front Levee	2,013,000
Wax Lake Outlet East Levee Enlargement	1,842,000
Complete:	
E69/73 Levee Enlargement, 2nd Lift	2,062,000
W52 Levee Enlargement, 2nd Lift	1,944,000
W85 A&B Levee Enlargement, 2nd Lift	2,004,000
Total	$22,495,000

NON-FEDERAL COST: In accordance with the Flood Control Act of 15 May 1928, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Bear the administrative costs for furnishing rights-of-way for levee and levee drainage construction; purchase maintenance equipment; and perform miscellaneous levee work.	$ 1,110,000	0
Agree to accept lands turned over to them under the provision of Section 4 of the Flood Control Act of 15 May 1928, and as provided in the Flood Control Act of 18 August 1941.	0	0
Bear costs for and maintain all flood control works after their completion, except controlling and regulating spillway structures, including special levees; maintenance includes normally such matters as cutting grass, removal of weeds, local drainage and minor repairs to the levees.	0	$3,700,000
For the Upper Point Coupee Loop Area, provide an interior drainage system and comply with the applicable provisions of the Uniform Relocations Assistance and Real Property Acquisition Policies Act of 1970, PL 91-646, approved 2 January 1971, and comply with the provision of Section 221 of the Flood Control Act of 1970, PL 91-611.	7,390,000	0
The State of Louisiana, through the Department of Transportation and Development as the local sponsor, will provide a voluntary 25% cost share for the planning, design, and construction of the interim protection for floodproofing of riverfront businesses in Morgan City and Berwick.	2,500,000	0
Total Non-Federal Costs	$11,000,000	$3,700,000

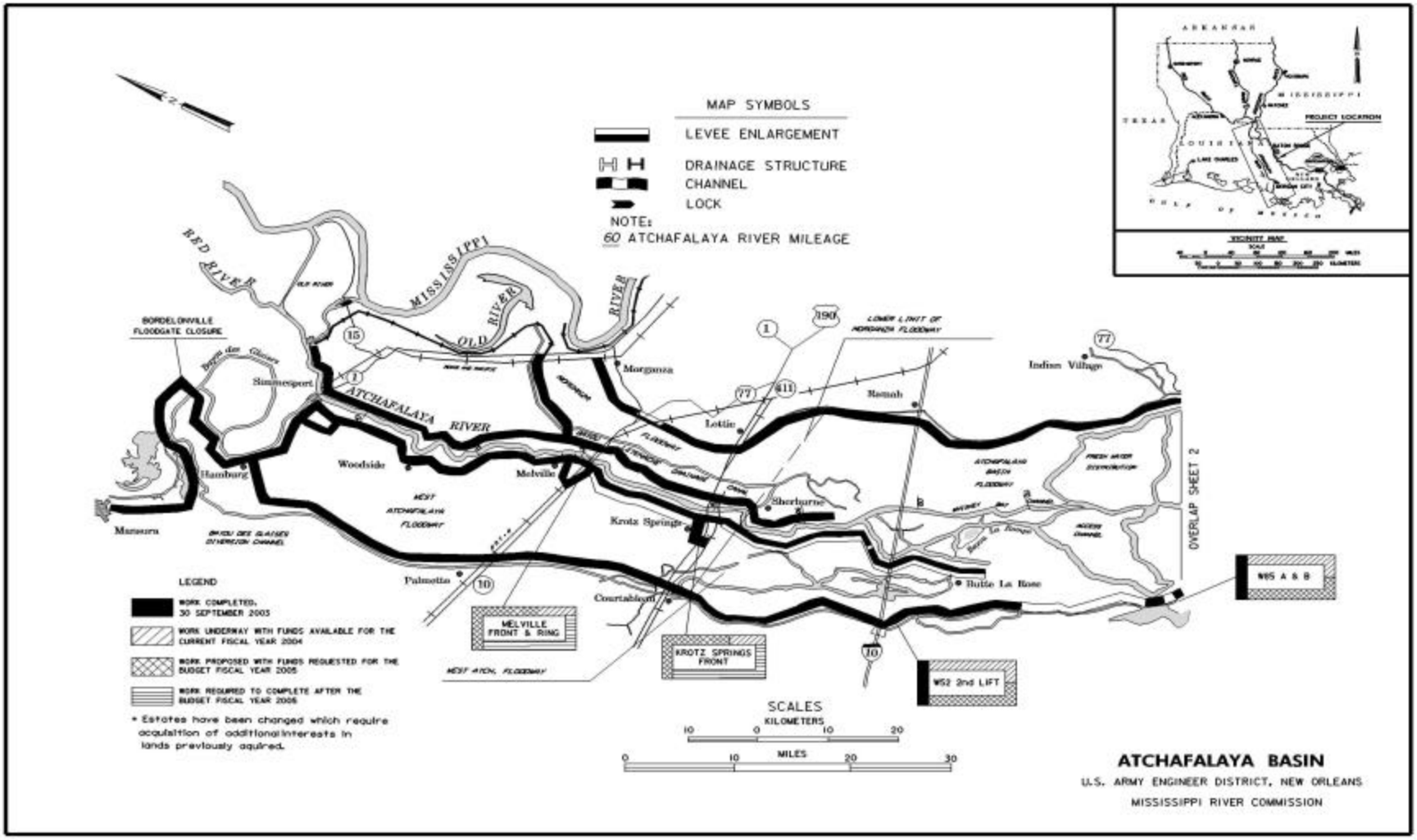
STATUS OF LOCAL COOPERATION: Necessary assurances for maintaining the project have been furnished by the Atchafalaya Basin Levee District; Red River, Atchafalaya and Bayou Boeuf Levee District; St. Mary Parish Government; Pointe Coupee Parish Police Jury; and the towns of Berwick and Morgan City, LA. These agencies are furnishing all requirements of local cooperation necessary for meeting present project schedules.

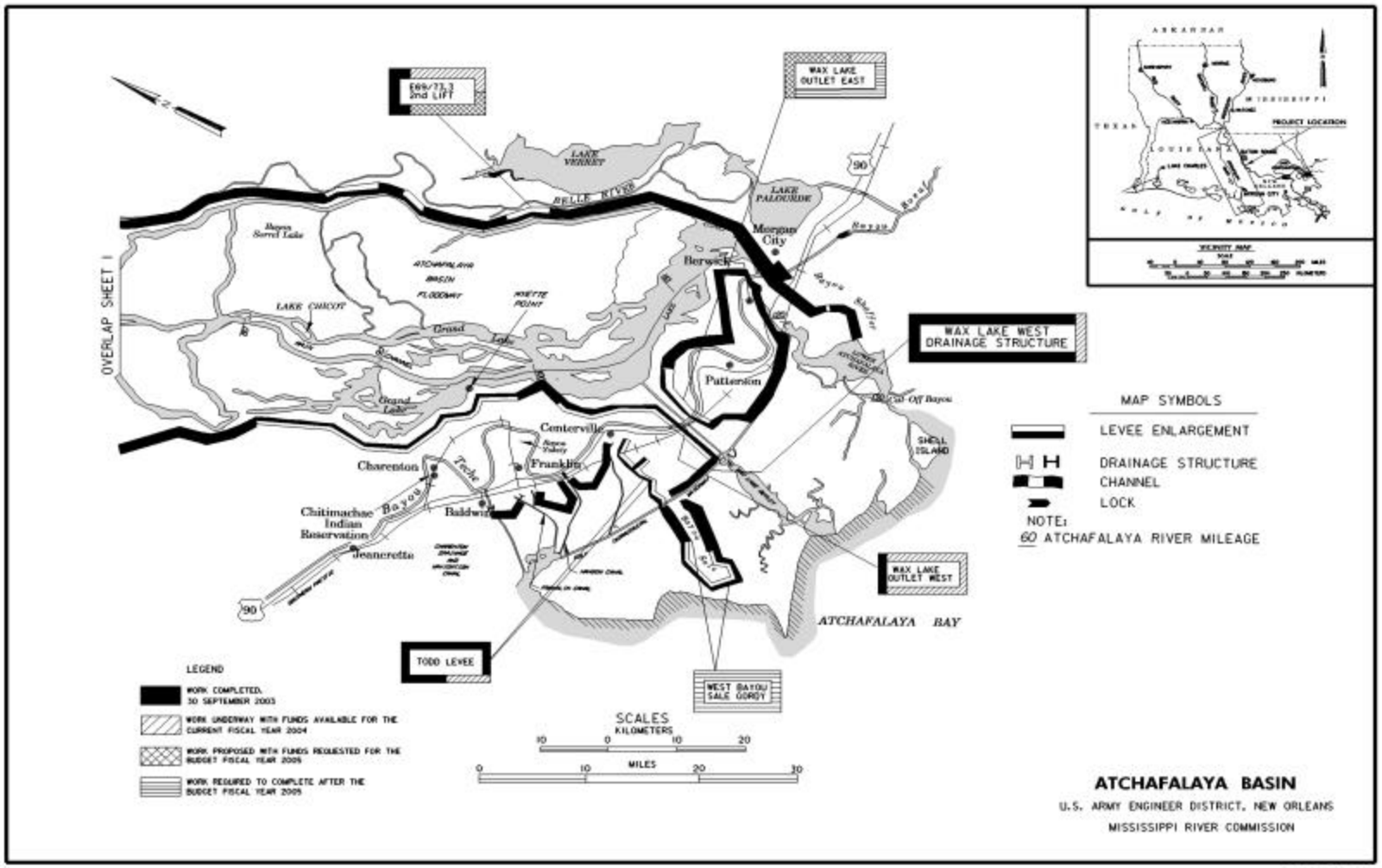
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $1,755,000,000 is a decrease of $35,000,000 from the latest estimate ($1,790,000,000) presented to Congress (Fiscal Year 2004). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ -32,478,000
Design Changes	-2,537,000
Post Contract Award and Other Estimating Adjustments	+2,537,000
Price Escalation on Real Estate	-2,522,000
Total	$ -35,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982. The final Environmental Impact Statement for the Upper Pointe Coupee Loop Area was filed with the Council on Environment Quality on 11 June 1976.

OTHER INFORMATION: Funds to initiate construction were appropriated in 1928.


MAP SYMBOLS
LEVEE ENLARGEMENT
DRAINAGE STRUCTURE
CHANNEL
LOCK
NOTE:
60 ATCHAFALAYA RIVER MILEAGE
RED RIVER
MISSISSIPPI
OLD RIVER
ATCHAFALAYA RIVER
BORDELONVILLE FLOODGATE CLOSURE
Simmesport
Hamburg
Marksville
Woodside
Melville
Morganza
Lottie
Rosiah
Indian Village
Sherburne
Krotz Springs
Palmetto
Courtableau
Butte La Rose
OVERLAP SHEET 2
MELVILLE FRONT & RING
KROTZ SPRINGS FRONT
WS2 2nd LIFT
WS5 A & B
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE AFTER THE BUDGET FISCAL YEAR 2005
* Estates have been changed which require acquisition of additional interests in lands previously aquired.
SCALES
KILOMETERS
MILES
ATCHAFALAYA BASIN
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 2


E69/73.3
2nd LIFT
WAX LAKE
OUTLET EAST
WAX LAKE WEST
DRAINAGE STRUCTURE
WAX LAKE
OUTLET WEST
TODD LEVEE
WEST BAYOU
SALE GORDY
OVERLAP SHEET 1
LAKE VERRET
BELLE RIVER
LAKE PALOURDE
Morgan City
Berwick
Patterson
Centerville
Franklin
Charenton
Baldwin
Jeanerette
Chitimachae Indian Reservation
Bayou Teche
LAKE CHICOT
Grand Lake
Bayou Sorrel Lake
ATCHAFALAYA BASIN FLOODWAY
HOETTE POINT
Bayou Shaffer
Bayou Boeuf
Old Bayou
SHELL ISLAND
ATCHAFALAYA BAY
90
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
GULF OF MEXICO
PROJECT LOCATION
VICINITY MAP
MAP SYMBOLS
LEVEE ENLARGEMENT
DRAINAGE STRUCTURE
CHANNEL
LOCK
NOTE:
60 ATCHAFALAYA RIVER MILEAGE
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE AFTER THE BUDGET FISCAL YEAR 2005
SCALES
KILOMETERS
MILES
ATCHAFALAYA BASIN
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Atchafalaya Basin Floodway System, Louisiana (Continuing)

LOCATION: The project is located in south-central Louisiana and encompasses 595,000 acres in an area bounded on the north by south right-of-way line of the Union Pacific Railroad (just south of US Hwy 19); on the south by Morgan City; and on the east and west by the East and West Atchafalaya Basin Protection Levees.

DESCRIPTION: The plan of improvement consists of acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway for flood control purposes, environmental protection purposes, developmental control purposes, and public access; acquisition of real estate interest, excluding minerals, in the Lower Atchafalaya Floodway, for recreation developmental purposes and construction of several campgrounds, boat launching ramps, visitor's center, other recreational facilities and initial construction of two pilot water management units, including construction of miscellaneous canal closures and water circulation improvements, and implementation of future units at the discretion of the Chief of Engineers. These project features will be implemented in accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act, 1985; Water Resources Development Act, 1986; Energy and Water Development Appropriations Act, 1988; Energy and Water Development Appropriations Act, 1991; Energy and Water Development Appropriations Act, 1997; and Water Resources Development Act, 2000.

REMAINING BENEFIT–REMAINING COST RATIO: 37.7 to 1 at 2-1/2 percent. The benefit-cost ratio is based on all features which comprise the Main Stem system of the Mississippi River and Tributaries project.

TOTAL BENEFIT-COST RATIO: 7.9 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project is a feature of the Main Stem system which was authorized in Fiscal Year 1928. Initial funds for the acquisition of real estate interests for flood control, developmental control, environmental protection, and public access were provided in 1985. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the Main Stem system. The benefit-cost ratio for the Main Stem components computed for the base estimate was 7.9 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in October 1979 at 1979 price levels. The latest comprehensive analysis was conducted in 1974. The 1979 analysis is the same as the 1974 analysis except that certain undocumented benefit categories were eliminated and 1979 prices were used.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$202,000,000		Land Acquisition	50	TBD
				Recreation	3	TBD
Estimated Non-Federal Cost		$ 30,134,000		Management Units	2	TBD
Cash Contribution	$27,000,000			Entire Project	35	TBD
Other Costs	3,134,000					
Total Estimated Project Cost		$232,134,000				
Allocations to 30 September 2003		$102,865,000				
Conference Allowance for FY 2004		7,768,000				
Allocation for FY 2004		7,046,000	1/			
Allocations through FY 2004		109,911,000	54			
Allocation Requested for FY 2005		$7,200,000	58			
Programmed Balance to Complete after FY 2005		84,889,000				
Unprogrammed Balance to Complete after FY 2005		0				

PHYSICAL DATA

Lands and Damages: 388,000 Acres

Recreational Facilities

- 3 campgrounds – developed
- 7 campgrounds – primitive
- 15 2-lane boat launching ramps
- 1 Visitors Center
- Trails

Water Management Units

- Miscellaneous canal closures and water circulation channels

1/ Reflects $680,000 reduction assigned as savings and slippage, and $42,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004.

JUSTIFICATION: The Atchafalaya Basin Floodway System features result from a comprehensive study with a view to developing a plan for the management and preservation of the water and related land resources of the Atchafalaya River Basin, Louisiana, which would include provisions for reductions of siltation, improvement of water quality, and possible improvements of the area for commercial and sport fishing. The features of the Atchafalaya Basin Floodway System are compatible with the current flood control plan, and include real estate acquisition of lands, flowage easements, and developmental control easements in the floodway south of Krotz Springs, Louisiana, to ensure unhampered use of the floodway during major floods; and environmental protection easements to protect the basin's environmental resources. Provision of additional public access and several campgrounds, boat launching ramps, visitors center, and other recreational facilities are also authorized. The water management units feature involves making use of distinct hydrologic units within the floodway to improve historical overflow conditions and thereby enhance aquatic ecosystem productivity.

The Atchafalaya Basin Floodway System is one of several Main Stem components, which together comprise the plan of improvement for the control of floods on the Mississippi River. The components are: Mississippi River Levees, Channel Improvement, South Bank Arkansas and South Bank Red River Levees, the Atchafalaya Basin, Atchafalaya Basin Floodway System, Old River, and a few miscellaneous items. Because the benefits of the Atchafalaya Basin Floodway

System derive from the way in which they operate together with the other Main Stem components when the Mississippi River floods, the benefit-cost ratio is a composite one that covers the entire plan.

The value of lands and improvements protected by authorized works against the design flood is $148.2 billion in 2003 dollars. This consists of 226,000 residential acres which include the City of New Orleans, 45,000 acres of commercial lands, 10 million acres of agricultural lands, and 6.5 million acres of woodland and marshland. The area subject to flooding by project flood assuming no protective works is 22.7 million acres. The area that will be provided complete protection by the completed project is 15.1 million acres.

The maximum flood of record was the 1927 flood which overflowed about 26,000 square miles, caused the deaths of 214 people, rendered 637,000 people temporarily homeless, and caused property damages of $347.0 million. This would be equivalent to $11.2 billion damages in 2003 prices.

The next flood of magnitude was the 1973 flood which overflowed 16,875 square miles (10.8 million acres), caused the death of 28 people, and displaced approximately 45,300 persons. The deaths and displacements of persons would have been significantly higher without the project in place. Without Federal projects, approximately 19.8 million acres would have been inundated. Total damages with existing projects in operation were $643 million (1973 price levels). Damages without projects would have been $11.5 billion and total damages prevented by projects amounted to $10.8 billion. Expressed in 2003 prices, damages without the projects would have been $40.6 billion and damages prevented would have been $38.1 billion.

The benefit-cost ratio was derived by measuring the total benefits credited to those Main Stem components against their total cost. Average annual benefits for the composite of Main Stem features are as follows:

Annual Benefits	Amount
Flood Control	$ 2,734,073,000
Navigation	884,704,000
Area Redevelopment	3,433,000
Recreation	3,434,000
Total	$ 3,625,644,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Buffalo Cove (Management Unit)	$ 1,500,000
Myette Boat Landing	200,000
Lands and Damages	4,000,000
Planning, Engineering and Design:	
Lands Acquisition	300,000
Management Units	1,000,000
Supervision and Administration	200,000
Total	$ 7,200,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

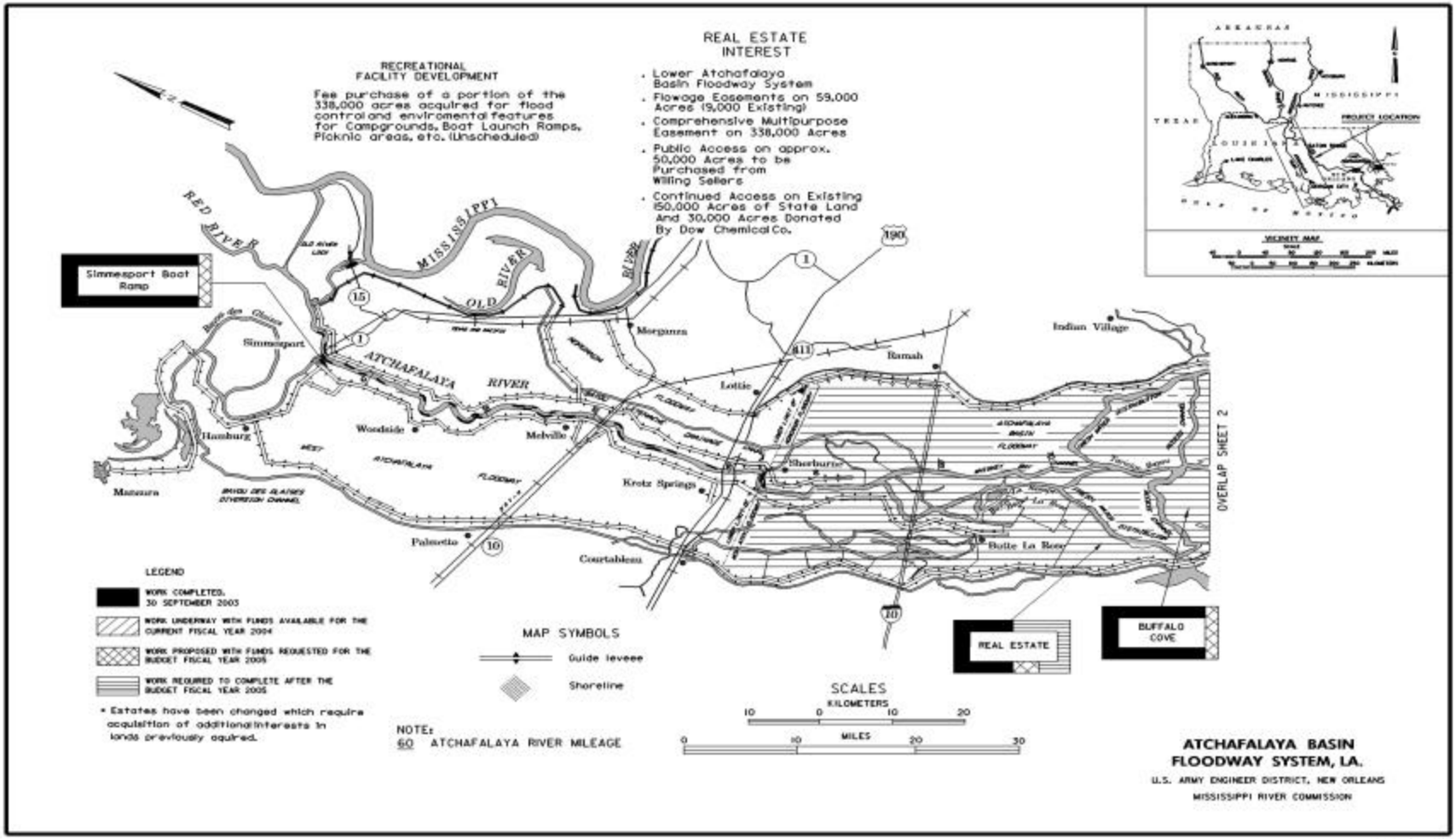
Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Pay one-half of the separable cost allocated to recreation and bear all costs of operation, maintenance, and replacements of recreation facilities.	$ 27,000,000	$ 520,500
Provide lands, easements, rights-of-way, and dredged material disposal areas for recreation.	3,134,000	0
Pay 25 percent of operation and maintenance of Water Management Units.	0	200,000
Total Non-Federal Costs	$ 30,134,000	$ 720,500

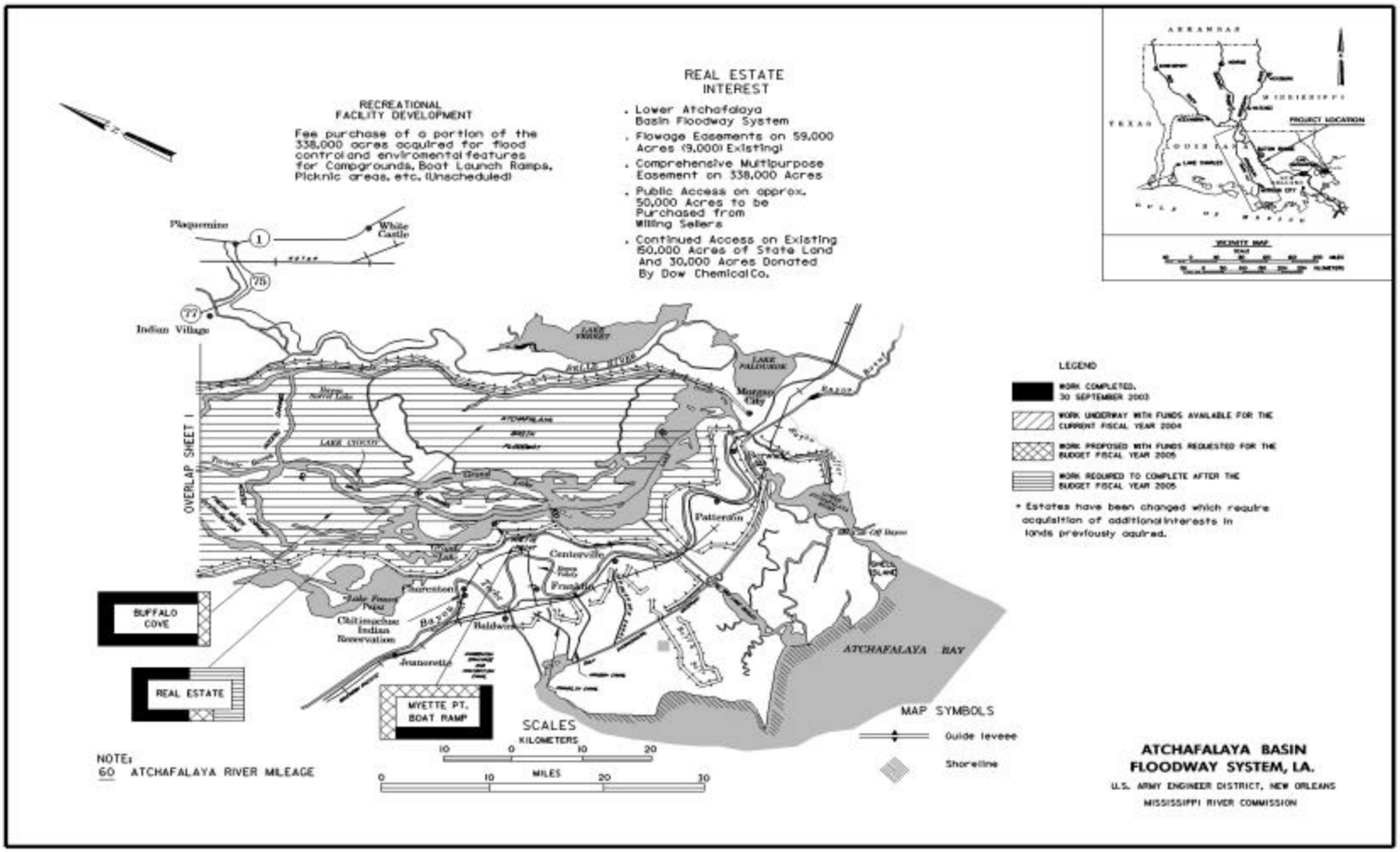
STATUS OF LOCAL COOPERATION: The Avoyelles Parish Police Jury is the non-Federal sponsor for the Simmesport Boat Ramp. The State of Louisiana has provided a letter of intent supporting the recreation feature of the project and agrees to its cost sharing requirements. The State designated the Department of Natural Resources to be the lead State agency to represent the State in the implementation of the project. Additional sponsors, St. Mary's Parish, Morgan City, the Port of Katy Springs, St. Martin's Parish, and Iberville Parish serve as local sponsors for recreational facilities.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $202,000,000 is the same as last presented to Congress (Fiscal Year 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Environmental Protection Agency on 20 August 1982.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1985.


REAL ESTATE INTEREST
. Lower Atchafalaya Basin Floodway System
. Flowage Easements on 59,000 Acres (19,000 Existing)
. Comprehensive Multipurpose Easement on 338,000 Acres
. Public Access on approx. 50,000 Acres to be Purchased from Willing Sellers
. Continued Access on Existing 150,000 Acres of State Land And 30,000 Acres Donated By Dow Chemical Co.
RECREATIONAL FACILITY DEVELOPMENT
Fee purchase of a portion of the 338,000 acres acquired for flood control and enviromental features for Campgrounds, Boat Launch Ramps, Picknic areas, etc. (Unscheduled)
RED RIVER
MISSISSIPPI RIVER
OLD RIVER
ATCHAFALAYA RIVER
Simmesport Boat Ramp
Simmesport
Hamburg
Mansura
Wordside
Melville
Morganza
Lottie
Krotz Springs
Palmetto
Courtableau
Sherburne
Butte La Rose
Ramah
Indian Village
OVERLAP SHEET 2
REAL ESTATE
BUFFALO COVE
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE AFTER THE BUDGET FISCAL YEAR 2005
* Estates have been changed which require acquisition of additional interests in lands previously aquired.
MAP SYMBOLS
Guide levee
Shoreline
NOTE: 60 ATCHAFALAYA RIVER MILEAGE
SCALES
KILOMETERS
MILES
ATCHAFALAYA BASIN FLOODWAY SYSTEM, LA.
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION
VICINITY MAP
PROJECT LOCATION
SHEET 1 OF 2


RECREATIONAL FACILITY DEVELOPMENT
Fee purchase of a portion of the 338,000 acres acquired for flood control and environmental features for Campgrounds, Boat Launch Ramps, Picknic areas, etc. (Unscheduled)
REAL ESTATE INTEREST
. Lower Atchafalaya Basin Floodway System
. Flowage Easements on 59,000 Acres (9,000) Existing)
. Comprehensive Multipurpose Easement on 338,000 Acres
. Public Access on approx. 50,000 Acres to be Purchased from Willing Sellers
. Continued Access on Existing 150,000 Acres of State Land And 30,000 Acres Donated By Dow Chemical Co.
Plaquemine
White Castle
Indian Village
OVERLAP SHEET I
Morgan City
Patterson
Centerville
Franklin
Baldwin
Jeanerette
Chitimacha Indian Reservation
ATCHAFALAYA BAY
BUFFALO COVE
REAL ESTATE
MYETTE PT. BOAT RAMP
NOTE:
60 ATCHAFALAYA RIVER MILEAGE
SCALES
KILOMETERS
MILES
MAP SYMBOLS
Guide levees
Shoreline
LEGEND
WORK COMPLETED, 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE AFTER THE BUDGET FISCAL YEAR 2005
* Estates have been changed which require acquisition of additional interests in lands previously aquired.
ARKANSAS
TEXAS
LOUISIANA
MISSISSIPPI
PROJECT LOCATION
VICINITY MAP
ATCHAFALAYA BASIN FLOODWAY SYSTEM, LA.
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

SHEET 2 OF 2

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Francis Bland Floodway Ditch (Eight Mile Creek), Arkansas (Continuing)

LOCATION: The project is located in Greene and Craighead Counties in northeastern Arkansas approximately 90 miles northwest of Memphis, Tennessee. The City of Paragould, Arkansas, is drained by the Francis Bland Floodway Ditch.

DESCRIPTION: The project provides for 12.4 miles of channel improvement. There are 4.4 miles within the city limits of Paragould, Arkansas. The remaining 8.0 miles provide a downstream outlet for the city. All work is programmed.

AUTHORIZATION: 1985 Supplemental Appropriations Act and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 6.3 to 1 at 8-7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.2 to 1 at 8-7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1986).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available reevaluation approved in January 1995 at 1993 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$14,237,000	Entire Project	75	TBD
Estimated Non-Federal Cost		5,763,000			
Cash Contributions	$ 926,000				
Other Costs	4,837,000				
Total Estimated Project Cost		$20,000,000			

PHYSICAL DATA	
Lands and Damages:	180 acres Commercial/Residential
Relocations:	
Roads	7 bridges
Railroads	2 bridges
Channels	12.4 miles

SUMMARIZED FINANCIAL DATA (Continued)			ACCUM PCT OF EST FED COST
Allocations to 30 September 2003	$8,874,000		
Conference Allowance for FY 2004	2,050,000		
Allocation for FY 2004	660,000	1/	
Allocations through FY 2004	9,534,000		67
Allocation Requested for FY 2005	1,357,000		76
Programmed Balance to Complete After FY 2005	3,346,000		
Unprogrammed Balance to Complete After FY 2005	0		

1/ Reflects $179,000 reduction assigned as savings and slippage, and $11,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004, and $1,200,000 reprogrammed from the project.

JUSTIFICATION: Francis Bland Floodway Ditch (Eight Mile Creek) provides drainage primarily for the City of Paragould, Arkansas. A 100-year flood would cause expected annual damages of $1,869,200 (October 2002 price levels). The project will provide 100-year protection in the urban area of Paragould and maintain current 3-year protection levels in the downstream rural area. Flooding impacts 1,750 residential and commercial structures and contents within the 100-year flood plain. The structure and contents have a value of approximately $177,573,700 (October 2002 price levels). Total damage from a 100-year flood is estimated at approximately $13,744,400 (October 2002 price levels). Average annual damage for such properties with project is $187,100 (October 2002 price levels). Flooding has occurred on an annual basis. Major floods occurred in 1973, 1974, 1980, and 1991. The plan of improvement addresses the need for flood damage reduction without significant detriment to the natural environment. Total annual average benefits (1993 price levels), all for flood control, are $2,260,000.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Item 2, Phase 2, Urban Channel Enlargement	$ 957,000
Planning, Engineering and Design	200,000
Supervision and Administration	200,000
Total	$ 1,357,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$3,603,000	---
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	1,234,000	---
Pay 5 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	926,000	$21,700
Total Non-Federal Costs	$5,763,000	$21,700

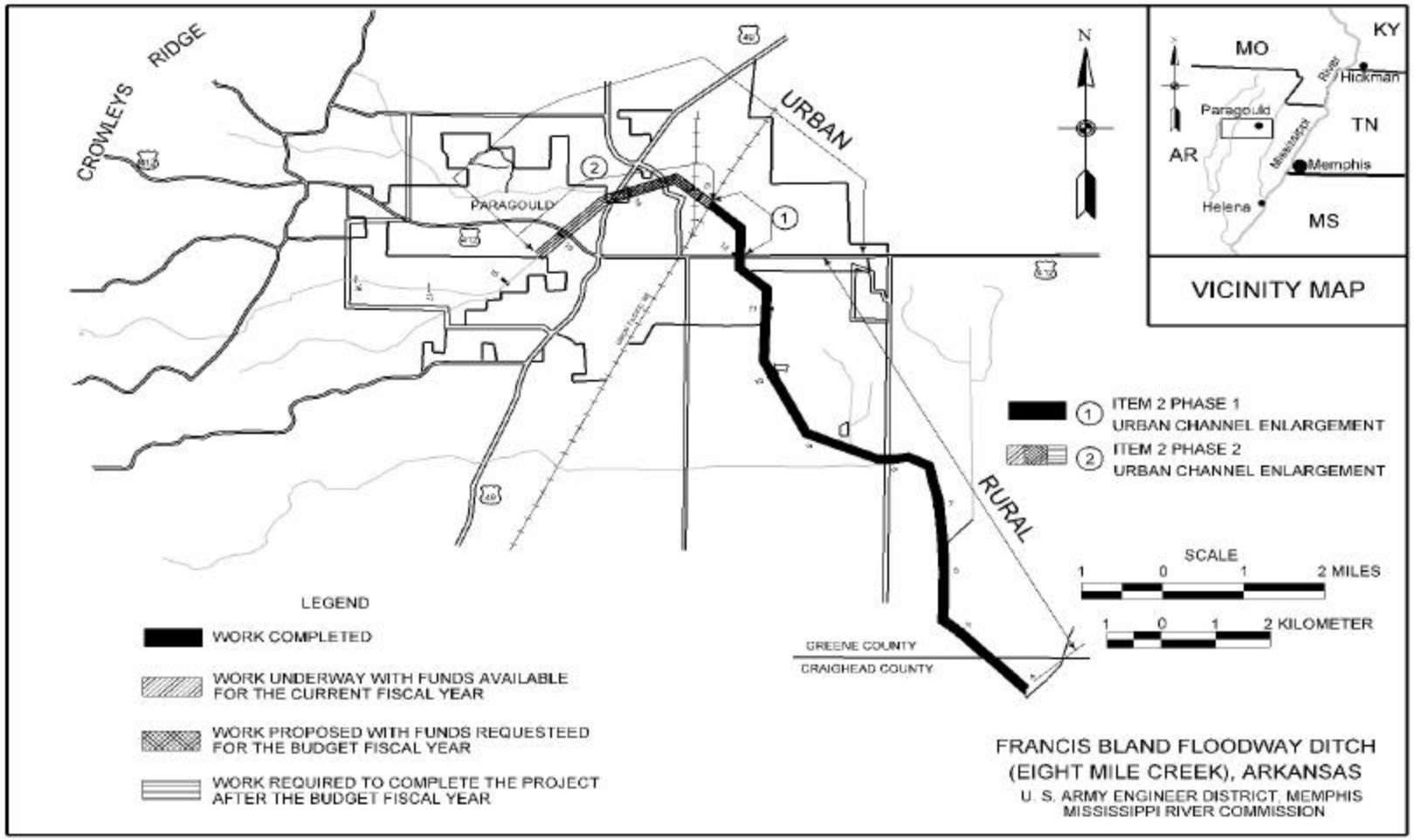
STATUS OF LOCAL COOPERATION: City officials have identified sufficient funds in current annual tax revenue, which can be used to meet project cash contributions and other requirements. The Arkansas Soil and Water Conservation Commission is the sponsor with the City of Paragould, Arkansas as the sub-party. The Project Cooperation Agreement with the Arkansas Soil and Water Commission was executed on 28 June 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $14,237,000 is an increase of $3,037,000 from the latest estimate ($11,200,000) presented to Congress (FY 2004). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	$ 3,037,000
Total	$ 3,037,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment/Finding of No Significant Impact (FONSI) was completed as part of the August 1988 General Design Memorandum. A cultural resources field survey indicates that some cultural resource sites are located in the project vicinity. The project will not impact any of the sites. There are no endangered species in the project area. Water quality certification has been granted by the State of Arkansas.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design and construction were appropriated in Fiscal Year 1986.


CROWLEYS RIDGE
PARAGOULD
URBAN
RURAL
N
MO
KY
Hickman
Paragould
TN
AR
Memphis
Helena
MS
VICINITY MAP
ITEM 2 PHASE 1
URBAN CHANNEL ENLARGEMENT
ITEM 2 PHASE 2
URBAN CHANNEL ENLARGEMENT
SCALE
1 0 1 2 MILES
1 0 1 2 KILOMETER
GREENE COUNTY
CRAIGHEAD COUNTY
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTEED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
FRANCIS BLAND FLOODWAY DITCH
(EIGHT MILE CREEK), ARKANSAS
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: St. Francis Basin, Arkansas and Missouri (Continuing)

LOCATION: The project is located in the St. Francis Basin in southeastern Missouri and northeastern Arkansas, and extends from the hills southwest of Cape Girardeau, Missouri, near Wappapello, Missouri, to the confluence of the St. Francis and Mississippi Rivers about 10 miles above Helena, Arkansas.

DESCRIPTION: The project provides for protection against headwater floods by means of a detention reservoir at Wappapello, MO, improvement of the flood-carrying capacities of the St. Francis and Little Rivers and their principal tributaries by means of levees, channel improvements, new channels, auxiliary channels, and floodways, including the main ditches in the Little River Basin. Protection against backwater flooding of the Mississippi River is provided by realignment of the St. Francis River channel supplemented with auxiliary channels, levee construction, and a pumping plant and floodgate. All work is programmed.

AUTHORIZATION: Flood Control Acts of 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1958, 1965, 1968, Water Resources Development Act of 1974; Omnibus Appropriations Act 2001, PL 106-554.

REMAINING BENEFIT-REMAINING COST RATIO: 5.9 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: This project feature was authorized in Fiscal Year 1928 and initial construction funds were provided in Fiscal Year 1938. The authorized comprehensive review of the Mississippi River and Tributaries project, contained in House Document 308/88/2, as updated to reflect 1965 conditions and price levels, is considered to be the base estimate for the project. The benefit-cost ratio for the St. Francis Basin components computed for the base estimate was 2.4 to 1.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1985 at 1983 price levels.

SUMMARIZED FINANCIAL DATA			STATUS (1 January 2004	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$445,588,000	Big Slough and Mayo Ditch	100	
Estimated Non-Federal Cost		1,876,000	Wappapello Lake	100	
Cash Contributions	$ 263,000		Little River Drainage	100	
Other Costs	1,613,000		St. Francis River and and Tributaries	83	TBD
Total Estimated Project Cost		$ 447,464,000	Entire Project	87	TBD

SUMMARIZED FINANCIAL DATA (CONT)			ACCUM PCT OF EST FED COST
Allocations to 30 September 2003	$383,568,000		
Conference Allowance for FY 2004	5,000,000		
Allocation for FY 2004	4,536,000	1/	
Allocations through FY 2004	388,104,000		87
Allocation Requested for FY 2005	3,000,000		88
Programmed Balance to Complete After FY 2005	54,484,000		
Unprogrammed Balance to Complete After FY 2005	0		

1/ Reflects $437,000 reduction assigned as savings and slippage, and $27,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

Levees:
Average Height: 11.7 feet
Length: 438.0 miles

Channels:
St. Francis River and Tributaries: 638 miles
Little River Drainage: 299 miles
Big Slough and Mayo Ditches: 28 miles

Pumping Plants:
1 – 25 cubic feet per second
1 – 12,000 cubic feet per second
1 – 700 cubic feet per second

Relocations:
Roads: 21.3 miles and 296 bridges
Railroads: 39 bridges

Dam and Reservoir: 1 – Dam

Flood Control and Diversion Structures: 8

Lands and Damages: 188,927 acres

Other: 1 – Siphon

JUSTIFICATION: The project is for flood damage reduction and is a unit in the Comprehensive Plan for Flood Control, Mississippi River and Tributaries. Protection against headwater floods of the St. Francis and Little Rivers will be afforded to an area of approximately 1,436,855 acres of agricultural lands including numerous small towns, several major railroads, highways, and utilities, located in Missouri and Arkansas. The construction of adequate outlets for the many drainage improvements undertaken by local interests will provide relief from overflow on approximately 196,700 acres in the Little River Basin, 29,000 acres in the Elk Chute Basin, and 35,000 acres in the Big Slough area. In addition, relief from flooding by backwaters of the Mississippi River is afforded to approximately 532,000 acres in the Lower St. Francis Basin below the latitude of St. Francis Lake by the Madison to Marianna Cutoff and related work including the pumping plant. Flooding has occurred every year with few exceptions, and the flood of record occurred in 1937 causing numerous breaks in the locally constructed substandard levees with resultant damages of over $2,000,000. It is estimated that the recurrence of the 1937 flood, under present conditions of development in the floodplain, would cause damages of over $74,495,000 (2002 price levels) if the flood occurred during the crop-growing season. Continuing construction of this

project is needed to prevent recurring flood losses. Project benefits will result from flood damages prevented, increased utilization of land, and fish and wildlife enhancement. Counties within the project area that are subject to substantial and persistent unemployment are: Lee, Mississippi and St. Francis in Arkansas. Average annual benefits (1983 price levels) are as follows (for total project):

Annual Benefits	Amount
Flood Control	$24,106,000
Recreation	2,152,000
Fish and Wildlife	333,000
Area Redevelopment	785,000
Advance Replacement	1,304,000
Betterments	423,000
Relocation Assistance	24,000
Total	$29,127,000

FISCAL YEAR 2005 The requested amount will be applied as follows:

ST. FRANCIS RIVER AND TRIBUTARIES

Continue:	
Hwy 79, 10 & 15 Mile Bayou, AR, Relocations	$ 228,000
Ditch 13, Culvert	75,000
Steele Bypass Weir	100,000
10-15 Mile Bayou Channel	197,000
Buffalo Island, Outlet Structure	100,000
Honey Cypress, M20 & M21	100,000
10-15 County Bridge, Mile 13.8	100,000
Lands and Damages	600,000
Planning, Engineering and Design	1,200,000
Supervision and Administration	300,000
Total	$ 3,000,000

NON-FEDERAL COST: Prior to the Flood Control Act of 1946, local interests provided lands, easements, and rights-of-way and provided for relocation of interfering facilities. After 1946, local cooperation was limited to minor maintenance of levees except for providing right-of-way for specific features, i.e., recreation facilities at the W. G. Huxtable Pumping Plant, Inter River Culvert and St. Francis Lake Control Structure. A tabulation of these and other non-Federal costs is as follows:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$1,492,000	
Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.	121,000	
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, and replacement of recreation facilities.	85,000	
Pay all costs of minor maintenance of levees.		$970,000
Pay a portion equivalent to 6.4% of the first costs associated with the Improvements in the Big Lake area for fish and wildlife enhancement.	178,000	
Total Non-Federal Costs	$1,876,000	$970,000

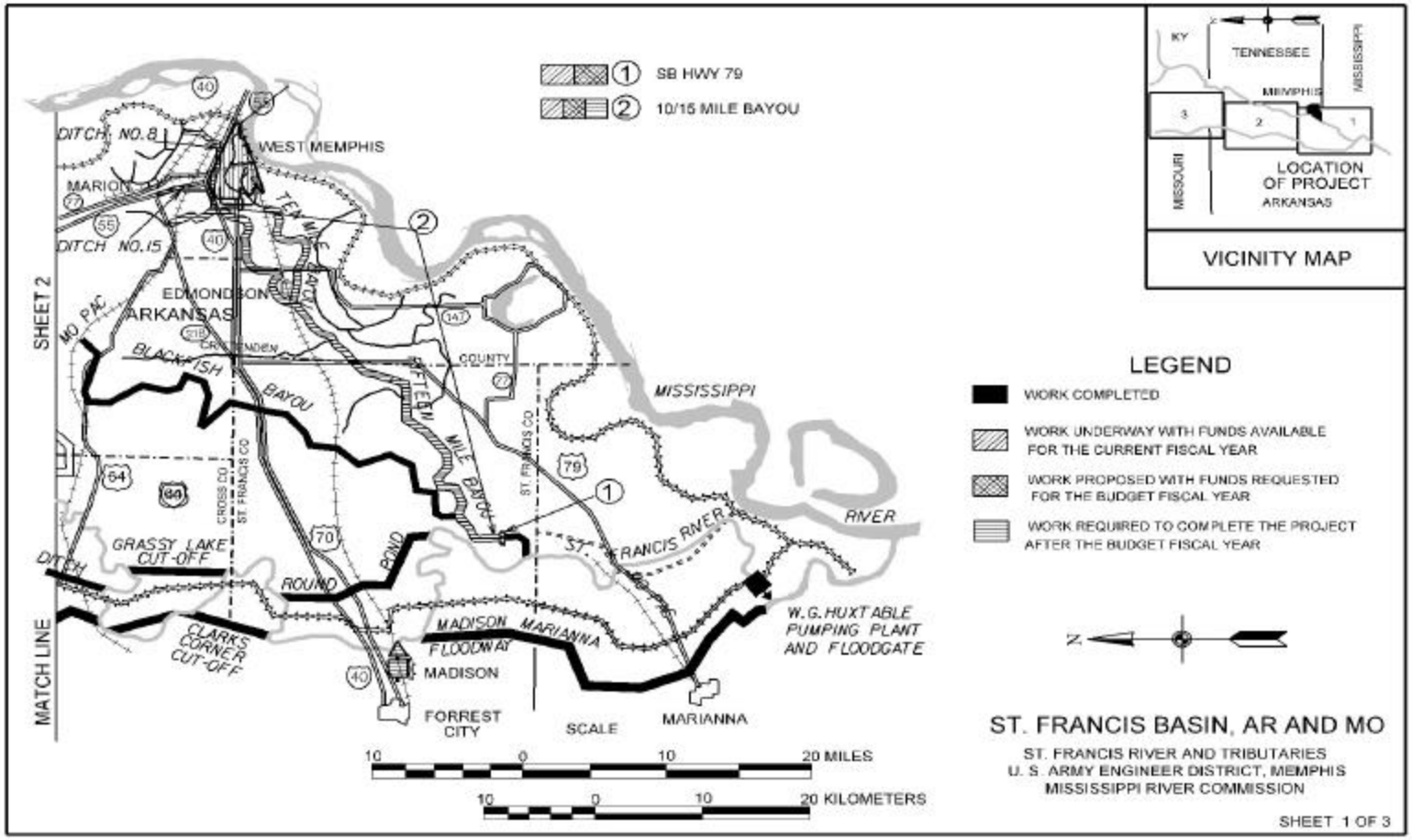
STATUS OF LOCAL COOPERATION: Necessary assurances have been furnished by 24 levee and drainage districts to perform minor maintenance as required by law. These agencies are furnishing all requirements of local cooperation necessary for meeting the present project schedule.

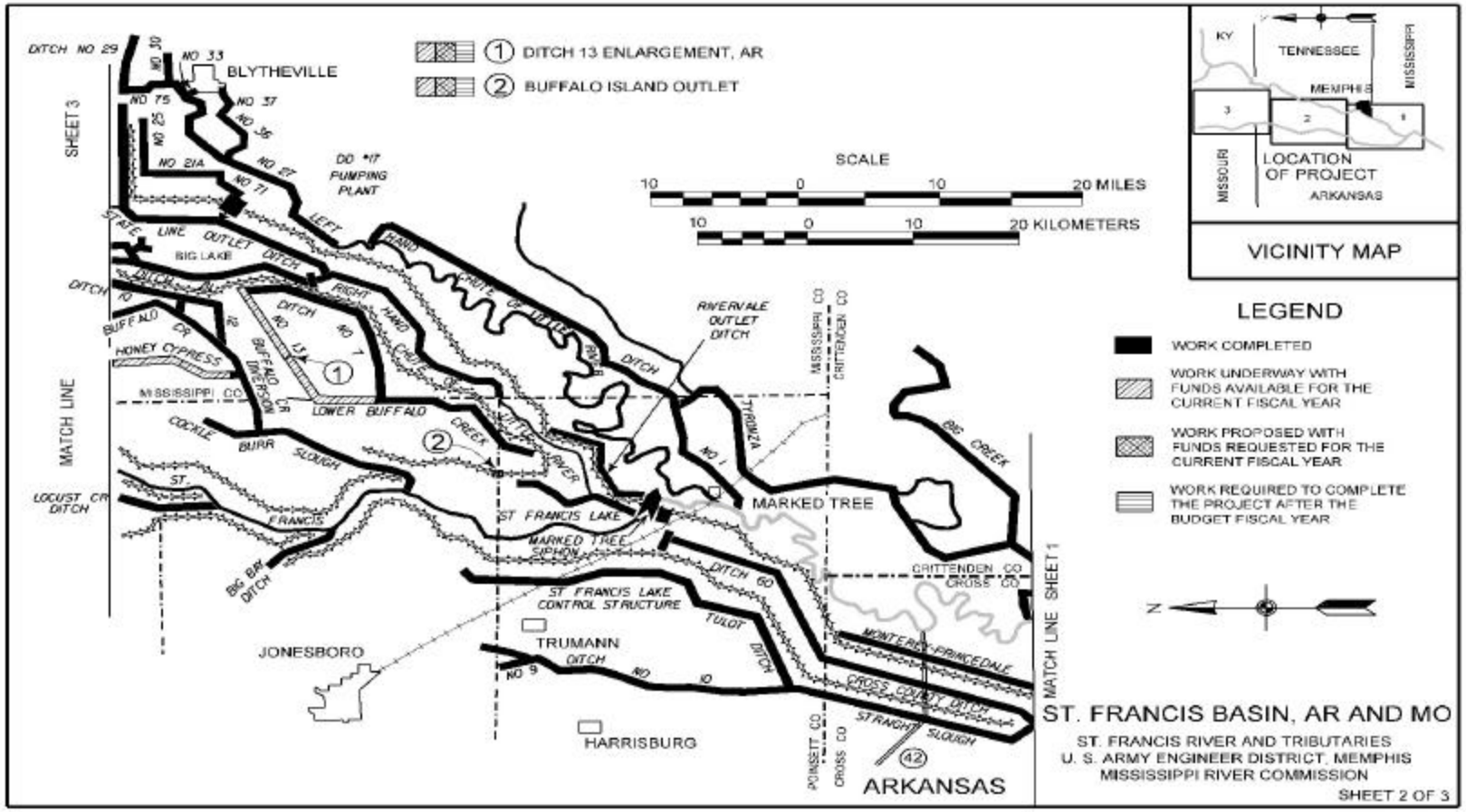
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $445,588,000 is an increase of $14,388,000 from the latest estimate ($431,200,000) presented to Congress (FY 2004). This change includes the following items:

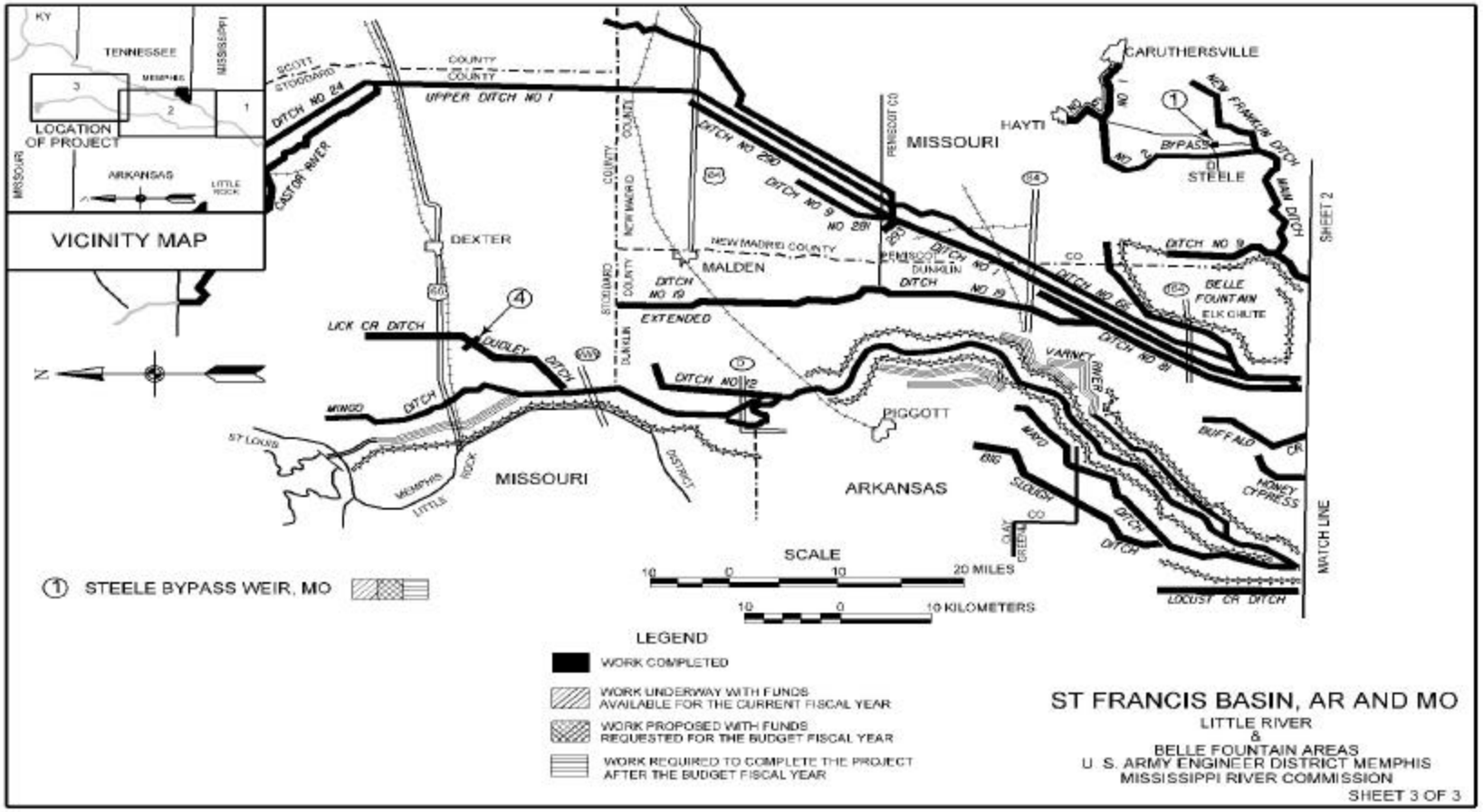
Item	Amount
Price Escalation on Construction Features	$ 5,226,000
Post Contract Award and Other Estimating Adjustments	7,223,000
Price Escalation on Real Estate	1,939,000
Total	$ 14,388,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with the Council on Environmental Quality on 11 December 1973.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1938.


SB HWY 79
10/15 MILE BAYOU
WEST MEMPHIS
DITCH NO.8
MARION
DITCH NO.15
EDMONDSON
ARKANSAS
MO PAC
BLACKFISH BAYOU
TEN MILE BAYOU
MISSISSIPPI
RIVER
ST. FRANCIS RIVER
GRASSY LAKE CUT-OFF
ROUND POND
CLARKS CORNER CUT-OFF
MADISON MARIANNA FLOODWAY
MADISON
FORREST CITY
MARIANNA
W.G. HUXTABLE PUMPING PLANT AND FLOODGATE
MATCH LINE
SHEET 2
SCALE
20 MILES
20 KILOMETERS
KY
TENNESSEE
MEMPHIS
MISSISSIPPI
MISSOURI
LOCATION OF PROJECT
ARKANSAS
VICINITY MAP
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
ST. FRANCIS BASIN, AR AND MO
ST. FRANCIS RIVER AND TRIBUTARIES
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION
SHEET 1 OF 3


1 DITCH 13 ENLARGEMENT, AR
2 BUFFALO ISLAND OUTLET
SCALE
10 0 10 20 MILES
10 0 10 20 KILOMETERS
VICINITY MAP
KY
TENNESSEE
MISSISSIPPI
MEMPHIS
MISSOURI
LOCATION OF PROJECT
ARKANSAS
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE CURRENT FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
BLYTHEVILLE
SHEET 3
MATCH LINE
DITCH NO 29
NO 30
NO 33
NO 75
NO 37
NO 36
NO 25
NO 21A
NO 27
NO 71
DD #17 PUMPING PLANT
STATE LINE OUTLET DITCH
BIG LAKE
LEFT HAND CUT OUTLET
RIGHT HAND CUT OUTLET
DITCH NO 7
DITCH NO 13A
BUFFALO DIVERSION CR
HONEY CYPRESS
MISSISSIPPI CO
LOWER BUFFALO CREEK
COCKLE BURR SLOUGH
LOCUST CR DITCH
ST FRANCIS
BIG BAR DITCH
RIVERVALE OUTLET DITCH
TYRONZA RIVER
NO 1
MISSISSIPPI CO
CRITTENDEN CO
BIG CREEK
MARKED TREE
ST FRANCIS LAKE
MARKED TREE SIPHON
ST FRANCIS LAKE CONTROL STRUCTURE
DITCH 60
TULOT DITCH
CRITTENDEN CO
CROSS CO
MONTERIA-PRINCEDALE
CROSS COUNTY DITCH
STRAIGHT SLOUGH
TRUMANN
JONESBORO
DITCH NO 9
NO 10
HARRISBURG
POINSETT CO
CROSS CO
42
ARKANSAS
MATCH LINE SHEET 1
N
ST. FRANCIS BASIN, AR AND MO
ST. FRANCIS RIVER AND TRIBUTARIES
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION
SHEET 2 OF 3


VICINITY MAP
LOCATION OF PROJECT
TENNESSEE
MISSISSIPPI
MISSOURI
ARKANSAS
LITTLE ROCK
MEMPHIS
CASTOR RIVER
UPPER DITCH NO 1
DITCH NO 24
DEXTER
LICK CR DITCH
DUDLEY DITCH
MINGO DITCH
ST LOUIS
MEMPHIS
LITTLE ROCK
MISSOURI
MALDEN
NEW MADRID COUNTY
DITCH NO 19
EXTENDED
DITCH NO 12
DITCH NO 28D
DITCH NO 9
NO 28B
DITCH NO 7
DITCH NO 8
DITCH NO 18
DUNKLIN
PIGGOTT
ARKANSAS
VARNEY RIVER
HAYTI
CARUTHERSVILLE
STEELE
BYPASS
NEW FRANKLIN DITCH
MAIN DITCH
DITCH NO 9
BELLE FOUNTAIN
ELK CHUTE
BUFFALO CR
MONEY CYPRESS
LOCUST CR DITCH
MATCH LINE
SHEET 2
SCALE
20 MILES
10 KILOMETERS
① STEELE BYPASS WEIR, MO
LEGEND
WORK COMPLETED
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
ST FRANCIS BASIN, AR AND MO
LITTLE RIVER
&
BELLE FOUNTAIN AREAS
U. S. ARMY ENGINEER DISTRICT MEMPHIS
MISSISSIPPI RIVER COMMISSION
SHEET 3 OF 3

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Mississippi Delta Region, Louisiana (Salinity Control Structures) (Continuing)

LOCATION: The project is located in the lower Mississippi River delta region in Plaquemines and St. Charles Parishes, Louisiana. The Caernarvon structure is located in Plaquemines Parish on the east bank of the Mississippi River in the vicinity of Caernarvon, Louisiana. The Davis Pond structure is located in St. Charles Parish on the west bank just downstream of Luling, Louisiana.

DESCRIPTION: The plan of improvement originally consisted of four salinity control structures (Caernarvon, Davis Pond, Homeplace, and Bohemia) with appurtenant levees and channels, to divert freshwater from the Mississippi River into coastal bays and marshes for fish and wildlife restoration. The Caernarvon and Davis Pond salinity control structures are programmed, including post-construction environmental monitoring which will continue for four years after completion of construction of each structure. The Homeplace and Bohemia structures were deauthorized on 1 May 1997.

AUTHORIZATION: Flood Control Act of 1965, and Water Resources Development Acts of 1974, 1986 and 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 10.5 to 1 at 8-7/8 percent (Davis Pond).

TOTAL BENEFIT-COST RATIO: 2.8 to 1 at 3-1/4 percent for Caernarvon (Fiscal Year 1969), and 5.6 to 1 at 8-7/8 percent for Davis Pond.

INITIAL BENEFIT - COST RATIO: 3.4 to 1 at 3-1/4 percent for Caernarvon (Fiscal Year 1969), and 3.0 to 1 at 8-1/8 percent for Davis Pond (Fiscal Year 1983).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluations: Caernarvon - approved in November 1985, at 1985 price levels; and Davis Pond - approved in September 1992 at 1990 price levels.

SUMMARIZED FINANCIAL DATA				ACCUM PCT OF EST FED COST	STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost		$108,400,000			Caernarvon	100	February 1997
Estimated Non-Federal Cost		36,100,000			Davis Pond	80	TBD
Cash Contribution	$27,302,000				Entire Project	90	TBD
Other Costs	8,798,000						
Total Estimated Project Cost		$144,500,000					
Allocations to 30 September 2003		$ 98,662,000	1/				
Conference Allowance for FY 2004		3,200,000					
Allocation for FY 2004		2,903,000	2/				
Allocations through FY 2004		101,565,000		94			
Allocation Requested for FY 2005		1,800,000		95			
Programmed Balance to Complete After FY 2005		5,035,000					
Unprogrammed Balance to Complete After FY 2005		0					

1/ Includes $58,000 expended on Bohemia prior to 1970.

2/ Reflects $280,000 reduction assigned as savings and slippage, and $17,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004.

PHYSICAL DATA

	Caernarvon	Davis Pond
Lands and Damages	2,092 acres	10,213 acres
Relocations		
Roads/Bridges	1,600 linear feet	2,920 linear feet
Railroads	2,500 linear feet	3,600 linear feet
Utilities	4,600 linear feet	7,980 linear feet
Fish & Wildlife Facilities		
Structures	5 box culverts	4 box culverts
	15 feet by 15 feet	14 feet by 14 feet
	8,000 cubic feet per second	10,650 cubic feet per second

	Caernarvon	Davis Pond
Pumping Stations		1 pumping station, 570 cfs capacity
Channels	1.7 miles	2.2 miles
Levees	3.7 miles	16.9 miles

JUSTIFICATION: The project diverts freshwater from the Mississippi River to coastal bays and marshes for fish and wildlife restoration. Benefits include restoration of former ecological conditions by controlling salinity and supplementing nutrients. The bays are important to oyster production and as breeding areas for shrimp and food fishes, while the marsh areas produce natural food for fur-bearing animals and migratory waterfowl. A total of 981,500 acres of marshes and bays will be benefitted. The diversions take place under regulated conditions developed from monitoring the impact on the environment and the fish and wildlife. Average annual benefits are as follows:

Annual Benefits	Amount
Fish and Wildlife	$ 8,706,000
Caernarvon	14,997,000
Davis Pond	
Recreation	
Caernarvon	449,000
Davis Pond	298,000
Total	$24,450,000

FISCAL YEAR 2004: The requested amount will be applied as follows:

Davis Pond	
Continue:	
Monitoring	$ 300,000
2nd Lift Levees	1,100,000
Planning, Engineering and Design	250,000
Supervision and Administration	100,000
Total	$ 1,800,000

NON-FEDERAL COST: Based on the cost sharing concept adopted for the Caernarvon Structure, the non-Federal sponsor will voluntarily contribute 25 percent of the first cost of the project as well as the required 25 percent of the cost of operating, maintaining, repairing, rehabilitating, and replacing the project after completion.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Contribute 25 percent of the costs allocated to fish and wildlife restoration and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.		
Davis Pond	$30,250,000	$188,626
Caernarvon	5,850,000	71,277
Total Non-Federal Costs	$36,100,000	$259,903

The non-Federal sponsor for the Caernarvon and Davis Pond Structures has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement for the Caernarvon Structure was signed by the State of Louisiana on 2 June 1987 and by the Assistant Secretary of the Army for Civil Works on 10 June 1987. The current non-Federal cost estimate of $5,850,000, which includes a cash contribution of $5,850,000, is a decrease of $275,000 from the non-Federal cost estimate of $6,125,000 noted in the Project Cooperation Agreement, which

included a cash contribution of $6,125,000. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The State of Louisiana has provided cash contributions of $5,850,000 for the Caernarvon Structure. The State has also performed biological monitoring, with an estimated value of $1,044,000. The Project Cooperation Agreement for the Davis Pond Structure was signed 17 April 1993 by the State of Louisiana and the Acting Assistant Secretary of the Army. The Water Resources Development Act of 1996 authorized the Corps to credit the State of Louisiana up to $7,500,000 in oyster relocation costs. We are currently preparing an amendment to the Davis Pond PCA to incorporate these requirements. We anticipate execution of the amendment in September 2003. The State of Louisiana is funding both the construction and the operations and maintenance of the project through the Wetlands Conservation and Restoration Trust Fund. Our recent analysis of the non-Federal sponsor's financial capability affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment. The State of Louisiana has provided cash contributions of $17,732,000 through 30 September 2002 for the Davis Pond Structure.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $108,400,000 is an increase of $200,000 from the latest estimate ($108,200,000) presented to Congress (Fiscal Year 2004). This change includes the following item:

Item	Amount
Price Escalation on Construction Features	$ 200,000
Total	$ 200,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the Louisiana Coastal Area Study was filed with the Environmental Protection Agency on 5 April 1985. This statement is adequate for the Caernarvon and Davis Pond structures. An environmental assessment is being prepared to address proposed operational changes in the Davis Pond structure.

OTHER INFORMATION: Local interests, during the period 1954-1970, spent an estimated $420,000 for construction and maintenance of freshwater diversion structures and channel improvements on the east bank of the Mississippi River in the vicinity of Bohemia and Bayou Lamoque.

Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1969 and funds to initiate construction were appropriated in Fiscal Year 1987.

SUMMARIZED FINANCIAL DATA

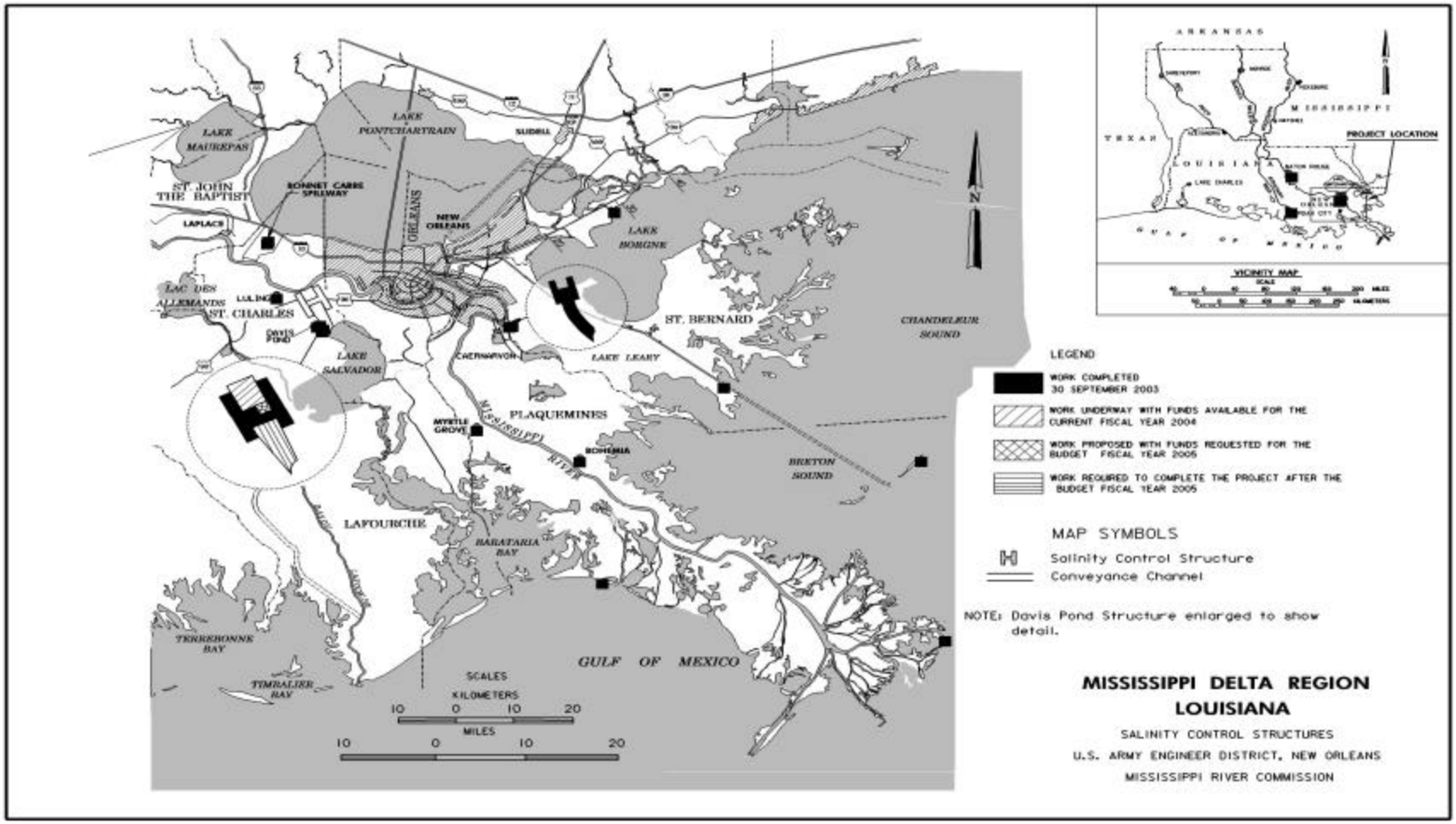
Davis Pond:		
Estimated Federal Cost		$90,825,000
Estimated Non-Federal Cost		30,250,000
Cash Contributions	$21,452,000	
Other Costs	8,798,000	
Total Estimated Cost		$121,100,000
Caernarvon:		
Estimated Federal Cost		$17,550,000
Estimated Non-Federal Cost		5,850,000
Cash Contributions	$5,850,000	
Other Costs	0	
Total Estimated Cost		$23,400,000

REMAINING BENEFIT - REMAINING COST RATIO:

Davis Pond: 10.5 to 1 at 8-7/8 percent.
Caernarvon: Not applicable because construction is complete.

TOTAL BENEFIT - COST RATIO:

Davis Pond: 5.6 to 1 at 8-7/8 percent.
Caernarvon: Not applicable because construction is complete.


LAKE MAUREPAS
ST. JOHN THE BAPTIST
LAPLACE
BONNET CARRE SPILLWAY
LAKE PONTCHARTRAIN
SLIDELL
ORLEANS
NEW ORLEANS
LAKE BORGNE
LAC DES ALLEMANDS
LULING
ST. CHARLES
DAVIS POND
LAKE SALVADOR
CAERNARVON
LAKE LEARY
ST. BERNARD
CHANDELEUR SOUND
PLAQUEMINES
MYRTLE GROVE
MISSISSIPPI RIVER
BOHEMIA
BRETON SOUND
LAFOURCHE
BARATARIA BAY
TERREBONNE BAY
TIMBALIER BAY
GULF OF MEXICO
N
SCALES
KILOMETERS
10 0 10 20
MILES
10 0 10 20
ARKANSAS
MISSISSIPPI
TEXAS
LOUISIANA
PROJECT LOCATION
GULF OF MEXICO
VICINITY MAP
LEGEND
WORK COMPLETED 30 SEPTEMBER 2003
WORK UNDERWAY WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR 2004
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR 2005
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR 2005
MAP SYMBOLS
Salinity Control Structure
Conveyance Channel
NOTE: Davis Pond Structure enlarged to show detail.
MISSISSIPPI DELTA REGION
LOUISIANA
SALINITY CONTROL STRUCTURES
U.S. ARMY ENGINEER DISTRICT, NEW ORLEANS
MISSISSIPPI RIVER COMMISSION

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN - Construction

PROJECT: Yazoo Basin, Mississippi (Continuing)

LOCATION: The project is located in Mississippi and extends generally from Memphis, Tennessee, southward to Vicksburg, Mississippi, and from the escarpment at Greenwood, westward to the Mississippi River. The counties included are DeSoto, Tunica, Tate, Coahoma, Quitman, Panola, Bolivar, Sunflower, Tallahatchie, Yalobusha, Leflore, Grenada, Carroll, Washington, Humphrey, Holmes, Issaquena, Sharkey, Yazoo, and Warren.

DESCRIPTION: The project provides protection against headwater floods of streams in the basin; against backwater floods of the Mississippi; and for major drainage in the delta area. The Yazoo Basin is divided into three major flood control components (the Yazoo Headwater, the Yazoo Backwater, and the Big Sunflower River, etc., Including Steele Bayou). All of the work in the project is programmed except for remaining recreation facilities at Grenada Lake pending development of cost sharing agreements with local interests for construction and non-Federal operation and maintenance consistent with the provisions of the Federal Water Project Recreation Act of 1965 (Public Law 89-72), as amended; and remaining work on Rocky Bayou pending a decision to continue construction in accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986.

AUTHORIZATION: Flood Control Acts of 1936, 1937, 1938, 1941, 1944, 1946, 1950, 1962, 1965, and the Water Resources Development Acts of 1974, 1986, and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 3.3 to 1 at 2-1/2 percent.

TOTAL BENEFIT-COST RATIO: 4.5 to 1 at 2-1/2 percent.

INITIAL BENEFIT-COST RATIO: 2.1 to 1 at 2-1/2 percent (FY 1967).

BASIS OF BENEFIT-COST RATIO: Benefits and costs for the Yazoo Backwater Project are from the latest evaluation approved in July 1983 at 1974 price levels. Benefits for the remaining features of the Yazoo Basin project are based on "Upper Steele Bayou Project Reformulation Study," December 1992; and "Upper Yazoo Projects Reformulation Study," December 1993. Costs are based on October 2003 costs deflated to 1974 price levels.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$ 1,942,279,000
Programmed Construction		1.923,329,000	
Unprogrammed Construction		18,950,000	
Estimated Non-Federal Cost			$ 5,646,000
Programmed Construction		918,000	
Cash Contributions	834,000		
Other Costs	84,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		4,728,000	
Cash Contributions	1,617,000		
Other Costs	3,111,000		
Total Estimated Programmed Construction Cost			1,924,247,000
Total Estimated Unprogrammed Construction Cost			23,678,000
Total Estimated Project Cost			$ 1,947,925,000

ACCUM PCT OF EST FED COST	STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
	Yazoo City	100	---
	Belzoni	100	---
	Will M. Whittington Auxiliary Channel	99	TBD
	Sardis Lake	100	---
	Arkabutla Lake	100	---
	Enid Lake	100	---
	Grenada Lake	98	TBD
	Greenwood	100	---
	Streambank Erosion Control Evaluation and Demonstration	100	---
	Upper Yazoo Projects	65	TBD
	Main Stem	73	TBD
	Tributaries	62	TBD
	All Work Except Ascalmore-Tippo and Opossum Bayous	62	TBD
	Ascalmore-Tippo and Opossum Bayous	71	TBD
	Delta Headwaters Project	100	TBD
	Big Sunflower River, Etc., Including Steele Bayou	96	TBD

SUMMARIZED FINANCIAL DATA (CONT)			ACCUM PCT OF EST FED COST
Allocations to 30 September 2003	$ 1,059,189,000		
Conference Allowance for FY 2004	39,055,000		
Allocation for FY 2004	36,817,000	1/	
Allocations Thru FY 2004	1,096,006,000		56
Allocations Requested for FY 2005	$ 5,850,000		57
Programmed Balance to Complete After FY 2005	821,473,000		
Unprogrammed Balance to Complete After FY 2005	18,950,000		

STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Yazoo Backwater	23	TBD
Yazoo Backwater Including Muddy Bayou Control Structure	51	TBD
Rocky Bayou Separable Element	27	TBD
Backwater Pumping Plant Separable Element	6	TBD
Yazoo Backwater Mitigation Separable Element	100	TBD
Reformulation Study	70	TBD
Entire Project	70	TBD

1/ Reflects $2,367,000 reduction assigned as savings and slippage, and $216,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004, and $345,000 reprogrammed to the project.

PHYSICAL DATA

Yazoo City:
- Lands and Damages: 361 acres
- Relocations: 1.1 miles roads
- Levees: 4.1 miles
- Channels: 1.6 miles
- Pumping Plant: One 540 cubic feet per second (cfs)

Belzoni:
- Lands and Damages: 3.3 acres
- Levees: 0.6-mile levee and 0.5-mile floodwall

Will M. Whittington Auxiliary Channel:
- Lands and Damages: 11,996 acres
- Relocations:
  - Roads: 3.0 miles and 12 bridges
  - Railroads: 0.4 mile and 1 bridge
- Fish and Wildlife Facilities:
  - 1 water control structure
- Channels: 30.8 miles
- Levees: 61.3 miles

Sardis Lake:
- Lands and Damages: 98,584 acres
- Relocations:
  - Roads: 3.2 miles and 1 bridge
  - Railroads: 3.2 miles and 1 bridge
- Reservoir: 58,500-acre pool area
- Dam: Earthfill, 15,300 feet long; 97 feet average height
- Roads, Railroads, and Bridges: 7.6 miles roads and 8 bridges
- Recreation Facilities: 19 sites
- Buildings: 4

Arkabutla Lake:
- Lands and Damages: 52,629 acres
- Relocations:
  - Roads: 5.5 miles and 5 bridges
  - Railroads: 5.8 miles and 2 bridges
- Reservoir: 33,400-acre pool area
- Dam: Earthfill, 11,500 feet long; 67 feet average height
- Roads: 4 miles
- Channel and Canals: 1.5 miles
- Recreation Facilities: 11 sites
- Buildings: 4

Enid Lake:
- Lands and Damages: 43,870 acres
- Relocations:
  - Roads: 19.1 miles and 9 bridges
- Reservoir: 28,000-acre pool area
- Dam: Earthfill, 8,400 feet long; 85 feet average height
- Roads: 1 mile
- Recreation Facilities: 10 sites
- Buildings: 4

Grenada Lake:
- Lands and Damages: 90,356 acres
- Relocations:
  - Roads: 83.2 miles and 47 bridges
  - Railroads: 21.6 miles and 21 bridges
  - Cemetery: 1
- Reservoir: 64,600-acre pool area
- Dam: Earthfill, 13,900 feet long; 80 feet average height
- Roads: 4.5 miles and 1 bridge
- Recreation Facilities: 20 sites
- Buildings: 4

Greenwood:
- Lands and Damages: 1,435 acres
- Relocations:
  - Roads: 0.5 mile and 4 bridges
- Bank Stabilization: 0.8 mile
- Channels: Big Sand Creek Diversion (2.9 miles)
- Levees and Floodwalls: 28.4 miles, height 4-6 feet
- Pumping Plants: Storm Water: 3-capacity 67, 89, and 675 cfs

Upper Yazoo Projects:
- Lands and Damages: 24,171 acres
- Relocations:
  - Roads: 8.0 miles and 1 bridge
- Utilities:
  - 16 pipelines
  - 20 power lines
  - 9 telephone lines
- Channels: 2 cutoffs, 197.4 miles; bottom width of 75 feet to 150 feet
- Levees: 26.6 miles levees and 0.2-mile floodwall, average height 3.5 feet
- Flood Control and Diversion Structure: One control structure with three 32-foot-wide gate bays, 66 water control structures, and 2 sedimentation structures
- Bank Stabilization: 6.8 miles

Main Stem:
- Lands and Damages: 16,560 acres
- Relocations:
  - Roads: 28.9 miles and 10 bridges
  - Railroads: 1.2 miles
- Channels: 43 cutoffs, 251 miles channel clearing and 21 miles channel enlargement (total miles 288.3)
- Levees: 156.1 miles; variable height, 3 to 28 feet
- Bank Stabilization: 1.8 miles

Tributaries:
- All Work Except Ascalmore-Tippo and Opossum Bayous
  - Lands and Damages: 40,177 acres
  - Relocations:
    - Roads: 7.3 miles and 57 bridges
    - Railroads: 2.2 miles and 6 bridges
  - Channels: 442.6 miles
  - Levees: 147.8 miles, variable height, 3 to 25 feet
  - Pumping Plant: 1 storm water (McKinney Bayou) 250 cfs second; 3 Pelucia Creek Pumping Plants, 75, 15, and 10 cfs
  - Bank Stabilization: 8.2 miles
    9 Grade Control Structures

Ascalmore-Tippo and Opossum Bayous:
- Lands and Damages: 2,601 acres
- Relocations:
  - Roads: 11 bridges
  - Railroads: 1 bridge
- Channels: 50.6 miles
- Levees: 12.6 miles; average height 7 feet

Delta Headwaters Project:
- Abiaca Creek Watershed:
  - Bank Stabilization 1.0 miles
  - Levees 9.5 miles
  - Major Grade Control Structures 3
  - Minor Grade Control Structures 9
- Batupan Bogue Watershed:
  - Bank Stabilization 15.5 miles
  - Major Grade Control Structures 29
  - Minor Grade Control Structures 42
- Black Creek Watershed:
  - Bank Stabilization 28.4 miles
  - Levees 1.5 miles
  - Floodwater Retarding Structures 2
  - Major Grade Control Structures 9
  - Minor Grade Control Structures 130
- Burney Branch Watershed:
  - Channel Improvement 0.3 mile
- Cane-Mussacuna Watershed:
  - Minor Grade Control Structures 11
  - Major Grade Control Structures 4
  - Bank Stabilization 0.8 mile

Delta Headwaters Project:
- Coldwater River Watershed:
  - Bank Stabilization 9.7 miles
  - Major Grade Control Structures 26
  - Minor Grade Control Structures 204
- Hickahala-Senatobia Watershed:
  - Bank Stabilization 2.8 miles
  - Channel Improvement 13.9 miles
  - Major Grade Control Structures 28
  - Minor Grade Control Structures 73
- Hotophia Creek Watershed:
  - Bank Stabilization 4.0 miles
  - Major Grade Control Structures 9
  - Minor Grade Control Structures 20
- Hurricane-Wolf Watershed:
  - Bank Stabilization 3.2 miles
  - Major Grade Control Structures 3
  - Minor Grade Control Structures 37
- Long Creek Watershed:
  - Bank Stabilization 7.2 miles
  - Major Grade Control Structures 8
  - Minor Grade Control Structures 11
- Otoucalofa Creek Watershed:
  - Bank Stabilization 7.5 miles
  - Channel Improvement 0.8 mile
  - Major Grade Control Structures 3
  - Minor Grade Control Structures 17
- Pelucia Creek Watershed:
  - Major Grade Control Structures 1
  - Bank Stabilization 1.4 miles
- Yalobusha Watershed:
  - Technical Work Plan under Preparation
  - Major Grade Control Structures 5
  - Minor Grade Control Structures 40

Big Sunflower River, Etc., Including Steele Bayou:
- Lands and Damages: 34,974 acres
- Relocations:
  - Roads: 2.0 miles and 68 bridges
  - Railroads: 1 bridge
  - Fish and Wildlife Facilities: 9 water control structures
- Channels: (miles)

Big Sunflower River	216
Quiver River	81
Steele Bayou	100
Deer Creek	7
Bogue Phalia	95
Little Sunflower River	28
Hushpuckena River	28
Tributaries	172
Gin and Muddy Bayous	12.3
Total	739.3

  - 1 channel weir
- Levees: 9.0 miles, average height 7 feet; 4 gated culverts and 4 fixed crest spillways
- Bank Stabilization: 1.0 mile

Yazoo Backwater Pumping Plant:
- Lands and Damages: 378 acres project lands
- Relocations:
  - Roads: 1.0 mile and 1 bridge
- Channels: 1.9 miles
- Levees: 0.5 miles, variable height 7 to 30 feet
- Pumping Plant: One 10,000 cfs

Yazoo Backwater Including Muddy Bayou Control Structure:
- Lands and Damages: 30,203 acres
- Relocations:
  - Roads: 24.3 miles and 2 bridges
  - Railroads: 0.8 mile and 1 bridge
- Fish and Wildlife Facilities:
  - 2 Water Control Structures
  - 7 Greentree Reservoirs
  - 5 Slough Control Areas
  - 4 Pumping Stations
- Channels: 38.9 miles, average depth, 25 feet
- Levees: 78.5 miles levees, variable height, 5 to 30 feet; 5 floodgates, openings vary in size from 72 square feet to 2,700 square feet

Yazoo Backwater Including Muddy Bayou Control Structure:
- Recreation Facilities: 2 boat-launching ramps
- Floodway Control and Diversion Structures:
  - Muddy Bayou Control Structure (opening size 480 square feet)

Rocky Bayou Area:
- Lands and Damages: 1,140 acres
- Relocations:
  - Roads: 7.0 miles
- Levees: 19.0 miles

Yazoo Backwater, Fish and Wildlife Mitigation:
- Lands and Damages: 8,807 acres

Streambank Erosion Control Evaluation and Demonstration:
- Bank Stabilization: 65.0 miles

JUSTIFICATION: The Yazoo Headwaters feature will protect 1,209,000 acres against floods, substantially benefit 303,000 acres and protect Greenwood, Belzoni, Yazoo City and numerous smaller communities. Channel improvement work on the Big Sunflower River and its tributaries will protect 195,000 acres against the design flood and an additional 395,000 acres will be benefited because of improved drainage conditions. Also, approximately 368,000 acres in the Yazoo Backwater Area will be protected against frequent flooding and substantial benefits will accrue to an additional 224,000 acres from improved drainage. Had there been no protection in 1958, the floods of April-June and September would have caused damages amounting to $22,821,000. Should these floods recur under present conditions, but with the flood control works assumed complete, damages amounting to $181,779,000 would be prevented. In addition, the four Yazoo Basin lakes are being used extensively for recreation. Visitor-day attendance increased from 2,857,000 in calendar year 1958 to 9,479,156 visitor days in FY 2003. Average annual benefits are as follows:

Annual Benefits	Amount
Flood Control	$113,791,000
Fish and Wildlife	7,142,000
Recreation	18,557,000
Area Redevelopment	1,234,000
Bank Stabilization Works	1,478,000
Total	$142,202,000

In 1991, the Office of Management and Budget directed the Corps undertake a reformulation of all unconstructed features of the Yazoo Basin Project. The reformulation study would evaluate alternative plans for (a) greater levels of flood protection for urban areas, (b) reduced levels of agricultural intensification and (c) reduced adverse impacts on the environment. The reformulation study was divided into four phases. The first and second phases were the Upper Steele Bayou Project and Upper Yazoo Projects. These studies were completed in December 1992 and December 1993, respectively, and construction is proceeding. Reformulation studies on the Yazoo Tributaries have been delayed pending advancement of construction on the upper Yazoo Projects. The Yazoo Backwater Reformulation study, or fourth phase, is still underway.

FISCAL YEAR 2005: The requested amount will be applied as follows:

Upper Yazoo Projects:	
Continue:	
Lands and Damages	$ 250,000
Channel Item 5B	680,000
Item 7 Structures	200,000
Complete:	
Channel Item 6A	720,000
Planning, Engineering and Design	1,500,000
Supervision and Administration	500,000
Subtotal	3,850,000
Big Sunflower, Etc., Including Steele Bayou:	
Continue:	
Channel Item 66A/B Swan Lake	1,300,000
Planning, Engineering and Design	200,000
Lands and Damages	500,000
Subtotal	2,000,000
TOTAL	$ 5,850,000

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the initial authorization and subsequent authorized modifications of the Yazoo Basin project including the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Will M. Whittington:		
Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	$ 238,000	$77,700
Subtotal Non-Federal Costs	$ 238,000	$77,700
Big Sunflower River, Etc., Including Steele Bayou:		
Provide 25 percent of lands allocated to fish and wildlife enhancement.	$ 43,000	
Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, and maintain and operate fish and wildlife facilities and perform minor maintenance on the project.	$ 450,000	$48,494
Provide lands, easements, rights-of-way, and borrow and excavated or dredged material disposal areas.	$ 30,000	
Subtotal Non-Federal Costs	$ 523,000	$48,494

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Main Stem:		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 11,000	
Subtotal Non-Federal Costs	$ 11,000	
Yazoo Backwater Including Muddy Bayou Control Structures:		
Pay 25 percent of the first costs allocated to fish and wildlife enhancement and pay 25 percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	$ 146,000	$ 30,547
Subtotal Non-Federal Costs	$ 146,000	$ 30,547
Rocky Bayou:		
Provide lands, easements, rights-of-way, and dredged material disposal areas.	$ 1,411,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$ 1,700,000	
Pay 8.4 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.	$ 1,617,000	$ 39,274
Subtotal Non-Federal Costs	$ 4,728,000	$ 39,274
Total Non-Federal Costs	$ 5,646,000	$ 196,015

STATUS OF LOCAL COOPERATION:

Flood Control:

Local cooperation is not required for the Yazoo Headwaters Feature.

Assurances to operate the Big Sunflower River Unit and perform minor maintenance have been accepted from the Yazoo-Mississippi Delta Levee District and the Board of Mississippi Levee Commissioners. Formal assurances for work in the Steele Bayou Basin were accepted 8 June 1972 without the requirement that local interests "construct or have constructed by others, the necessary associated interior drainage works."

For the Yazoo Backwater unit, assurances of local cooperation have been accepted from the Board of Mississippi Levee Commissioners and the Yazoo-Mississippi Delta Levee District. Supplemental assurances covering the requirements of local cooperation as provided for in the "Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970" (PL 91-646), were accepted 7 August 1972. The Board of Levee Commissioners for the Yazoo-Mississippi Delta, non-Federal sponsor for Rocky Bayou, and the Board of Levee Commissioners for the Mississippi Levee District, non-Federal sponsor for Yazoo Backwater, have been notified of the cost-sharing requirements of the Water Resources Development Act of 1986. The Board of Commissioners for the Mississippi Levee District indicated by letter dated 3 November 1988 they cannot agree to any form of cost sharing for the Yazoo Backwater Project. However, they later agreed to pay up to 5 percent toward the remaining construction cost and operating cost as per 16 July 1990 letter from Senator Thad Cochran to Senator J. Bennett Johnston, Chairman, Subcommittee on Energy and Water Development. The Water Resources Development Act of 1996, Section 202a(2), contained language (physical construction defined) which relieved the local sponsor from cost sharing the project based on redefinition of when physical construction began. Under the 1996 provision, the cost would be 100 percent Federal.

Recreation:

The State of Mississippi, which provided formal assurances in 1967 that it would operate and maintain Corps constructed recreation facilities at the Yazoo Basin lakes, notified the Vicksburg District in the early 1980's that it was unable to fully comply with the assurances and to continue the operation and maintenance function for some of the sites. Under the terms of an escape clause in the leases, the state was allowed to withdraw its operation and maintenance support at some sites.

Fish and Wildlife:

Local cooperation agreements will be obtained when planning is more advanced.

COMPARISON OF FEDERAL COST ESTIMATES: The current cost estimate of $1,942,279,000 is an increase of $35,717,000 from the latest estimate ($1,906,562,000) presented to Congress (FY 2004). This change includes the following items:

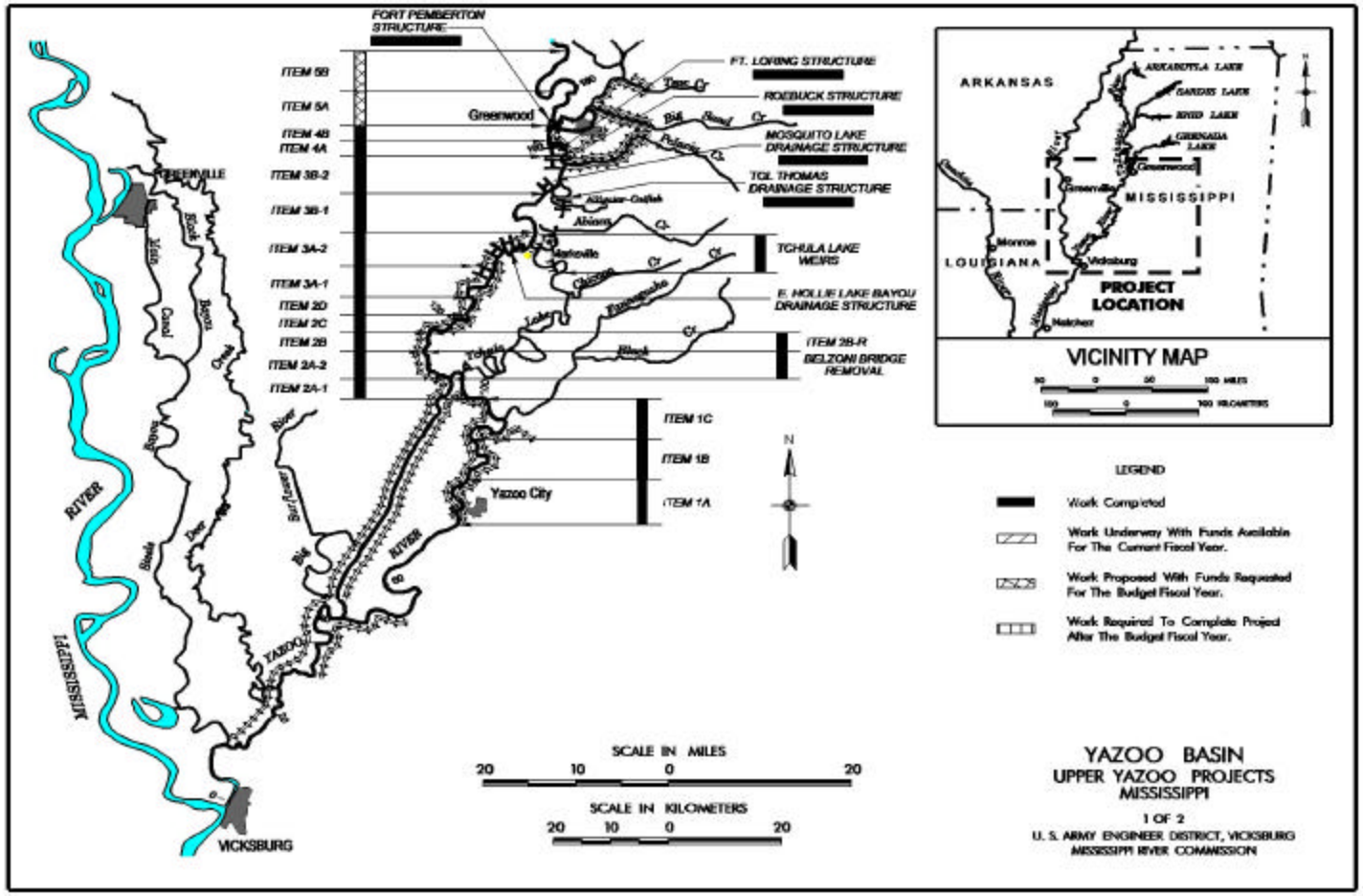
Item	Amount
Price Escalation on Construction Features	$19,326,000
Price Escalation on Real Estate Features	2,330,000
Authorized Modifications	14,061,000
Total	$35,717,000

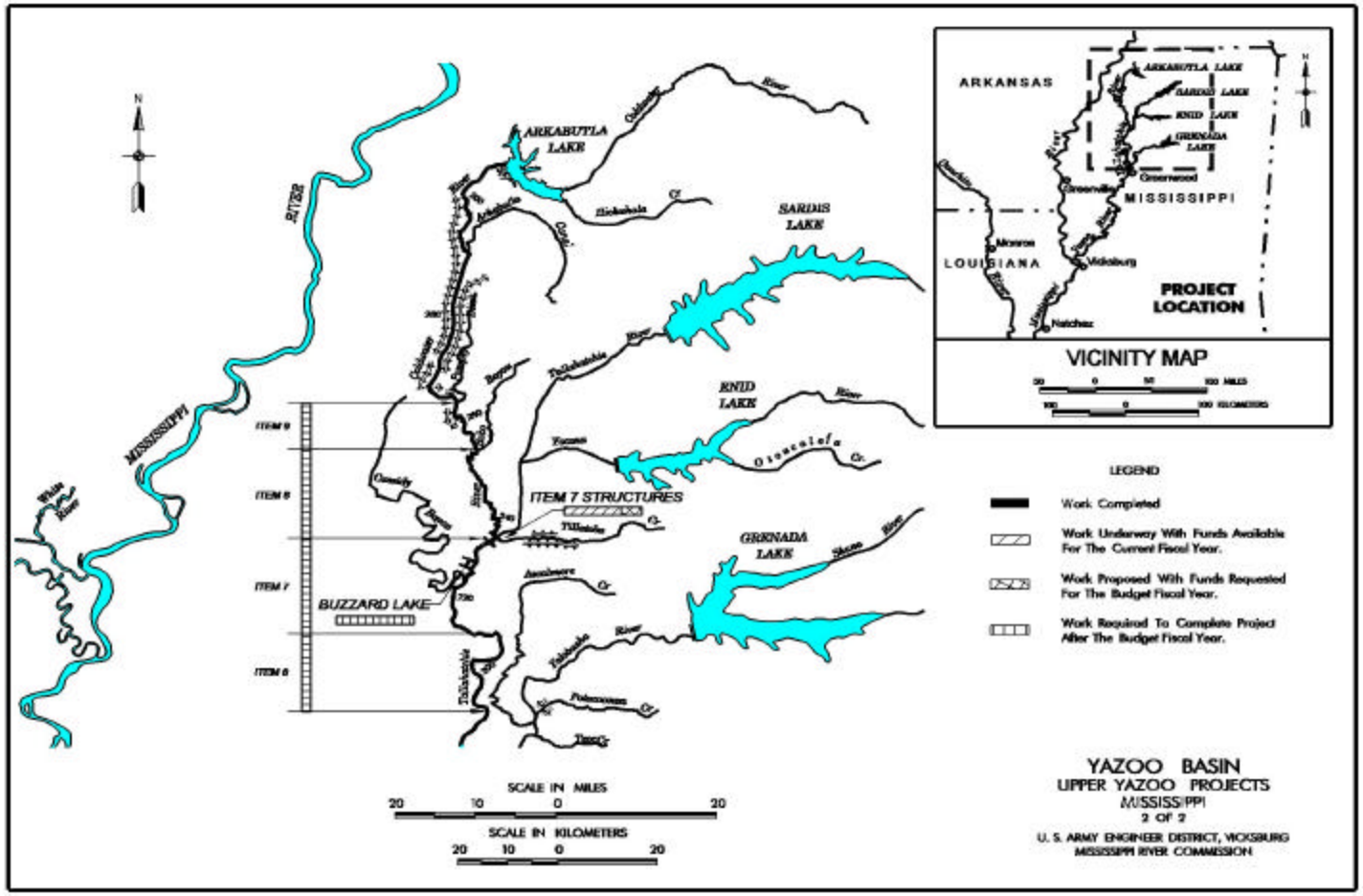
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Final Environmental Impact Statements have been filed with the Council on Environmental Quality or with the Environmental Protection Agency as follows:

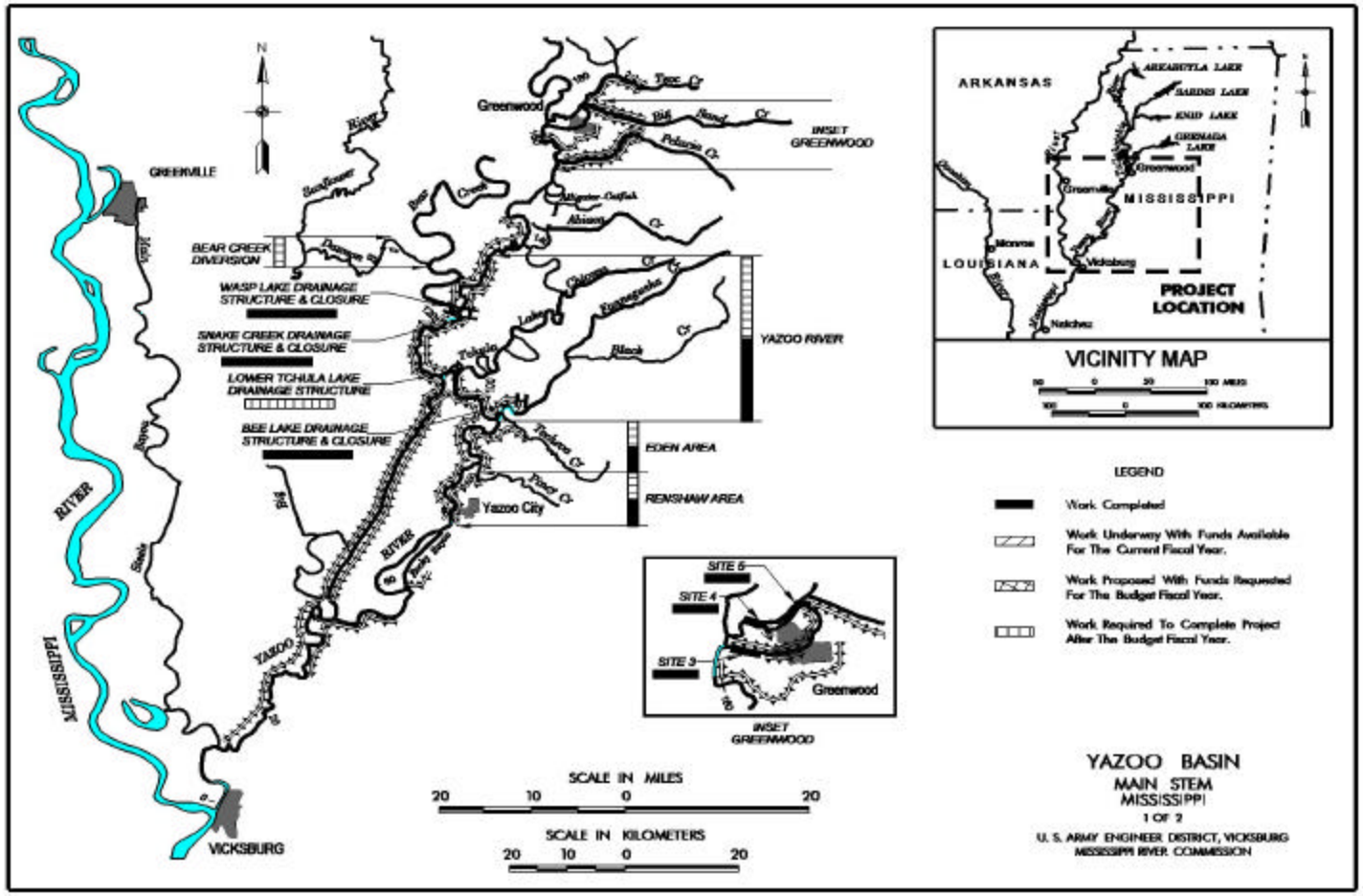
Project Unit	Date
Upper Yazoo Projects	Supplement No. 1 to FEIS, 25 Feb 1994
Main Stem	FEIS, 29 Dec 1975
Big Sunflower (Upper Steele Bayou)	Supplement No. 1 to FEIS, 26 Feb 1993
Yazoo Backwater	Draft Supplement No. 1 to FEIS, Sep 2000
Tributaries	FEIS, 16 Jan 1976 [1]
Delta Headwaters Project[2]	
Hickahala-Senatobia Creeks Watershed	FEIS, Jul 1992
Abiaca Creek Watershed	FEIS, Jul 1993
Coldwater River Watershed	FEIS, Apr 1996
Yalobusha River Watershed	FEIS, May 2002

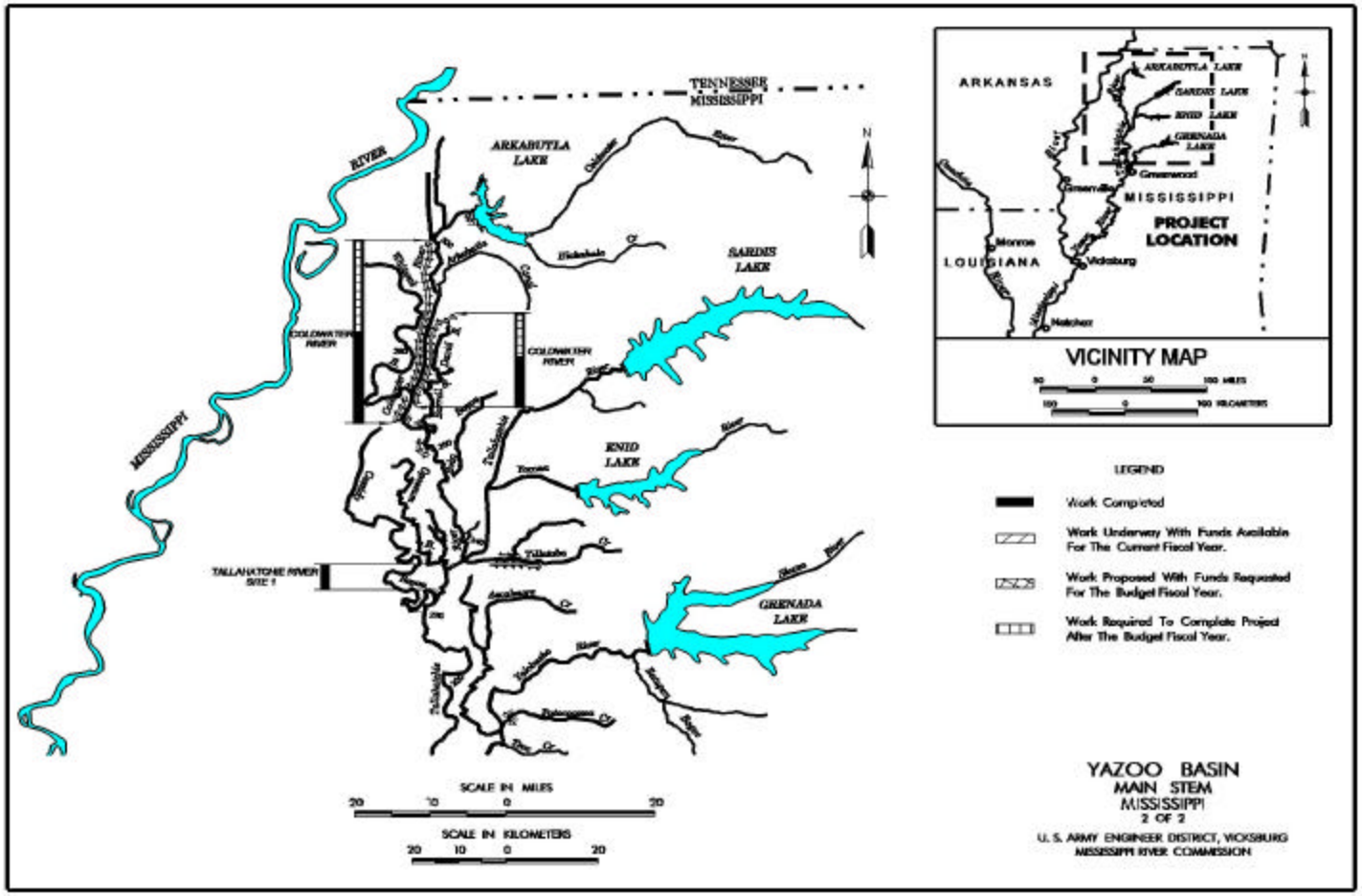
OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1936.

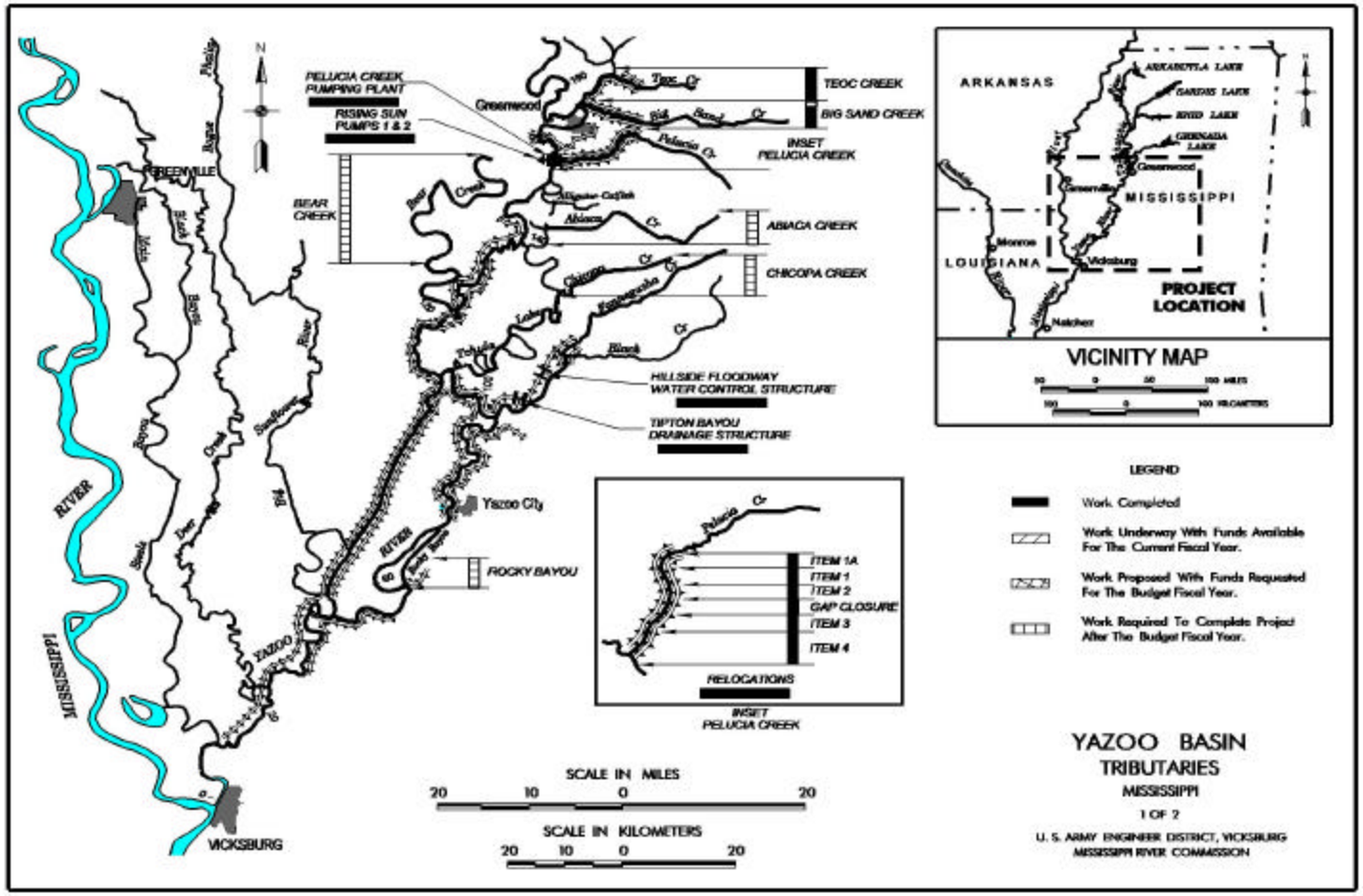
[1] A Supplemental EIS covering the Tributaries portion of the Yazoo Basin projects will be prepared subsequent to construction advancement of the Upper Yazoo Projects.
[2] General structural measures (e.g., bank stabilization and grade control structures) being employed in the overall DHP have been covered by environmental assessments.

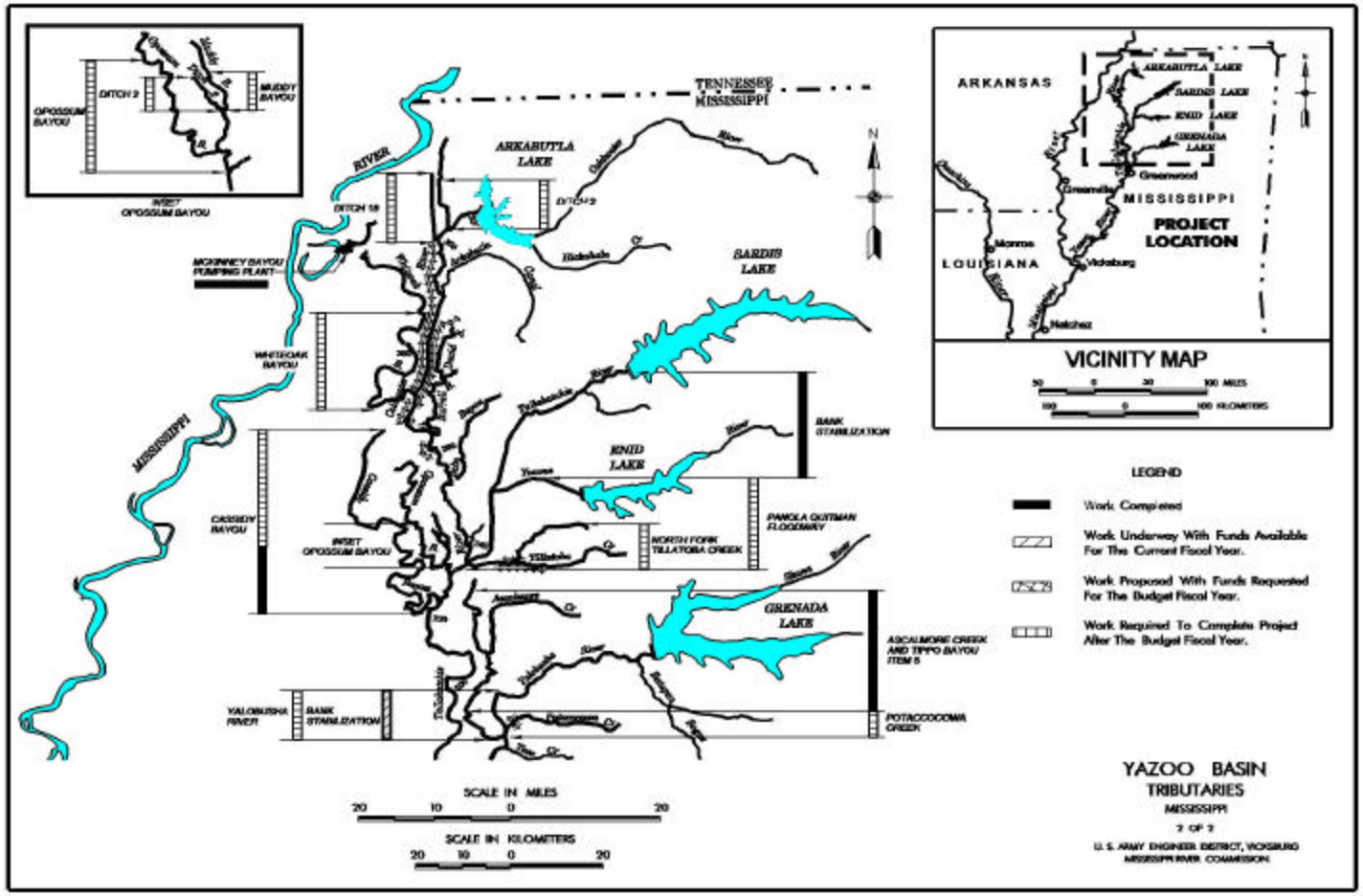

FORT PEMBERTON STRUCTURE
ITEM 5B
ITEM 5A
ITEM 4B
ITEM 4A
ITEM 3B-2
ITEM 3B-1
ITEM 3A-2
ITEM 3A-1
ITEM 2D
ITEM 2C
ITEM 2B
ITEM 2A-2
ITEM 2A-1
ITEM 1C
ITEM 1B
ITEM 1A
FT. LORING STRUCTURE
ROEBUCK STRUCTURE
MOSQUITO LAKE DRAINAGE STRUCTURE
TGL THOMAS DRAINAGE STRUCTURE
TCHULA LAKE WEIRS
E. HOLLIE LAKE BAYOU DRAINAGE STRUCTURE
ITEM 2B-R
BELZONI BRIDGE REMOVAL
Greenwood
GREENVILLE
Yazoo City
VICKSBURG
MISSISSIPPI RIVER
YAZOO RIVER
ARKANSAS
MISSISSIPPI
LOUISIANA
Monroe
Vicksburg
Natchez
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
20 10 0 20
SCALE IN KILOMETERS
20 10 0 20
YAZOO BASIN
UPPER YAZOO PROJECTS
MISSISSIPPI
1 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION

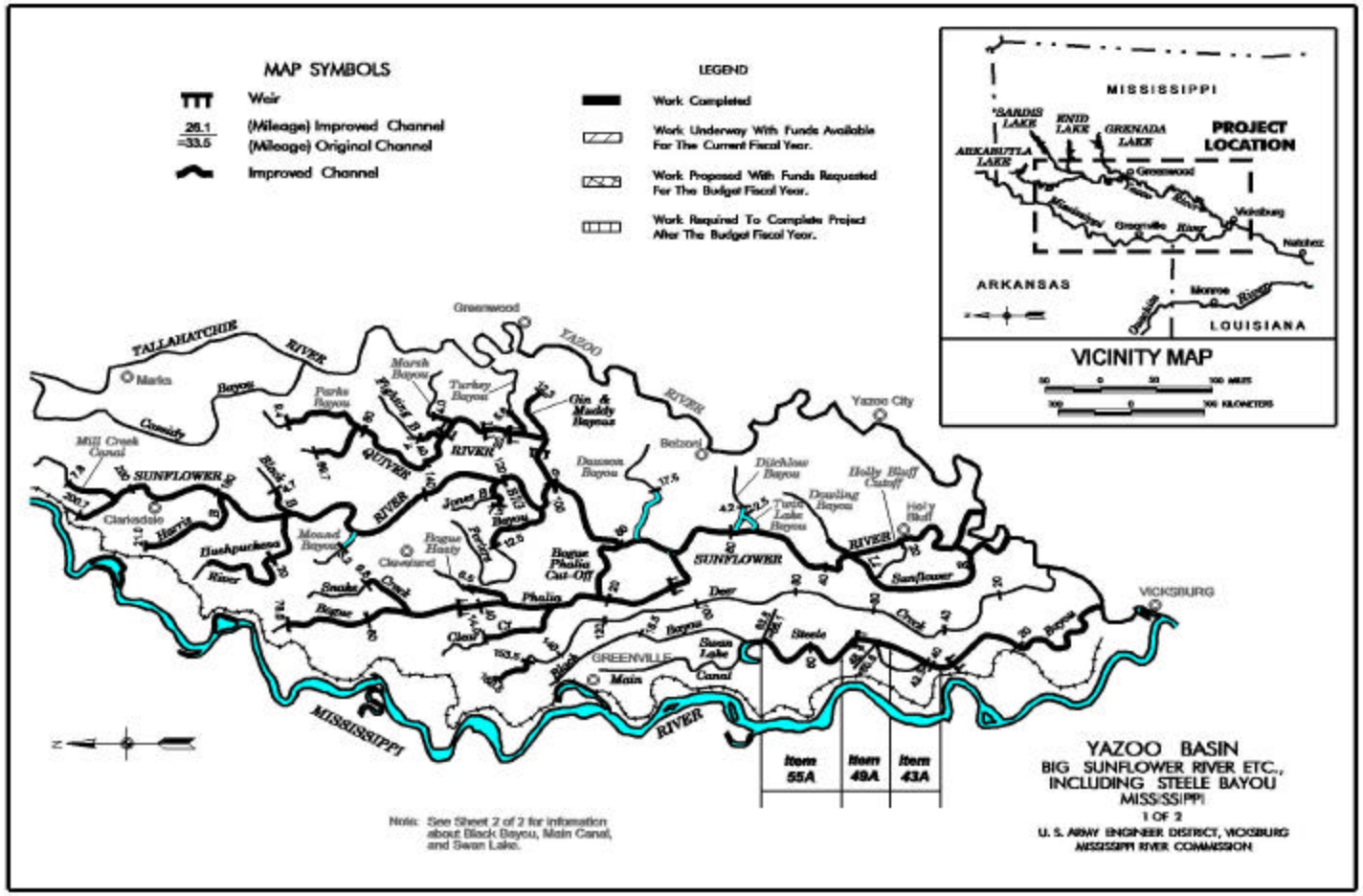

ARKABUTLA LAKE
SARDIS LAKE
ENID LAKE
GRENADA LAKE
BUZZARD LAKE
ITEM 7 STRUCTURES
ITEM 9
ITEM 8
ITEM 7
ITEM 6
MISSISSIPPI RIVER
ARKANSAS
MISSISSIPPI
LOUISIANA
Greenwood
Vicksburg
Natchez
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
SCALE IN MILES
SCALE IN KILOMETERS
YAZOO BASIN
UPPER YAZOO PROJECTS
MISSISSIPPI
2 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION

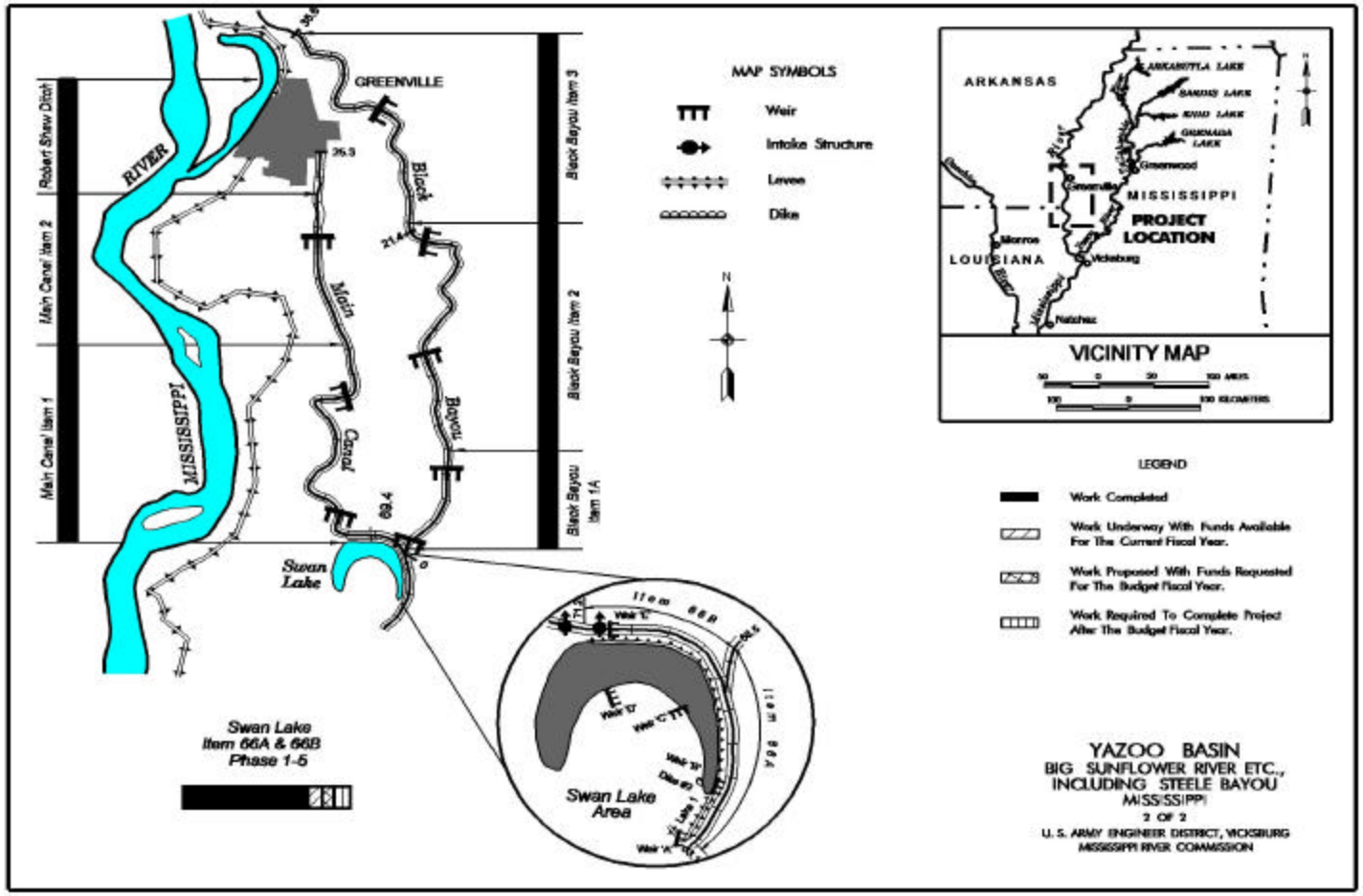

GREENVILLE
Greenwood
INSET GREENWOOD
BEAR CREEK DIVERSION
WASP LAKE DRAINAGE STRUCTURE & CLOSURE
SNAKE CREEK DRAINAGE STRUCTURE & CLOSURE
LOWER TCHULA LAKE DRAINAGE STRUCTURE
BEE LAKE DRAINAGE STRUCTURE & CLOSURE
YAZOO RIVER
EDEN AREA
RENSHAW AREA
Yazoo City
MISSISSIPPI RIVER
YAZOO
VICKSBURG
SITE 5
SITE 4
SITE 3
Greenwood
INSET GREENWOOD
SCALE IN MILES
20 10 0 20
SCALE IN KILOMETERS
20 10 0 20
ARKANSAS
MISSISSIPPI
LOUISIANA
Greenwood
Vicksburg
Natchez
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
YAZOO BASIN
MAIN STEM
MISSISSIPPI
1 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION

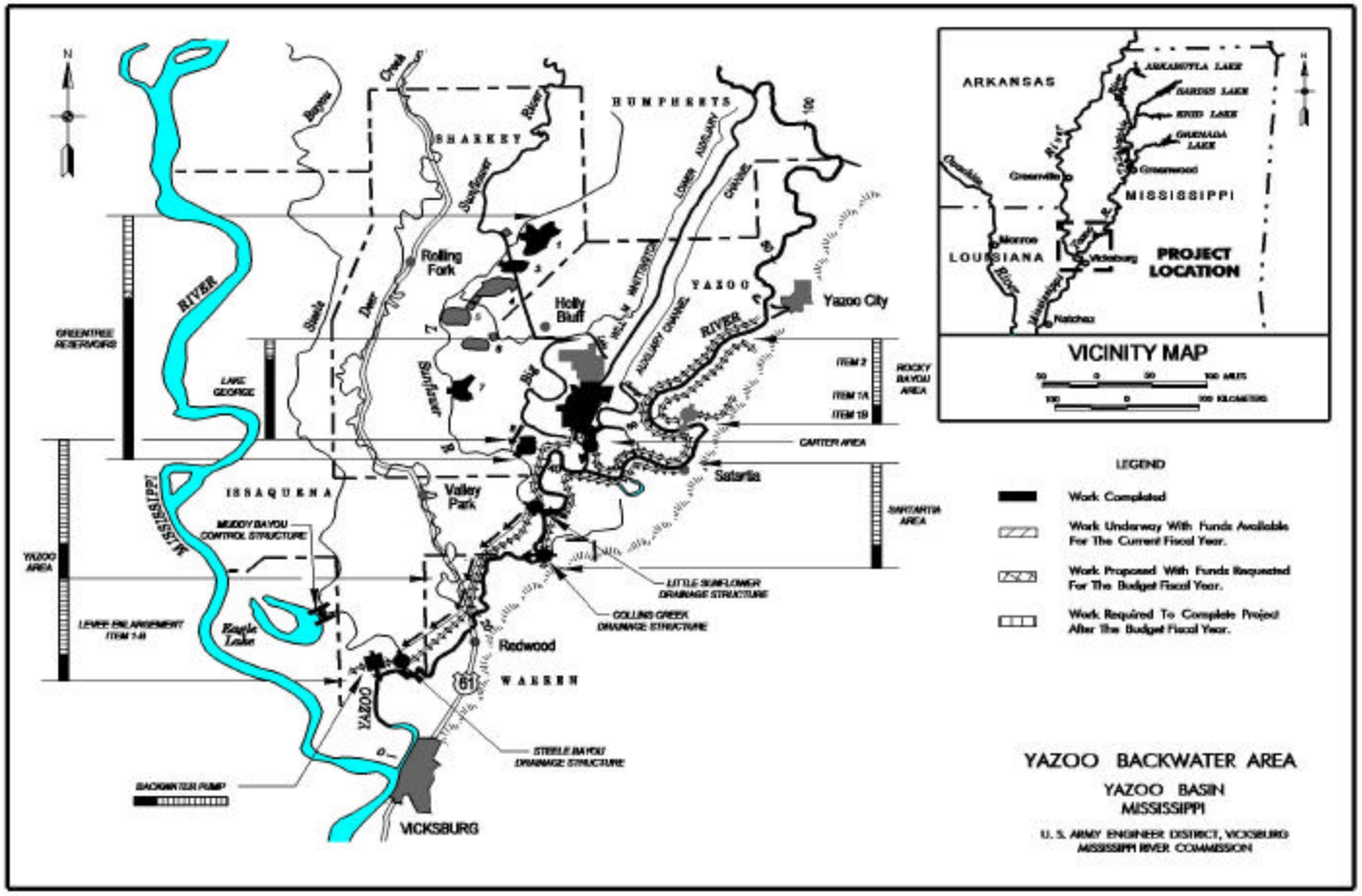

TENNESSEE
MISSISSIPPI
ARKABUTLA LAKE
SARDIS LAKE
ENID LAKE
GRENADA LAKE
MISSISSIPPI RIVER
COLDWATER RIVER
TALLAHATCHIE RIVER SITE 1
SCALE IN MILES
SCALE IN KILOMETERS
ARKANSAS
MISSISSIPPI
LOUISIANA
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
YAZOO BASIN
MAIN STEM
MISSISSIPPI
2 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION

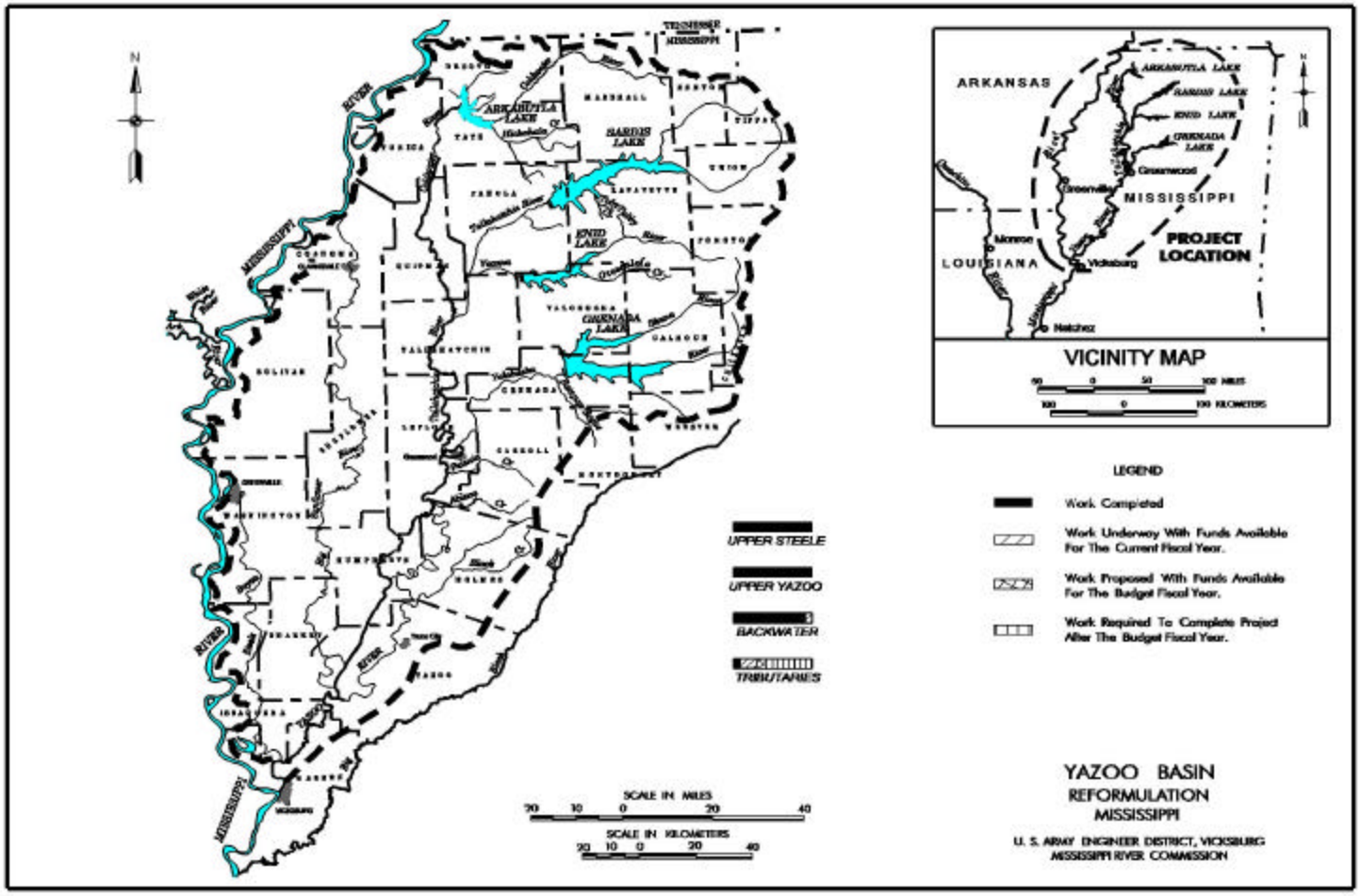

PELUCIA CREEK PUMPING PLANT
RISING SUN PUMPS 1 & 2
BEAR CREEK
TEOC CREEK
BIG SAND CREEK
INSET PELUCIA CREEK
ABIACA CREEK
CHICOPA CREEK
HILLSIDE FLOODWAY WATER CONTROL STRUCTURE
TIPTON BAYOU DRAINAGE STRUCTURE
ROCKY BAYOU
Greenwood
GREENVILLE
Yazoo City
VICKSBURG
MISSISSIPPI RIVER
YAZOO
ITEM 1A
ITEM 1
ITEM 2
GAP CLOSURE
ITEM 3
ITEM 4
RELOCATIONS
INSET PELUCIA CREEK
SCALE IN MILES
20 10 0 20
SCALE IN KILOMETERS
20 10 0 20
ARKANSAS
MISSISSIPPI
LOUISIANA
Monroe
Vicksburg
Natchez
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
YAZOO BASIN
TRIBUTARIES
MISSISSIPPI
1 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION


TENNESSEE
MISSISSIPPI
ARKABUTLA LAKE
SARDIS LAKE
ENID LAKE
GRENADA LAKE
MISSISSIPPI RIVER
MORINEY BAYOU PUMPING PLANT
WHITEOAK BAYOU
CASSIDY BAYOU
INSET OPOSSUM BAYOU
DITCH 2
DITCH 18
MUDDY BAYOU
YALOBUSHA RIVER
BANK STABILIZATION
PANOLA QUITMAN FLOODWAY
NORTH FORK TILLATOBA CREEK
ASCALMORE CREEK AND TIPPO BAYOU ITEM 5
POTACOCOWA CREEK
SCALE IN MILES
SCALE IN KILOMETERS
ARKANSAS
LOUISIANA
MISSISSIPPI
PROJECT LOCATION
Greenwood
Greenville
Monroe
Vicksburg
Natchez
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
YAZOO BASIN
TRIBUTARIES
MISSISSIPPI
2 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION


MAP SYMBOLS
Weir
26.1
33.5
(Mileage) Improved Channel
(Mileage) Original Channel
Improved Channel
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
MISSISSIPPI
SARDIS LAKE
ENID LAKE
GRENADA LAKE
ARKABUTLA LAKE
PROJECT LOCATION
Greenwood
Vicksburg
Natchez
ARKANSAS
Monroe
LOUISIANA
VICINITY MAP
TALLAHATCHIE RIVER
YAZOO RIVER
Greenwood
Marks
Yazoo City
Belzoni
Clarksdale
SUNFLOWER RIVER
QUITMAN RIVER
Cleveland
GREENVILLE
VICKSBURG
MISSISSIPPI RIVER
Item 55A
Item 49A
Item 43A
Note: See Sheet 2 of 2 for information about Black Bayou, Main Canal, and Swan Lake.
YAZOO BASIN
BIG SUNFLOWER RIVER ETC., INCLUDING STEELE BAYOU
MISSISSIPPI
1 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION


GREENVILLE
RIVER
MISSISSIPPI
Robert Shaw Ditch
Main Canal Item 2
Main Canal Item 1
Black Bayou Item 3
Black Bayou Item 2
Black Bayou Item 1A
Main
Canal
Black
Bayou
Swan Lake
Swan Lake Area
Swan Lake
Item 66A & 66B
Phase 1-5
MAP SYMBOLS
Weir
Intake Structure
Levee
Dike
ARKANSAS
LOUISIANA
MISSISSIPPI
PROJECT LOCATION
Greenwood
Vicksburg
Natchez
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
YAZOO BASIN
BIG SUNFLOWER RIVER ETC., INCLUDING STEELE BAYOU
MISSISSIPPI
2 OF 2
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION


YAZOO BACKWATER AREA
YAZOO BASIN
MISSISSIPPI
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Requested For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
VICINITY MAP
ARKANSAS
LOUISIANA
MISSISSIPPI
PROJECT LOCATION
Greenville
Greenwood
Monroe
Vicksburg
Natchez
SHARKEY
HUMPHREYS
YAZOO
ISSAQUENA
WARREN
Rolling Fork
Holly Bluff
Yazoo City
Valley Park
Satartia
Redwood
VICKSBURG
Eagle Lake
RIVER
MISSISSIPPI
YAZOO
GREENTREE RESERVOIR
LAKE GEORGE
YAZOO AREA
LEVEE ENLARGEMENT ITEM 1-B
MUDDY BAYOU CONTROL STRUCTURE
BACKWATER PUMP
STEELE BAYOU DRAINAGE STRUCTURE
COLLINS CREEK DRAINAGE STRUCTURE
LITTLE SUNFLOWER DRAINAGE STRUCTURE
CARTER AREA
ROCKY BAYOU AREA
SWITARTHA AREA
ITEM 2
ITEM 1A
ITEM 1B
61


ARKANSAS
MISSISSIPPI
LOUISIANA
PROJECT LOCATION
VICINITY MAP
LEGEND
Work Completed
Work Underway With Funds Available For The Current Fiscal Year.
Work Proposed With Funds Available For The Budget Fiscal Year.
Work Required To Complete Project After The Budget Fiscal Year.
UPPER STEELE
UPPER YAZOO
BACKWATER
TRIBUTARIES
SCALE IN MILES
SCALE IN KILOMETERS
YAZOO BASIN
REFORMULATION
MISSISSIPPI
U. S. ARMY ENGINEER DISTRICT, VICKSBURG
MISSISSIPPI RIVER COMMISSION

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO, and TN – Construction

PROJECT: St. John's Bayou – New Madrid Floodway, Missouri (Continuing)

LOCATION: The project area is located in southeast Missouri in New Madrid, Scott, and Mississippi Counties.

DESCRIPTION: The authorized project consists of 137 miles of rural channel improvement, 6.7 miles of urban channel improvement, a 1,000 cfs pumping station, and a 1,500 cfs pumping station, including mitigation features, and would be constructed in three phases. Work for the First Phase of the project is programmed. This phase includes the two pumping stations, 27.6 miles of channel improvements and appropriate mitigation features. The remaining St. John's Bayou work consists of 91 miles of channel improvements, including the 6.7 miles of urban channel. The remaining New Madrid floodway work consists of 25 miles of rural channel improvements. Both the St. Johns Bayou and New Madrid Floodway remaining work are unprogrammed due to the lack of local sponsor financing capability.

AUTHORIZATION: Water Resources Development Acts of 1986 and 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.5 to 1 at 7-3/8 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7-3/8 percent.

INITIAL BENEFIT-COST RATIO: 1.2 at 7-3/8 percent

BASIS OF BENEFIT-COST RATIO: Benefits are from the June 2002 Final Revised Supplemental Environmental Impact Statement at 1996 price levels based on total project. The benefit-cost ratio does not include costs associated with the 1,500-foot gap closure and box culvert authorized as a component of the Mississippi River Levee System by the Flood Control Act of 1954.

SUMMARIZED FINANCIAL DATA			
Estimated Federal Cost			$67,850,000
Programmed Construction		$40,050,000	
Unprogrammed Construction		27,800,000	
Estimated Non-Federal Cost			$44,750,000
Programmed Construction		$16,950,000	
Cash Contributions	$ 2,850,000		
Other Costs	14,100,000		
Estimated Non-Federal Cost			
Unprogrammed Construction		$27,800,000	
Cash Contributions	$ 2,780,000		
Other Costs	25,020,000		

STATUS (1 January 2004)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
First Phase	3	TBD
St. Johns Phase	0	Indefinite
New Madrid Phase	0	Indefinite
Entire Project	0	Indefinite

PHYSICAL DATA

Lands and Damages:	
Flood Control	6,467 acres
F&WL Mitigation	1,317 acres (8,375 including the MRL Project Item)
Restrictive Easements	2,450 acres
Seasonal Sump Pond Easements	3,550 acres (6,400 including the MRL Project item)

SUMMARIZED FINANCIAL DATA (cont.)		ACCUM PCT OF EST FED COST
Total Estimated Programmed Construction Cost	$ 57,000,000	
Total Estimated Unprogrammed Construction Cost	55,600,000	
Total Estimated Project Cost	112,600,000	
Allocations to 30 September 2003	$ 9,313,000	
Conference Allowance for FY 2004	4,000,000	
Allocation for FY 2004	1,780,000 1/	
Allocations through FY 2004	11,093,000	16
Allocation Requested for FY 2005	$ 8,300,000	29
Programmed Balance to Complete After FY 2005	20,657,000	
Unprogrammed Balance to Complete After 2005	27,800,000	

PHYSICAL DATA (cont.)	
Relocations:	
Roads	38 bridges/1 road
Railroads	3 bridges
Utilities	103 facilities
Channels:	
Enlargement	27 miles Phase 1 (143.6 authorized)
Pumping Plants:	
1000 cfs	
1500 cfs	

1/ Reflects $351,000 reduction assigned as savings and slippage, and $22,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004, and $1,847,000 reprogrammed from the project.

JUSTIFICATION: The project area is subject to flooding where the existing channels overflow. The lower end of the New Madrid Floodway is flooded by backwater from the Mississippi River. Construction of the authorized levee closure (Mississippi River Levee project item) in the lower end of the floodway would eliminate Mississippi River backwater; however, absent other features, local runoff would continue to build up behind the levee when the gate is closed during high Mississippi River stages. The project, therefore, includes two pumping stations and attendant channel improvements to help alleviate the flood problems. Total average annual benefits of the authorized project are as follows (1996 price levels):

Annual Benefits	Amount
Urban	$ 2,491,000
Agricultural Inundation Reduction	6,277,000
Agricultural Intensification	2,363,000
Advanced Replacements	232,000
Betterments	13,000
Wildlife and Aquatic Gains	159,000
Total	$11,535,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Real Estate	$ 69,000
Continue:	
Channel Item #3-Lower St. Johns Bayou Improvement	$1,820,000
Pump Station Item #2-New Madrid Pump Station	$5,294,000
Planning, Engineering and Design	$ 350,000
Supervision and Administration	$ 767,000
Total	$ 8,300,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Provide lands, easements, right-of-way, and borrow and excavated or dredged material disposal areas.	$19,912,000	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	$19,208,000	
Pay 5 percent of the costs allocated to flood control in cash to bring the total non-federal share of flood control cost to 25 percent and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	$ 5,630,000	$793,650
Total Non-Federal Costs	$44,750,000	$793,650

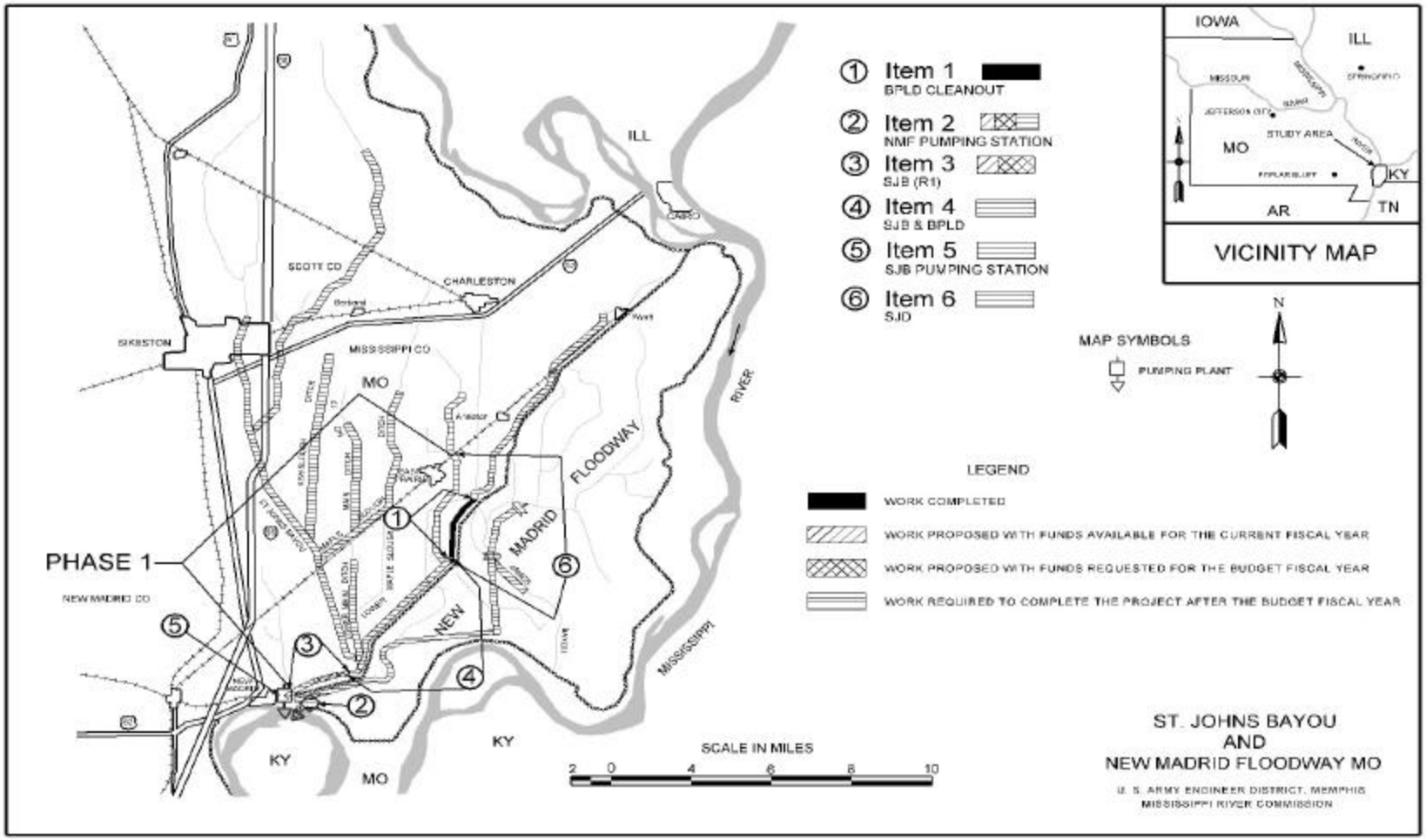
STATUS OF LOCAL COOPERATION: The St. John Levee and Drainage District is the cost-sharing local sponsor for the First Phase of the St. Johns Bayou and New Madrid Floodway Project. A Limited Reevaluation Report (LRR) to separate the engineering, economic, and environmental data for the First Phase from the overall project was approved 7 August 1997. The Project Cooperation Agreement (PCA) was signed 18 August 1997 and the first item of construction was completed in October 1997. An amended PCA reflecting change developed during formulation of the Revised Supplemental Environmental Impact statement was signed on 10 October 2003. East Prairie has received Federal recognition for its Enterprise Community Plan, thus making the Community eligible to receive Federal grant funds. USDA agreed to provide those funds necessary to reduce the local share of project costs to five percent.

COMPARISION OF FEDERAL COST ESIMATES: The current Federal cost estimate of $67,850,000 is an increase of $3,250,000 from the latest estimate ($64,60000) presented to Congress (Fiscal Year 2003). This change includes the following:

Item	Amount
Price Escalation on Construction Features	$3,278,000
Post Contract Award and Other Estimating Adjustments	($28,000)
Price Escalation on Real Estate	
Total	$3,250,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Impact Statement (EIS) for the St. Johns Bayou and New Madrid Floodway project was filed with the Council on Environmental Quality in June 1974, and a Supplement to the EIS was filed with the U.S. Environmental Protection Agency (EPA) in July 1982. The EIS and Supplement to the EIS identified mitigation related to the fish, wildlife, and other environmental losses. Project changes resulting from Phase II General Design Memorandum (GDM) studies were evaluated in 1987. Environmental analysis conducted in conjunction with the preparation of the Phase II GDM reflected no substantive change in environmental impacts, and concluded that mitigation approved in prior reports would offset project losses. Project construction was initiated in FY 1997 with 4.3 miles of vegetative clearing along the Setback Levee Ditch. This work was covered by an Environmental Assessment/FONSI. A Supplemental EIS was developed, reviewed by the public, and filed with the EPA on 24 August 2000. Due to concerns by the EPA and Fish and Wildlife Service, ASA(CW) directed the Corps to revise the Supplemental EIS to include an analysis of additional closure locations for the Mississippi River Levees feature portion of the project and to provide additional clarification to the wetland analysis. The Revised Supplemental Environmental Impact Statement was finalized in June/July 2002. Water Quality Certification was received on 9 June 2003. The NEPA Record of Decision was signed for the remaining items in Phase 1 on 18 August 2003.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1982. Funds to initiate construction were appropriated in FY 1997. Local interests support implementation of the First Phase portion of the St. Johns Bayou and New Madrid Floodway project to reduce the risk of flooding.


① Item 1
BPLD CLEANOUT
② Item 2
NMF PUMPING STATION
③ Item 3
SJB (R1)
④ Item 4
SJB & BPLD
⑤ Item 5
SJB PUMPING STATION
⑥ Item 6
SJD
IOWA
ILL
MO
KY
AR
TN
STUDY AREA
VICINITY MAP
MAP SYMBOLS
PUMPING PLANT
N
LEGEND
WORK COMPLETED
WORK PROPOSED WITH FUNDS AVAILABLE FOR THE CURRENT FISCAL YEAR
WORK PROPOSED WITH FUNDS REQUESTED FOR THE BUDGET FISCAL YEAR
WORK REQUIRED TO COMPLETE THE PROJECT AFTER THE BUDGET FISCAL YEAR
PHASE 1
NEW MADRID CO
SCOTT CO
CHARLESTON
SIKESTON
MISSISSIPPI CO
FLOODWAY
NEW MADRID
MISSISSIPPI
RIVER
SCALE IN MILES
2 0 4 6 8 10
ST. JOHNS BAYOU
AND
NEW MADRID FLOODWAY MO
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN - Construction

PROJECT: Nonconnah Creek, Tennessee and Mississippi (Continuing)

LOCATION: The Nonconnah Creek Basin is located in portions of Shelby and Fayette Counties in southwest Tennessee and extends into DeSoto and Marshall Counties in northwest Mississippi. Approximately half of the City of Memphis, Tennessee, is located within the drainage area.

DESCRIPTION: There are five elements to this project. The Flood Control Element consists of 7.7 miles of channel enlargement and 10.5 miles of channel clearing. The Environmental Element consists of 0.8 mile of nature trails and a 33-acre nature area. The Recreational Element consists of 8.8 miles of hiking/biking trails. The Flood Control Extension will extend the area protected by the flood control element upstream approximately 5 miles to Reynolds Road. The Recreation Extension would extend this element from 8.8 miles to 27 miles of hiking/biking trails. Both the extension elements maybe carried out if the Secretary determines that they are technically sound, environmentally acceptable, and economically justified. A reevaluation of these extensions is being performed to determine their feasibility.

AUTHORIZATION: Section 401 of the Water Resources Development Act of 1986 and Section 541 of the Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 7.5 to 1 at 8-7/8 percent (Flood Control Element only).

TOTAL BENEFIT-COST RATIO: 0.94 to 1 at 8-7/8 percent

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 8-7/8 percent (FY 1990).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in December 1990 at 1988 price levels.

SUMMARIZED FINANCIAL DATA				STATUS (1 January 2004)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost			$27,550,000	Flood Control Element	71	TBD
Programmed Construction		27,550,000		Environmental Element	0	TBD
Unprogrammed Construction		0		Recreation Element	0	TBD
				Flood Control Extension	0	TBD
Estimated Non-Federal Cost			$10,710,000	Recreation Extension	0	TBD
Programmed Construction		10,710,000		Entire Project	65	TBD
Cash Contributions	4,998,000					
Other Costs	5,712,000					
Estimated Non-Federal Cost						
Unprogrammed Construction		0				
Cash contributions	0					
Other Costs	0					

SUMMARIZED FINANCIAL DATA (CONT)			ACCUM PCT OF EST FED COST
Total Estimated Programmed Construction Cost	38,260,000		
Total Estimated Unprogrammed Construction Cost	0		
Total Estimated Project Cost	$38,260,000		
Allocations to 30 September 2003	$16,975,000		
Conference Allowance for FY 2004	3,100,000		
Allocation for FY 2004	2,728,000	1/	
Allocations through FY 2004	19,703,000		72
Allocation Requested for FY 2005	2,153,000		79
Programmed Balance to Complete After FY 2005	5,694,000		
Unprogrammed Balance to Complete After FY 2005	0		

PHYSICAL DATA

Lands and Damages:
- Flood Control, 600 acres
- F&WL Enhancement, 33 acres

Relocations:
- Roads, 1 bridge
- Utilities, 36 facilities

Channels:
- Enlargement, 7.7 miles
- Vegetation Clearing, 15.5 miles

Recreation:
- Bike/Hike Trails, 27 miles
- Nature Trails, 0.8 miles

1/ Reflects $280,000 reduction assigned as savings and slippage, and $18,000 rescinded in accordance with pending passage of the Consolidated Appropriations Act, 2004, and $84,000 reprogrammed from the project.

JUSTIFICATION: Flood protection is needed for 7,400 homes, businesses, and public buildings on 12,000 acres of urban and urbanizing lands located within the Nonconnah Creek flood plain inundated by the Standard Project Flood. The present value of these properties subject to flood damage is equal to $1,851,372 (2002 price levels). Major floods occurred in the basin on 21 November 1934, when 10.48 inches of rain fell in 24 hours, and on 9 May 1958, when 4.76 inches of rain fell in approximately eight hours. The most recent significant flood occurred on 3 December 1978, when 4.9 inches were recorded at the Memphis International Airport. The 1978 storm appears to be between the 5-year and 10-year frequency events. Under present day conditions, the 1934 and 1958 flood levels would cause considerably higher damages due to increased urbanization. When completed, the Nonconnah Creek project will prevent approximately $522,441,000 (2002 price levels) in flood damages during the Standard Project Flood. Feasibility level investigations being conducted indicate that a flood control element is feasible for the extension. Remaining average annual benefits (1987 price levels) are as follows:

Annual Benefits	Amount
Flood Damage Prevention	$ 1,923,000
Other Flood Control Benefits	203,000
Extensions	TBD
Total	$ 2,126,000

FISCAL YEAR 2005: The requested amount will be applied as follows:

Continue:	
Item 2, Phase 1, Channel Improvement	$ 1,440,000
Lands and Damages	5,000
Planning, Engineering and Design	603,000
Supervision and Administration	105,000
Total	$ 2,153,000

NON-FEDERAL COST: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Acts of 1986 and 1996, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Flood Control Element		
Provide lands, easements, rights-of-way, and dredged material disposal areas	$2,372,000	
Modify or relocate buildings utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project	2,881,000	
Pay not less than 5 percent of the cost allocated to flood control to bring the total non-Federal share to 25 percent; and bear all costs of operation, maintenance repair, rehabilitation, and replacement of flood control facilities.	2,747,000	$ 14,600
Environmental Element		
Provide lands, easements, rights-of-way, and dredged material disposal areas	145,000	

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation and Replacement Costs
Recreation Element		
Provide lands, easements, rights-of-way, and dredged material disposal areas	$ 314,000	
Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, rehabilitation and replacement of recreation facilities.	1,976,000	$18,600
Flood Control and Recreation Extensions		
Pay 25 percent of costs associated with the reevaluation, to be adjusted to project cost-sharing during construction.	275,000	---
Total Non-Federal Costs	$10,710,000	$33,200

STATUS OF LOCAL COOPERATION: The Local Cooperation Agreement for the flood control feature was executed on 23 July 1990 with the City of Memphis, Tennessee, serving as the local sponsor. The City of Memphis has reviewed a draft amendment to the cost-sharing agreement to add the authorized recreation and environmental enhancement features and is ready to execute an agreement. The city has provided letters stating financial and legal capabilities to sponsor these features. The city has also agreed to make all required payments concurrently with project construction. In addition, a cost-sharing agreement to perform the reevaluation of the flood control and the recreation extensions was signed on 16 January 2002 with officials from Shelby County, Tennessee, the local sponsors for the extensions.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of $27,550,000 is an increase of $5,450,000 from the latest estimate ($22,100,000) presented to Congress (FY 2004). This change includes the following items:

Item	Amount
Price Escalation on Construction Features	$ 363,000
Post Contract Award and Other Estimating Adjustments	5,067,000
Price Escalation on Real Estate	20,000
Total	$ 5,450,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final supplemental environmental impact statement was filed with the Environmental Protection Agency on 22 July 1982. Environmental assessments were made during Phase II General Design Memorandum studies, and changes were not of significant magnitude to warrant modifying the project impact statement.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in Fiscal Year 1986, and funds to initiate construction were appropriated in Fiscal Year 1990. Completion of the reevaluation of the flood control and recreation extensions is to be determined.

Flood Control Element

SUMMARIZED FINANCIAL DATA:

Estimated Federal Cost		$ 24,000,000
Estimated Non-Federal Cost		8,000,000
Cash Contributions	$ 2,747,000	
Others Costs	5,253,000	
Total Estimated Project Cost		$ 32,000,000

REMAINING BENEFIT-REMAINING COST RATIO: 4.8 to 1 at 8-7/8 percent

TOTAL BENEFIT-COST RATIO: 0.94 to 1 at 8-7/8 percent

Environmental Element

SUMMARIZED FINANCIAL DATA :

Estimated Federal Cost		$ 435,000
Estimated Non-Federal Cost		145,000
Cash Contributions	$ 0	
Others Costs	145,000	
Total Estimated Project Cost		$ 580,000

Recreation Element

SUMMARIZED FINANCIAL DATA :

Estimated Federal Cost		$ 2,290,000
Estimated Non-Federal Cost		2,290,000
Cash Contributions	$ 314,000	
Others Costs	1,976,000	
Total Estimated Project Cost		$ 4,580,000

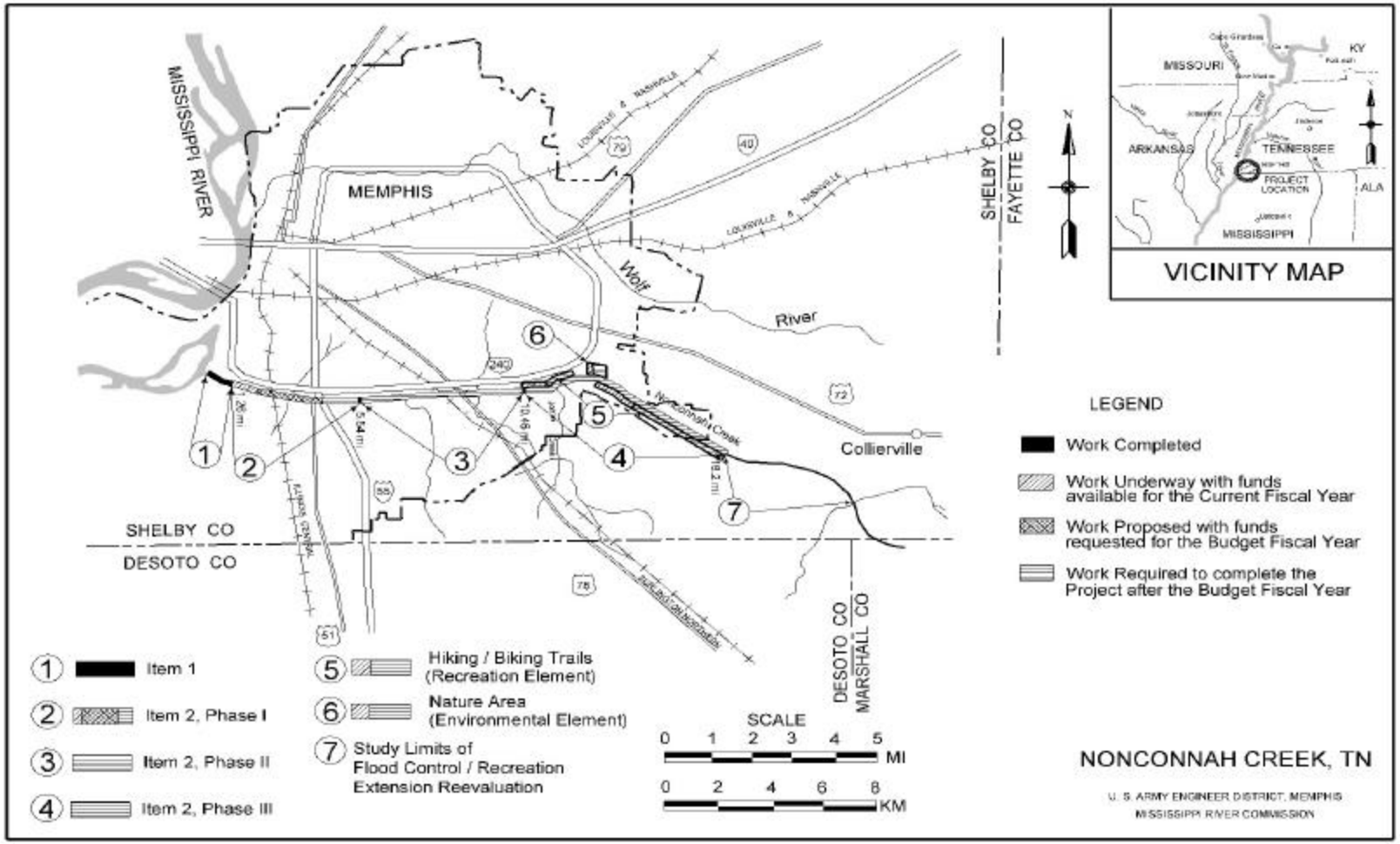
Flood Control and Recreation Extensions

SUMMARIZED FINANCIAL DATA :

Estimated Federal Cost		$ 825,000
Estimated Non-Federal Cost		275,000
Cash Contributions	$ 275,000	
Others Costs	0	
Total Estimated Project Cost		$ 1,100,000

REMAINING BENEFIT-REMAINING COST RATIO: TBD

TOTAL BENEFIT-COST RATIO: TBD


MISSISSIPPI RIVER
MEMPHIS
Wolf
River
Nonconnah Creek
Collierville
SHELBY CO
FAYETTE CO
SHELBY CO
DESOTO CO
DESOTO CO
MARSHALL CO
N
VICINITY MAP
MISSOURI
KY
ARKANSAS
TENNESSEE
PROJECT LOCATION
ALA
MISSISSIPPI
LEGEND
Work Completed
Work Underway with funds available for the Current Fiscal Year
Work Proposed with funds requested for the Budget Fiscal Year
Work Required to complete the Project after the Budget Fiscal Year
1 Item 1
2 Item 2, Phase I
3 Item 2, Phase II
4 Item 2, Phase III
5 Hiking / Biking Trails (Recreation Element)
6 Nature Area (Environmental Element)
7 Study Limits of Flood Control / Recreation Extension Reevaluation
SCALE
0 1 2 3 4 5 MI
0 2 4 6 8 KM
NONCONNAH CREEK, TN
U. S. ARMY ENGINEER DISTRICT, MEMPHIS
MISSISSIPPI RIVER COMMISSION

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN, Maintenance, FY 2005

The request of $151,855,000 provides for the day-to-day operation and ordinary maintenance, repair, and dredging activities in the Mississippi River and Tributaries Program. It also consists of the revision and publication of alluvial valley maps and navigation charts. The fund requirements are based upon the normal recurring annual expenses determined from experience records during the past years, and the repair and dredging work necessary to maintain the projects in operable condition.

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Mississippi River Levees, AR, IL, KY, LA MS, MO, & TN	9,977,000	7,665,000	Variation in levee repairs.
Bonnet Carre, LA	1,791,000	2,310,000	Variation in maintenance activities.
Mississippi Delta Region Caernarvon, LA	825,000	588,000	Variation in operation activities.
Revetments and Dikes	45,681,000	48,760,000	Variation in revetment repairs.
Dredging	16,635,000	20,515,000	Dredging.
Memphis Harbor (McKellar Lake), TN	1,417,000	1,205,000	Dredging.
Greenville Harbor, MS	182,000	29,000	Dredging.
Helena Harbor, AR	336,000	385,000	None.
Vicksburg Harbor, MS	227,000	32,000	Dredging.
Baton Rouge Harbor (Devil's Swamp), LA	159,000	14,000	Dredging.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN, Maintenance, FY 2005

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Mapping	1,121,000	1,112,000	
Arkansas	185,000	183,000	None.
Illinois	9,000	9,000	None.
Kentucky	25,000	23,000	None.
Louisiana	400,000	396,000	None.
Missouri	30,000	30,000	None.
Mississippi	426,000	424,000	None.
Tennessee	46,000	47,000	None.
St. Francis Basin, AR & MO Wappapello Lake, MO	5,036,000	4,046,000	Variation in road repairs.
St. Francis River & Tributaries, AR & MO	8,565,000	6,080,000	Variation in maintenance requirements.
White River Backwater, AR	1,170,000	1,316,000	None.
Lower Arkansas River, AR North Bank	95,000	146,000	Variation in levee repairs.
Lower Arkansas River, AR South Bank	122,000	122,000	None.
Tensas Basin, AR & LA Boeuf and Tensas Rivers	2,097,000	2,160,000	None.
Red River Backwater	3,777,000	3,083,000	Variation in maintenance requirements.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN, Maintenance, FY 2005

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Yazoo Basin, MS			
Sardis Lake	8,165,000	7,046,000	Variation in maintenance requirements.
Arkabutla Lake	6,350,000	5,710,000	Variation in maintenance requirements.
Enid Lake	5,270,000	4,954,000	Variation in maintenance requirements.
Grenada Lake	7,326,000	5,553,000	None.
Greenwood	680,000	585,000	Variation in pumping plant operations.
Yazoo City	735,000	729,000	None.
Main Stem	1,343,000	1,013,000	Increased operational costs.
Tributaries	1,030,000	923,000	None.
Will M. Whittington Auxiliary Channel	426,000	400,000	None.
Big Sunflower	1,677,000	139,000	Variation in maintenance requirements.
Yazoo Backwater	666,000	440,000	None.
Old River, LA	8,994,000	7,350,000	None.
Atchafalaya Basin, LA	12,096,000	13,000,000	Dredging and revetment.

MISSISSIPPI RIVER COMMISSION
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Flood Control, Mississippi River and Tributaries, AR, IL, KY, LA, MS, MO and TN, Maintenance, FY 2005

STATE/Project Name	ESTIMATED OBLIGATIONS ($) FY 2004 TOTAL	FY 2005 TOTAL	Reason for Change and Major Maintenance Items (Threshold $1,000,000)
Lower Red River, LA	322,000	105,000	None.
Bayou Cocodrie & Tributaries, LA	78,000	65,000	Variation in operations activities.
Atchafalaya Basin Floodway System, LA	2,223,000	2,775,000	None.
Inspection of Completed Works	1,510,000	1,500,000	
Arkansas	(318,000)	(318,000)	None.
Illinois	(174,000)	(174,000)	None.
Kentucky	(61,000)	(61,000)	None.
Louisiana	(590,000)	(585,000)	None.
Missouri	(116,000)	(116,000)	None.
Mississippi	(167,000)	(168,000)	None.
Tennessee	(84,000)	(78,000)	None.
TOTAL	158,104,000	151,855,000	