September 2015

Vicksburg District

Project Status

Arkansas

US Army Corps of Engineers®
Vicksburg District

GREAT SEAL OF THE STATE OF ARKANSAS

Arkansas Project Status Book

for September 2015

This Project Status Book contains information on the latest progress of the Vicksburg District's projects in the State of Arkansas. You will find project maps with corresponding fact sheets for each project. Fact sheets cite authorization for the project and provide locations and project description information. Also provided are activities for the fiscal year 2015 District capabilities are included for additional funds that may become available. Additionally, important issues or impacts are supplied for a more detailed perspective of the project. The Vicksburg District publishes this book to provide valuable status information for ongoing projects. For your added convenience, a copy of this book in PDF format is provided on the disk attached inside the back cover . However, if you should find you still have questions or need additional information about projects contained in this book, please contact:

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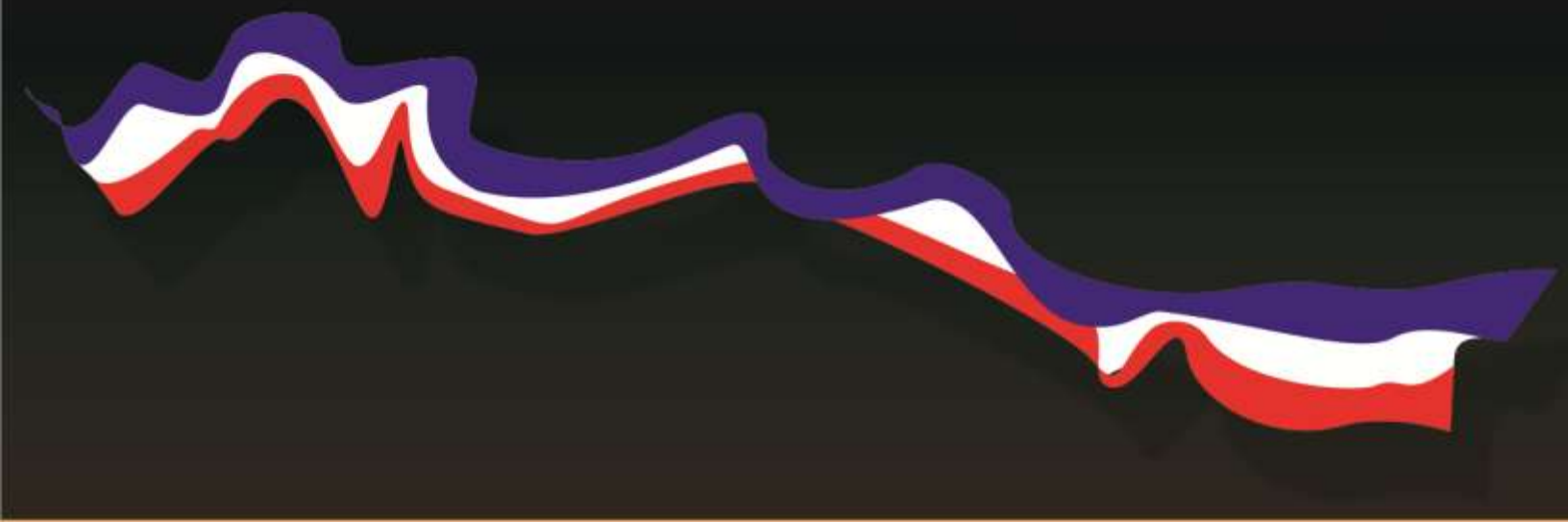

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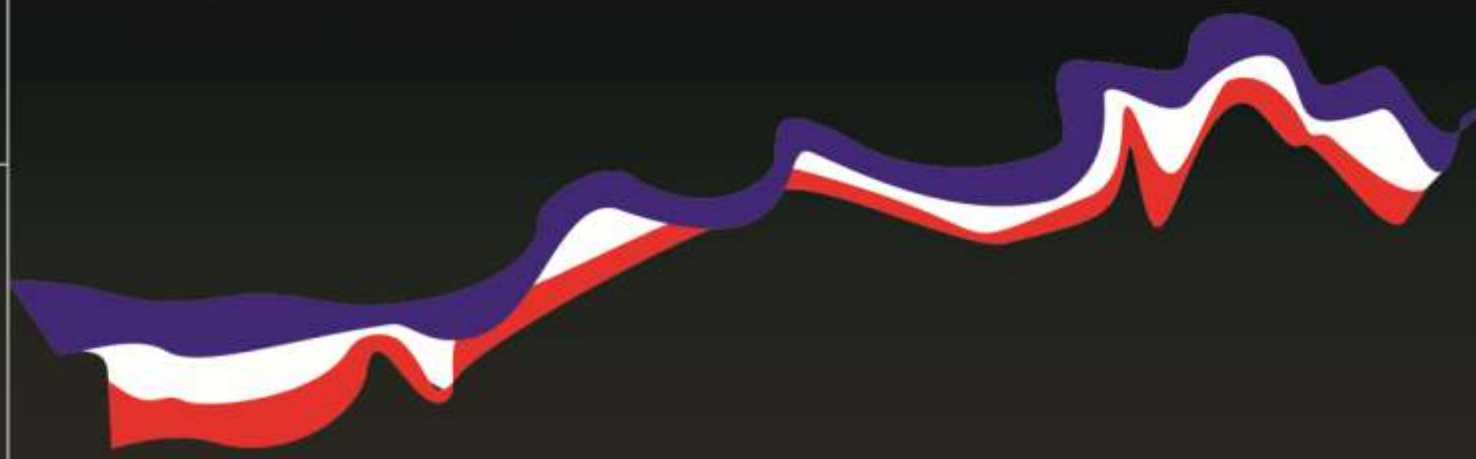

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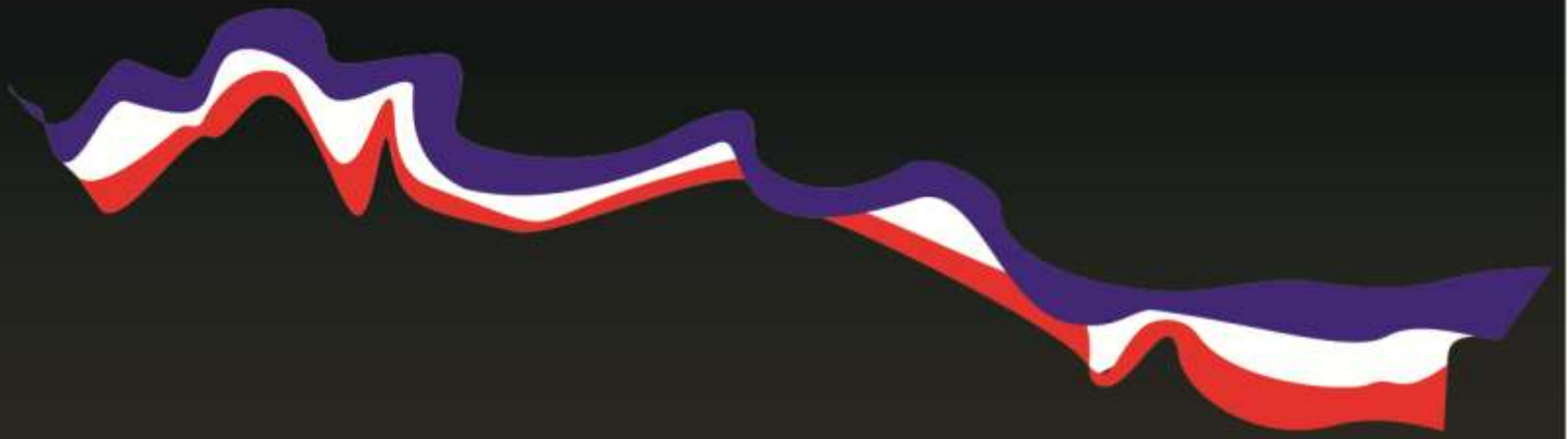

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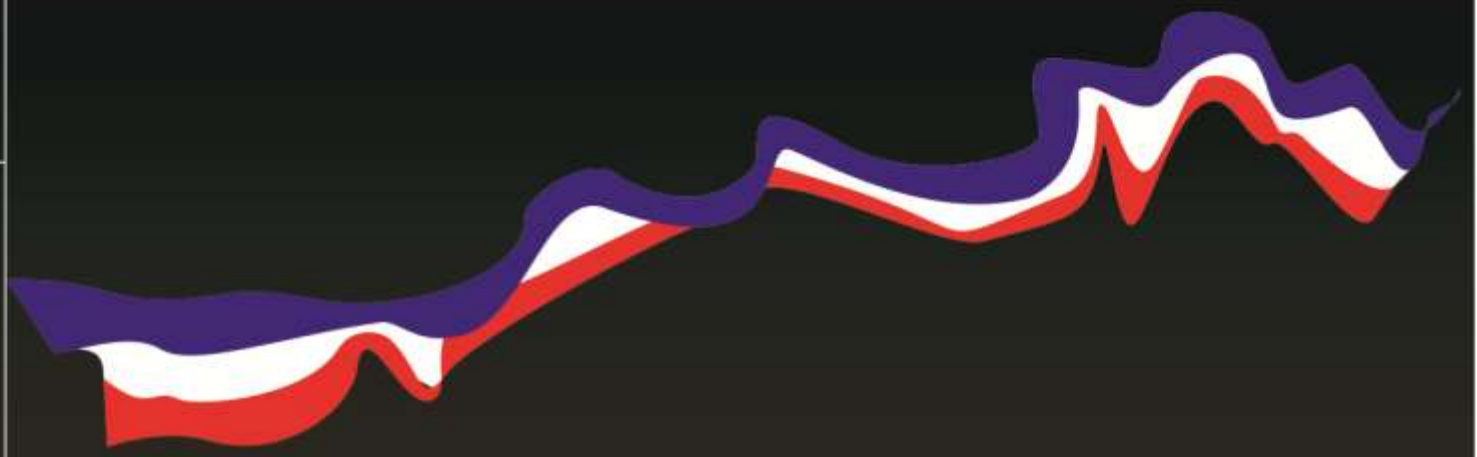
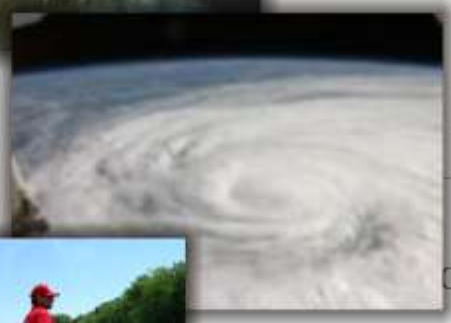


The Mississippi Valley Division

- We are 6 Interdependent Districts
- We have regional technical experts that bring expertise from the entire valley to work any water resource engineering challenge
- It is our pleasure to serve and provide the Nation's water resource engineering solutions
- We are...*BUILDING STRONG*



US Army Corps of Engineers ®
Vicksburg District

BIOGRAPHY

Colonel John W. Cross

Colonel John W. Cross is a native of Laurel, Mississippi and earned his Bachelor of Science Degree in geology in 1987 from the University of Southern Mississippi. He received a Masters of Business Administration in 1998 from the University of Central Texas and a Masters of Strategic Studies in 2010 from the US Army War College. His military education includes the Engineer Officer Basic and Advanced Courses, the Command and General Staff College at Fort Leavenworth, Kansas, and the US Army War College at Carlisle Barracks, Pennsylvania.

Colonel Cross began his career as an engineer platoon leader in Germany and later served as a company executive officer. After attending the Engineer Captain's Advanced Course, he moved to Fort Polk, Louisiana and deployed to Desert Storm serving as an assistant battalion operations officer. Following the war, he commanded an engineer company at Fort Polk, Louisiana and Fort Hood, Texas. He was selected for the Army's Training with Industry Program where he worked for the Environmental Protection Agency (EPA) in Denver, Colorado. His focus during this time included compliance with State and Federal regulations and environmental restoration at Superfund sites and Formerly Used Defense Sites (FUDS) in an eight state area. After working with the EPA in Denver, Colonel Cross was assigned to the Corps of Engineers Fort Worth District with duty at Fort Hood, Texas. At Fort Hood, he worked on various environmental contracts as well as military construction and FUD remediation in central Texas. As part of his tour with the District, he served as a project officer at Brooks Air Force Base in San Antonio, Texas supervising Military Construction for the Air Force.

He attended the Army's Command and General Staff College and served again at Fort Hood as a battalion operations officer and executive officer. After a tour in Stuttgart, Germany, he was selected for command of the Brigade Special Troops Battalion in 1st Brigade, 4th Infantry Division at Fort Hood. He deployed the battalion to Iraq in 2006 and operated north of Baghdad. After command, he was selected to lead the engineer training team at the Army's National Training Center at Fort Irwin, California where he trained battalions before they deployed to combat in Iraq and Afghanistan.

After graduating from the War College in 2010, he was assigned to Fort Bragg, North Carolina where he served as the XVIII Airborne Corps Engineer and deployed with the Corps to Iraq. In Iraq, he served as the Deputy Engineer to United States Forces Iraq and was responsible for the final disposition of over 80 bases and attendant infrastructure housing 50 thousand soldiers as well as the construction of facilities for the Department of State.

Colonel Cross is married and they have two sons.

Vicksburg District
Congressional Districts

Governors and U.S. Senators

ARKANSAS
Governor Asa Hutchinson
Senator John Boozman
Senator Tom Cotton

LOUISIANA
Governor Bobby Jindal
Senator David Vitter
Senator Bill Cassidy

MISSISSIPPI
Governor Phil Bryant
Senator Thad Cochran
Senator Roger Wicker

US Army Corps of Engineers
Vicksburg District

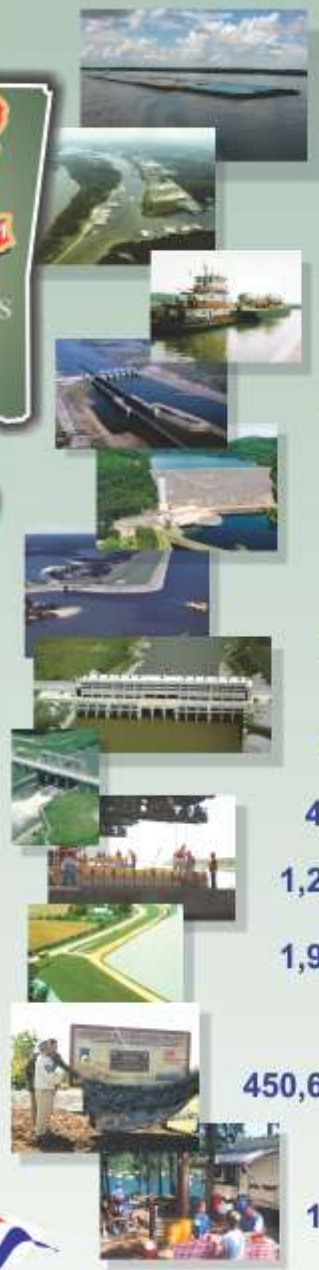
The Vicksburg District encompasses 68,000 square miles in Mississippi, Louisiana, and Arkansas. Seven major river basins fall into our jurisdiction including the mighty Mississippi, the Red, Ouachita, Pearl, and Yazoo Rivers. The District employs a diverse profile of professionals, over 1000 strong, divided between our Vicksburg, Mississippi headquarters and eleven field offices spread over all three states. Established in 1873, the District is a center of expertise for many engineering and environmental solutions and has been recognized as Vicksburg's second oldest business.

The Vicksburg District operates and maintains $2.3 billion in real property and projects, which in turn has generated both direct and indirect economic benefits for the nation.

These benefits are exclusive of the Regional MR&T projects like Mississippi River Levees and Mississippi River Channel Improvement. In Fy 13, Direct Annual Benefits to the economy from projects within the Vicksburg District contributed roughly $16 million for a total cumulative contribution of $302 million. Direct benefits include hydropower production, water supply, and collected fees.

The success of the MR&T projects has also led to substantial Indirect annual economic benefits contributing $827.7 million. Indirect benefits include flood damages prevented, transportation savings with our waterways, and recreation benefits. In FY 13, MR&T projects provided $655 million in flood damages prevented with cumulative benefits to date of $92.2 billion.

Vicksburg District Assets Include:



- **9** watersheds in Arkansas, Louisiana, and Mississippi including Bayou Meto, Big Black, Boeuf Tensas, Homochitto, Mississippi, Ouachita, Pearl, Red, and Yazoo
- **7** Mississippi River Ports handling over 8.5 million tons of cargo
- **5** Red River Ports handling over 1 million tons of cargo
- **12** locks and **9** dams on the Pearl, Red and Ouachita Rivers
- **3** Power plants capable of generating 168,500 kilowatts of electricity
- **10** Lakes with 1,673 miles of shoreline
- **21** Pumping plants
- **478** Flood control structures
- **1,252** Miles of navigable channel
- **1,910** Miles of levees, including 460 miles along the Mississippi River
- **450,603** Acres of project and mitigation lands are managed for forestry and wildlife enhancement
- **146** Recreation areas with 2,772 campsites and 1,529 picnic sites with estimated total visits of 8.1 million

Value to the Nation

Mississippi River

Benefits

Project	Average Annual Costs	Average Annual Benefits
Mississippi River and Tributaries	$210 Million	$1.46 Billion

Benefit-to-Cost Ratios

The current remaining (FY13) benefit-to-cost ratio for the MR&T system is 45.3 to 1 and likewise the total benefit-to-cost ratio for the system is 3.3 to 1 at the 7% interest rate. The benefit-to-cost ratios are based on annualizing the remaining and total benefits associated with the completed project and dividing them by the respective annualized cost to achieve these benefits. All project benefits and cost are annualized at the 7% interest rate over the economic life of the project. For the MR&T the economic life is 100 years.

Levees

Consists of raising, strengthening and extending levees to provide protection against flooding.

Channel Improvement

Consists of stabilizing riverbanks in desirable alignment and obtaining the most efficient flow characteristics for flood control and navigation by revetments, dikes, foreshore protection and improvements. This improves navigation conditions, stabilizes bends, and reduces maintenance dredging requirements

Did you know?

The Mississippi River from its confluence with the Ohio River to Baton Rouge, LA supported the transport of over 180 million tons of cargo in 2013!

Flood Risk Management

Flood risk management along the Mississippi River is provided through a coordinated system-wide water management program utilizing:

- Water storage reservoirs
- Levees
- Drainage Structures
- Channel Improvements
- Pumping Plants
- Weirs
- Sediment Reduction and Erosion Reduction Measures

Environmental Stewardship

The Corps has developed an environmentally sustainable project with the philosophy to avoid and minimize adverse environmental impacts. When impacts are unavoidable, compensation is made for the loss.

- The Corps has created over **6,700 acres of aquatic habitat** from borrow areas
- The Corps has **reforested at least 3,000 acres** of borrow areas
- The Corps has **reforested over 25,000 acres** of mitigation lands

Navigation

The Vicksburg District uses numerous tools to increase the safety and dependability of navigation on the Mississippi River.

- Dikes, revetments, and dredging are used to stabilize the navigation channel
- Channel Stabilization improves flow and reduces erosion
- The Vicksburg District supports two MR&T ports and five O&M ports

MR&T Ports

MR&T Port	2013 Commercial Tonnage	Jobs Sustained	Annual Payroll
Greenville, MS	3,474,197	540	$12,600,000
Vicksburg, MS	2,344,971	4,000	$80,000,000

O&M Ports

O&M Port	2013 Commercial Tonnage	Jobs Sustained
Rosedale, MS	1,340,001	325
Yellow Bend, AR	477,221	N/A
Lake Providence, LA	1,595,342	291
Madison Parish, LA	445,617	300
Claiborne Co., MS	N/A	N/A

Founded 1873 Vicksburg District of the Mississippi Valley Division

Value to the Nation

MISSISSIPPI RIVER

Ports

Port of Rosedale (RM 585)

2013 commercial tons - 1,340,001
Industries: esco Resource, Cives Steel, Jimmy Sanders Agricultural, Jantran Towing, APAC

32 RM

Yellow Bend Port (RM 554)

2013 commercial tons - 477,221
Industry: Bruce Oakley, Ark City Tank Storage, T.L. James, Producers Rice Mill

17 RM

Port of Greenville (RM 537)

2013 commercial tons - 3,474,197
Jobs sustained - 540
Major Industries: Entergy, ConAgra Fertilizer, APAC, Bunge, US Gypsum, Greenville Gravel, Scott Fertilizer, Superior Boat Works, Farmer Grain Terminal, Ergon, Greenville Shipbuilders, USCG - Patoka

53 RM

Lake Providence Port (RM 484)

2013 commercial tons - 1,595,342
Jobs Sustained - 291
Industries: Terral River Service, Bunge Corporation, Raley Transport

26.8 RM

Madison Parish Port (RM 457.2)

2013 commercial tons - 445,617
Jobs Sustained - 300
Industries: Mid Delta Terminal, Farm Chemical

20.2 RM

Port of Vicksburg (RM 437)

2013 commercial tons - 2,344,971
Jobs sustained - 4,000
Designated Foreign Trade Zone, Port of Entry - maintains a U.S. Customs Service
Major Industries: Anderson-Tully Lumber , Big River Shipbuilders, Bunge-Ergon, Citgo, ConAgra Fertilizer, Petroleum, DTE Petcoke, Ergon Marine & Industrial Supply, Ergon Refining, Falco Lime, Falco Chemical, Gavilon Fertilizer, Graham Packaging, Kinder Morgan Bulk Terminals, Magnolia Marine Transport, Neill Gas, Shell Oil, Quaker State, Polyvulc USA, Power Transport Service, Smith Towing A, Specialty Process Fabricator, US Coast Guard, Vicksmetal Armco, Waring Oil

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Vicksburg District
Of the Mississippi Valley Division

Value to the Nation

Red River Watershed
J. Bennett Johnston Waterway

Cargo

Port	Types of Cargo
Caddo-Bossier	Aggregate, Coal, Steel, Fertilizer, Petrochemicals, Project Lifts
Red River Parish	Aggregate, Coal, Steel, Fertilizer, Petrochemicals, Project Lifts
Natchitoches	Aggregate, Forest Product, Asphalt
Alexandria Regional	Fertilizer, Military Cargo, Citric Acid, Aggregate, Petrochemicals
Avoyelles Parish	N/A-Emerging Port

Commodity Movements

Commodity	CY 2010 Short Tons	CY 2013 Short Tons
Crude Petroleum	264,710	422,478
Gasoline	334,057	244,827
Distillate Fuel Oil	397,486	680,747
Residual Fuel Oil	266,798	476,308
Nitrogenous Fertilizer	132,277	147,134
Alcohols	226,917	65,903
Ammonia	65,935	62,549
Sodium Hydroxide	135,114	98,852
Limestone	1,698,290	1,147,596
Sand & Gravel	726,082	1,006,236
Lime	11,251	35,060
Grains	217,884	453,650
Oilseeds	185,710	294,215

Did you know?

- The $1.9 billion Red River Waterway Project was completed in 1994
- **Five lock and dam complexes** provide a total lift of 140 feet the equivalent of a 14-story building
- The navigation channel has a minimum depth of 9 feet and a minimum width of 200 feet
- The U.S. Army Corps of Engineers operates and maintains the locks and dams and supervises bank stabilization and other enhancements
- Over **1.7 million visitors annually** take advantage of facilities offered by 22 recreation areas in 8 parishes along the waterway
- **Over 8,400 acres of mitigation lands** have been purchased to offset losses caused by project construction

Navigation

Port	2014 Commercial Tonnage	Jobs Sustained
Caddo-Bossier	684,799	7,550
Red River Parish	81,358	N/A
Natchitoches	70,268	291
Alexandria Regional	121,021	2,009
System	**2013 Commercial Tonnage**	**Jobs Sustained**
JBJ Waterway	8,893,112	N/A

Project Benefits

Benefits	Basic Project	With Gaming
Total injection (spending)	$ 4,629,600,000	$ 16,410,800,000
Total Sales	8,471,300,000	25,804,700,000
Total Earnings	2,770,200,000	8,110,000,000
Total Taxes	58,200,000	170,300,000
Total Jobs (average)	2,107	6,862

Volunteer Partners

Organization	Service Provided
City of Shreveport	*Operation and Maintenance of the Shreveport Regional Visitor Center*
Red River Parish Police Jury	*Mow and clean areas of Lock 4 East and West Recreation Areas*
City of Natchitoches	*Operation and Maintenance of the Grand Ecore Visitor Center*

Vicksburg District — Founded 1873 — of the Mississippi Valley Division

Value to the Nation

Ouachita -Black Watershed

Commodity Movements

Commodity	CY 2010 Short Tons	CY 2011 Short Tons
Crude Petroleum	254,085	102,323
Gasoline	201,497	174,499
Distillate Fuel Oil	101,113	163,687
Nitrogenous Fertilizer	30,341	4,416
Ammonia	65,935	84,642
Sodium Hydroxide	106,250	82,146
Metallic Salts	36,997	11,390
Limestone	181,768	134,664
Grains	59,812	82,207
Oilseeds	78,161	95,521

Ouachita - Black Benefits

Benefit	Value
Transportation Savings	$1,100,000,000
Jobs Sustained	28,000
Annual Payroll	$325,000,000
Impact on Economy	$3,900,000,000
Taxes Paid	$180,000,000

Ports

Ports	Typical Cargo
Greater Ouachita	*Aggregates, oil, fuel, fabricated steel*
Columbia	*Cotton seed and grain*

Recreation

18 Corps recreational areas along the 4 pools of the Ouachita-Black Navigation Project with 700,000 visitors annually - facilities include:

- 18 boat ramps with 48 lanes
- 16 day-use areas
- 1 swimming beach
- Two Class A campgrounds outgranted to local governments

Environmental Stewardship

- Originally part of the project, the **65,000 acre** Felsenthal National Wildlife Refuge lies adjacent to the Ouachita River in Arkansas
- The **15,500 acre** D'Arbonne National Wildlife Refuge is located on Bayou D'Arbonne in Louisiana

Flood Risk Management

Watershed management is provided through a coordinated system-wide water management program utilizing:

- Water storage reservoirs with over 3.5 million acre-feet of capacity
- **Over 370 miles of levees** along the Ouachita River, and in the Tensas-Cocodrie, Larto Lake to Jonesville, Sicily Island and Below Red River areas
- **120 miles of channel** and tributary improvements along the Tensas River
- **5 pumping plants** of 300 cfs, 500 cfs, 750 cfs, 4,000 cfs, and 6,500 cfs

Navigation

- **337-mile Ouachita-Black Navigation Project** provides for a 9-foot by 100-foot navigation channel from the mouth of the Black River to Camden, AR
- **4 Locks and Dams** to regulate pool height and pass navigation
- Project supports approximately **28,000 private sector jobs** with an annual **payroll of $325,000,000**

Water Supply

- Provides water supply for cities of Hot Springs, Malvern, Arkadelphia and Camden in Arkansas as well as Monroe, Louisiana
- Supplies water to nine major industries
- Provides water supply for crop irrigation

H. K. Thatcher L&D
River Mile 281.9

Felsenthal L&D
River Mile 226.9

Columbia L&D
River Mile 117.0

Jonesville L&D
River Mile 25.0

Upper Ouachita NWR

Bayou D'Arbonne NWR

Vicksburg District
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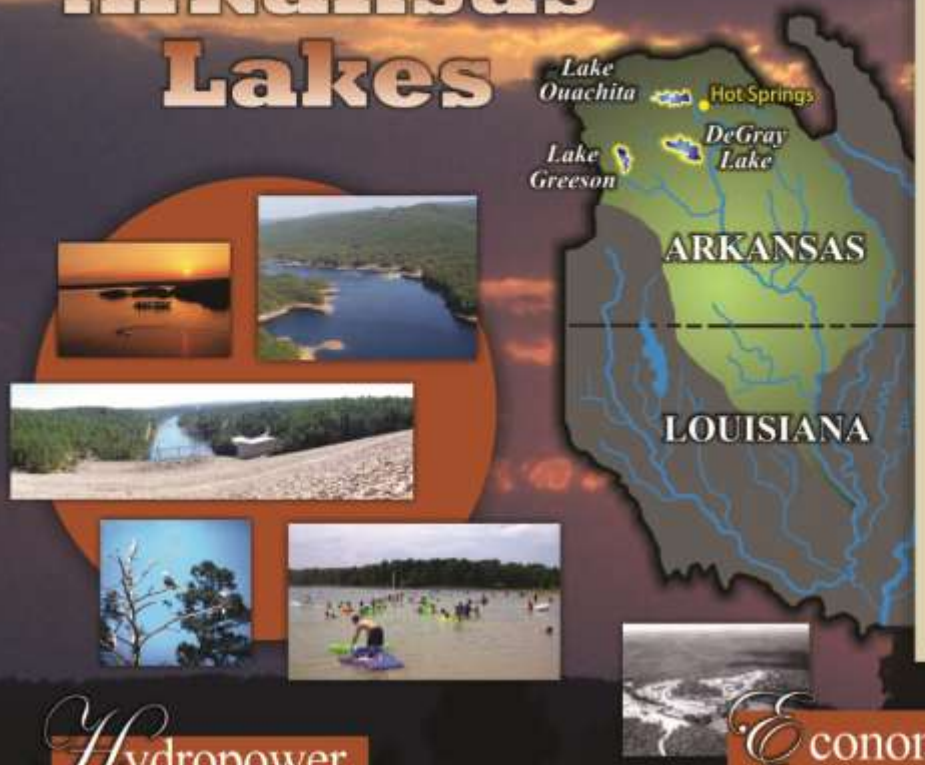
of the Mississippi Valley Division

Value to the Nation

Arkansas Lakes



A Corps First!

DeGray Lake holds the distinction as the first "pump back capable" impoundment in the history of the Corps of Engineers. A re-regulation dam forms a 400-acre impoundment directly below the main lake that serves as a storage basin for pump back capable features. During designated times, i.e. drought, the 28,000 KW generator can be reversed pulling water out of the Lower Lake into the main lake to be utilized again for hydropower generation. The 400-acre Lower Lake also serves as an ideal waterfowl refuge.

Did you know?

- **Narrows Dam is the only "all concrete" dam in the Vicksburg District**
- **The 3 Arkansas Lakes support over 700 jobs and provide over $38,000,000 in economic benefits to local economies**

Blakely Mountain Dam - Lake Ouachita 1956

Located along the Ouachita River in central Arkansas and surrounded by the Ouachita National Forest, the dam is 1100 feet wide and 205 feet tall creating a lake 205 feet deep at the deepest level. The project includes 690 miles of shoreline, 40,000 acres of water and 20,000 acres of public land. Facilities include 18 recreation areas with 18 campgrounds, 7 day-use areas, 19 boat ramps and 10 swimming beaches.

1,127,000 visits in 2012!

DeGray Lake 1972

Located along the Caddo River in south central Arkansas, the mulit-purpose project includes 32,400 acres. DeGray Dam has a crest 3,400 feet wide and rises 243 feet above the river bed. The dam creates a lake 200 feet deep at its deepest level with 207 miles of shoreline. Facilities include 15 recreation areas with 8 campgrounds, 7 day use areas, 11 boat ramps and 8 swimming beaches.

954,000 visits in 2012!

Narrows Dam Lake Greeson 1950

Located along the Little Missouri River in southwest Arkansas, Narrows Dam is 941 feet wide and rises to a height of the mean valley. The lake created by the dam, Lake Greeson, stretches 2 miles in length and is 150 deep at its deepest level and has 134 miles of shoreline. The project contains over 16,000 acres with over 15,000 acres forested. Facilities include 17 recreation areas with 12 campgrounds, 7 day-use areas, 9 boat ramps and 6 swimming beaches.

366,000 visits in 2012!

Hydropower

Project	Generating Capacity
Blakely Mountain Dam - Lake Ouachita	75,000 megawatts
DeGray Lake	68,000 megawatts
Narrow Dam - Lake Greeson	25,500 megawatts

Economic Impacts

Project	Economic Impact
Lake Ouachita	$18,000,000
DeGray Lake	$14,000,000
Lake Greeson	$6,000,000

Value to the Nation

Yazoo River Watershed

Yazoo River Watershed

encompasses the delta area extending north from Vicksburg, MS to north of Clarksdale, MS and east from the Mississippi River to the hills east of Greenwood, MS. It consists of roughly 8,900 square miles including all or parts of 12 Mississippi counties. The watershed has an approximate length of 175 miles and an approximate width of 40 miles.

Benefits

Project	Average Annual Costs	Average Annual Benefits
Upper Yazoo Projects	$17,373,000	$52,816,000
Delta Headwaters Project	$24,917,000	$24,917,000

Main Stem



Consists of new and enlarged levee improvements along the Yazoo, Tallahatchie, and Coldwater Rivers from Yazoo City to Prichard, MS; and channel cleaning, cutoffs, and channel enlargement along the Yazoo, Tallahatchie and Coldwater Rivers.

Upper Yazoo Projects


Includes channel and levee features along the main channel of the Yazoo, Tallahatchie, and Coldwater Rivers from the vicinity of Yazoo City, MS to the vicinity of the confluence of Arkabutla Creek with the Coldwater River.stabilization, and sediment / erosion control.

Delta Headwaters Project

Consists of 16 watersheds, ranging from 1 to 600 square miles, with features including bank stabilization; grade control structures; floodwater-retarding structures and channel modifications for flood risk management; bank stabilization, and sediment/erosion control.

Flood Risk Management

Flood risk management in the Yazoo River Basin is provided through a coordinated system-wide water management program utilizing:

- 4 water storage reservoirs
- 202 miles of levees
- 103 drainage structures
- 583 miles of channel
- 1 Pumping plant
- 8 Weirs
- Sediment reduction projects
- Erosion reduction measures

Flood Damages Prevented

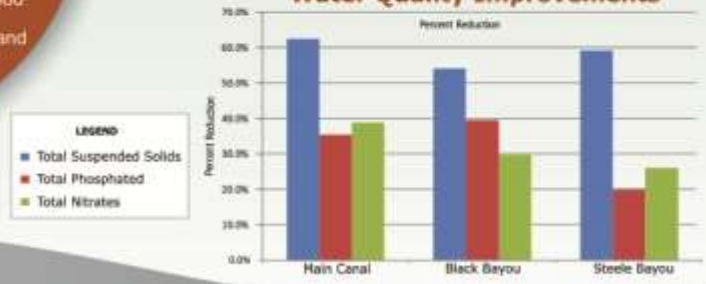
Area	FY 13 Flood Damage Prevented	Cumulative Flood Damage Prevented
Yazoo Backwater	$ 1,217,000	$ 99,311,000
Yazoo Headwaters	$13,093,000	$1,902,369,000
Mississippi Lakes	$ 9,034,000	$1,320,725,000
Big Sunflower River	$ 4,152,000	$ 417,369,000
Total Yazoo Basin	$27,496,000	$3,739,774,000

Environmental Stewardship

Since the early 1990s, the Vicksburg District has been involved with a flood control/sediment reduction project in the watershed which has dramatically improved water quality. Projects have included:

- Installation of low head weirs to maintain minimum water depths in channels
- Installation of 67 sediment control structures to prevent sediment from filling channels
- Water quality monitoring
- Large post-project reduction of in-stream suspended solids (TSS)

Water Quality Improvements



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Value to the Nation

Mississippi Lakes

Benefits

Project	Average Annual Costs	Average Annual Benefits
Arkabutla Lake	$5,000,000	$33,000,000
Sardis Lake	$5,000,000	$34,000,000
Enid Lake	$5,000,000	$22,000,000
Grenada Lake	$5,000,000	$39,000,000

Economic Impacts

Project	Economic Impact	Jobs Supported
Arkabutla Lake	$14,400,000	224
Sardis Lake	$26,200,000	427
Enid Lake	$10,500,000	161
Grenada Lake	$49,930,000	742

Visitation

Project	2012 Visits
Arkabutla Lake	854,371
Sardis Lake	1,300,000
Enid Lake	569,395
Grenada Lake	1,821,815

Did you know?

- Over 4.5 million visits are made to the lakes' facilities each year.
- Visitor spending at the North Mississippi Lakes represents a sizable component of the economies of local communities surrounding the lakes.
- Visitors spend over $101 million annually with 52% being captured by local economies.
- Visitor spending supports the addition of over 1,500 jobs.

Arkabutla Lake – 1943

Located just 30 minutes from Memphis, TN and Tunica, MS, in Tate and DeSoto counties in north Mississippi, Arkabutla Lake covers over 11,000 acres and provides a variety of opportunities for all outdoor enthusiasts to enjoy. Facilities include picnic areas, campgrounds, biking, hiking and walking trails, boat trails, equestrian trails ADA fishing pier and playgrounds.

Sardis Lake – 1940

Sardis Lake stretches over 98,000 acres thru Panola, Lafayette and Marshal Counties in northwest Mississippi. Located approximately 1 hour from Memphis, TN and 30 minutes from the University of Mississippi, the lake is a popular destination for water-related recreation. Facilities include nine campgrounds, boat ramps, cabins, playgrounds and swimming beaches.

Enid Lake – 1952

Located approximately 1 mile off Interstate 55, 72 miles south of Memphis, TN, Enid Lake encompasses over 44,000 acres and is visited each year by more than 1.5 million visitors. Enid has been recognized as one of America's Top 10 Fishing Spots. Facilities include campgrounds, hiking trails, off-road vehicle trail, playgrounds, boat ramps and swimming beaches.

Grenada Lake – 1954

Located in the gently rolling hills of pine and hardwood at the entrance to the Mississippi Delta, The lake covers 36,000 acres and offers some of the best fishing opportunities in the southeastern United States, and most any kind of water activity imaginable. Facilities include campgrounds, boat ramps, fishing areas, shelters, playgrounds and swimming beaches.

Founded 1873 Vicksburg District of the Mississippi Valley Division

Value to the Nation

Pearl River Watershed

Carthage

JACKSON

Levee Plan

Consists of raising, strengthening and extending levees to provide protection against flooding.

Monticello

PEARL RIVER

Columbia

Bogalusa

Picayune

The Pearl River originates in Neshoba County, MS and meanders approximately 444 miles to empty into Lake Borgne. The Pear River Watershed covers some 8,760 square miles and includes all or parts of 23 Mississippi Counties parts of 3 Louisiana Parishes.

Flood Risk Management

The Jackson (Fairgrounds) and East Jackson levees were completed in 1968 by the Corps. These protective works consist of two earthen levees, four gated outlets, and two pumping stations. Some 5.34 miles of river channel work was involved in constructing the plan. The Fairgrounds levee protects 420 acres in the fairgrounds area of Jackson on the west side of the river. The longer East Jackson levee protects 5,870 acres, including the town of Pearl and portions of Flowood and Richland. This project was sponsored by the Rankin-Hinds Pearl River Flood and Drainage Control District, which presently operates and maintains the levees. In 1984, an extension on the north end of the Fairgrounds levee was constructed to eliminate flanking of the levee.

Clearing of the floodway below the levee in Jackson was identified as an early action item to reduce Jackson flooding following the 1979 flood. The clearing plan, which was completed in 1984, extended from about 0.5 mile below the old Jackson sanitary landfill to Woodrow Wilson Bridge, a total of 3.3 river miles. The plan consisted of 237 acres of complete clearing, 20 acres of selective clearing, and 89 acres of partial clearing. To offset unavoidable impacts to fish and wildlife associated with the clearing plan, approximately 320 acres of bottomland hardwood were acquired as mitigation. The Pearl River Basin Development District isthe local sponsor

In 2012, the Rankin-Hinds Pearl River Flood and Drainage Control District initiated a Section 211 Flood Risk Management Study to evaluate additional flood risk management alternatives for the Jackson, MS area. The study is funded 100 percent with non-Federal funds.

Environmental Stewardship

In all aspects of natural and cultural resources management, the Corps promotes awareness of environmental values and adheres to sound environmental stewardship, protection, compliance and restoration practices. The Corps manages for long-term public access to, and use of, the natural resources in cooperation with other Federal, State, and local agencies as well as the private sector.

In late summer and early fall, virtually all of the Pearl River flow was captured by an area known as Wilson Slough. This left the main channel of the Pearl River in the vicinity of Walkiah bluff completely dry in some locations leaving property owners and local citizens with no opportunity to enjoy the benefits of the river. For more than 20 years, locals tried to get a project to restore flows in the vicinity of Walkiah Bluff. Using an authority established by Congress in 1990 which provided for environmental wetland restoration the Corps began the Pearl River, Walkiah Bluff Flow Distribution Project. The project was designed to restore flows in the Pearl River and once again make it a viable resource for both Mississippi and Louisiana.

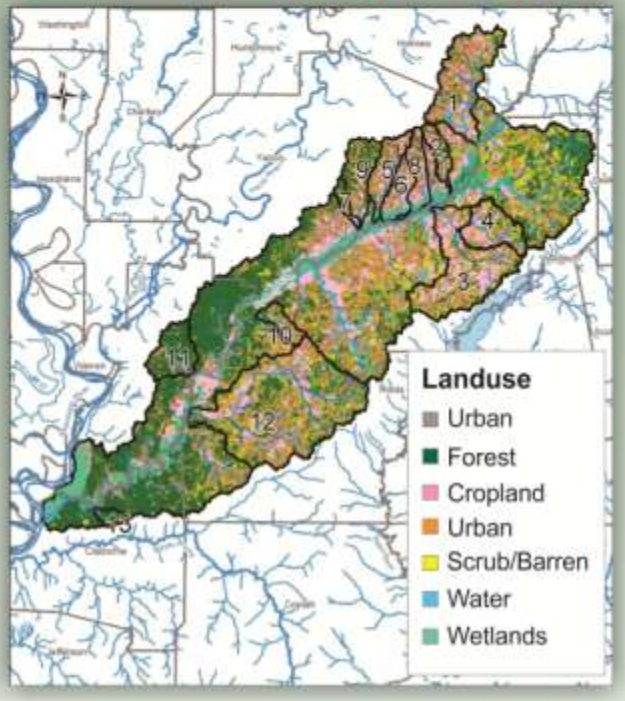
Vicksburg District — Founded 1873 — of the Mississippi Valley Division

Value to the Nation

Big Black River Watershed

Authority needed to combat flooding, erosion, and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and adds to problem of Gulf Hypoxia Zone.

Land Use in the Basin



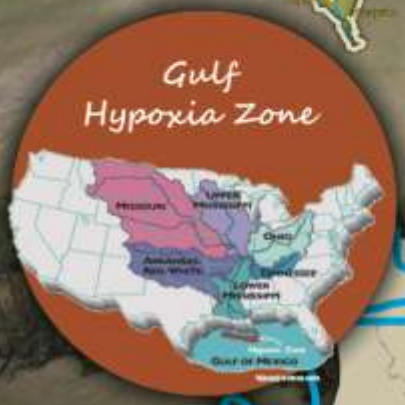
Environmental Stewardship

Nonpoint loading of sediment in a water body results from the transport of the material into receiving waters by the processes of mass wasting, head cutting, gullying, and sheet and rill erosion. Sources of sediment include:

- Agriculture
- Silviculture
- Rangeland
- Construction sites
- Roads
- Urban areas
- Mass wasting areas
- Gullies
- Surface mining
- In-channel and instream sources
- Historical landuse activities and channel alterations

Value to the Nation

Southwest Tributaries

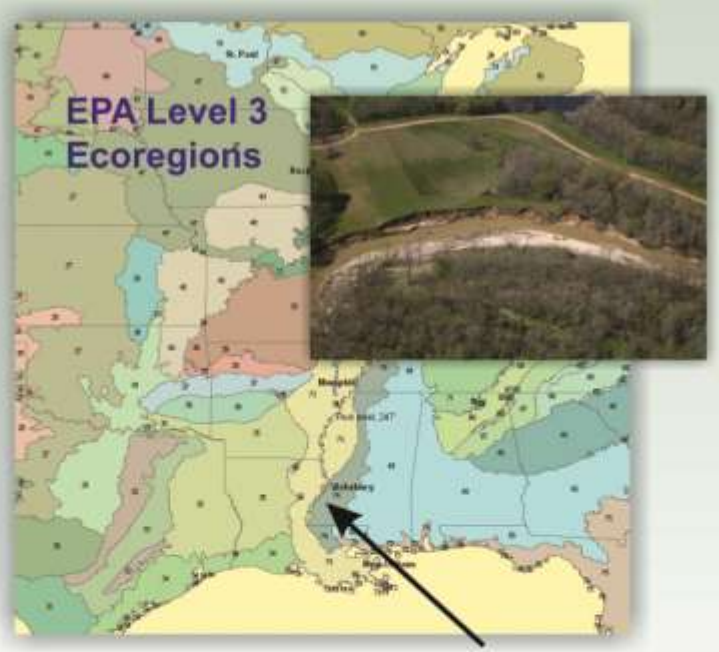


HINDS
Utica
Bayou Pierre
Crystal Springs
55
Port Gibson
CLAIBORNE
Hazlehurst
JEFFERSON
COPIAH
Fayette
LINCOLN
61
Natchez
ADAMS
Roxie
FRANKLIN
Meadville
Mississippi
Homochitto River
Crosby
Buffalo River
WILKINSON
Woodville
Centreville

The basin comprises a drainage area of approximately 3,200 square miles. All or parts of nine counties in southwestern Mississippi are included – Adams, Amite, Claiborne, Copiah, Franklin, Hinds, Jefferson, Lincoln, and Wilkinson. The basin extends in a north-south direction approximately 60 miles from just north of Port Gibson, MS, t o the vicinity of the Mississippi-Louisiana state line on the south; it extends in an east-west direction approximately 55 miles from the Mississippi River on the west to Interstate 55 on the east. Three major streams---Buffalo River, Homochitto River, and Bayou Pierre drain most of the area and flow directly into the Mississippi River.

Environmental Stewardship

Seeking authority to combat flooding, erosion, and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and adds to problem of Gulf Hypoxia Zone.



Mississippi Loess Plain 74

Vicksburg District
Founded 1873
of the Mississippi Valley Division

Value to the Nation

Bayou Meto

The project area includes Lonoke, Jefferson, Prairie, Arkansas, and Pulaski Counties and involves the study of 1,350 square miles in a 433,166 acre Improvement Project Area (IPA) with 369,874 acres of irrigated cropland.

Jacksonville
Sherwood
Lonoke
40
70
PULASKI
LONOKE
PRAIRIE
Bayou Meto
Two Prairie Bayou
England
165
Stuttgart
Wabbaseka
79
ARKANSAS
JEFFERSON
Altheimer
Bayou Meto
Bayou Meto

Pump Station No. 1/Reservoir

A pump station that takes excess surface water from the Arkansas River, pumps it up into a reservoir to utilize gravity flow, and puts it into a delivery system for irrigation use.

Little Bayou Meto Pump Station

A pump station that evacuates water from the Bayou Meto Basin and reduces flood damage on farmland and stress to bottomland hardwood forests that benefit waterfowl.

Continuing Authorities Program Section 205

SMALL FLOOD CONTROL PROJECTS of the Flood Control Act of 1948

Provides for local protection from flooding by the construction or improvement of flood control works.

Flood Risk Management

The project includes a pump station to evacuate water from the Bayou Meto Basin and reduces flood damage on farmland and stress to bottomland hardwood forests that benefit waterfowl management.

Jacksonville and Sherwood, AR have requested participation in individual Section 205 projects designed to assist with small flood control projects which will improve Flood Risk Management potential for the communities.

Environmental Stewardship

The project area includes 10,000 acres of herbaceous wetland complexes, along with riparian buffers and improvements to the Bayou Meto Wildlife Management Area to provide environmental restoration and enhancement features.

Water Supply

The project has features which divert excess water from the Arkansas River via a delivery system that contains pump stations, incorporates a system of new canals, existing streams, and pipelines to deliver water to depleted areas.

Project Features:

107 Miles of New Canal

1,750 CFS Pump Station

Riparian Buffers

128 Miles of Channel Work

10,000 Acres of Herbaceous Wetland Complexes

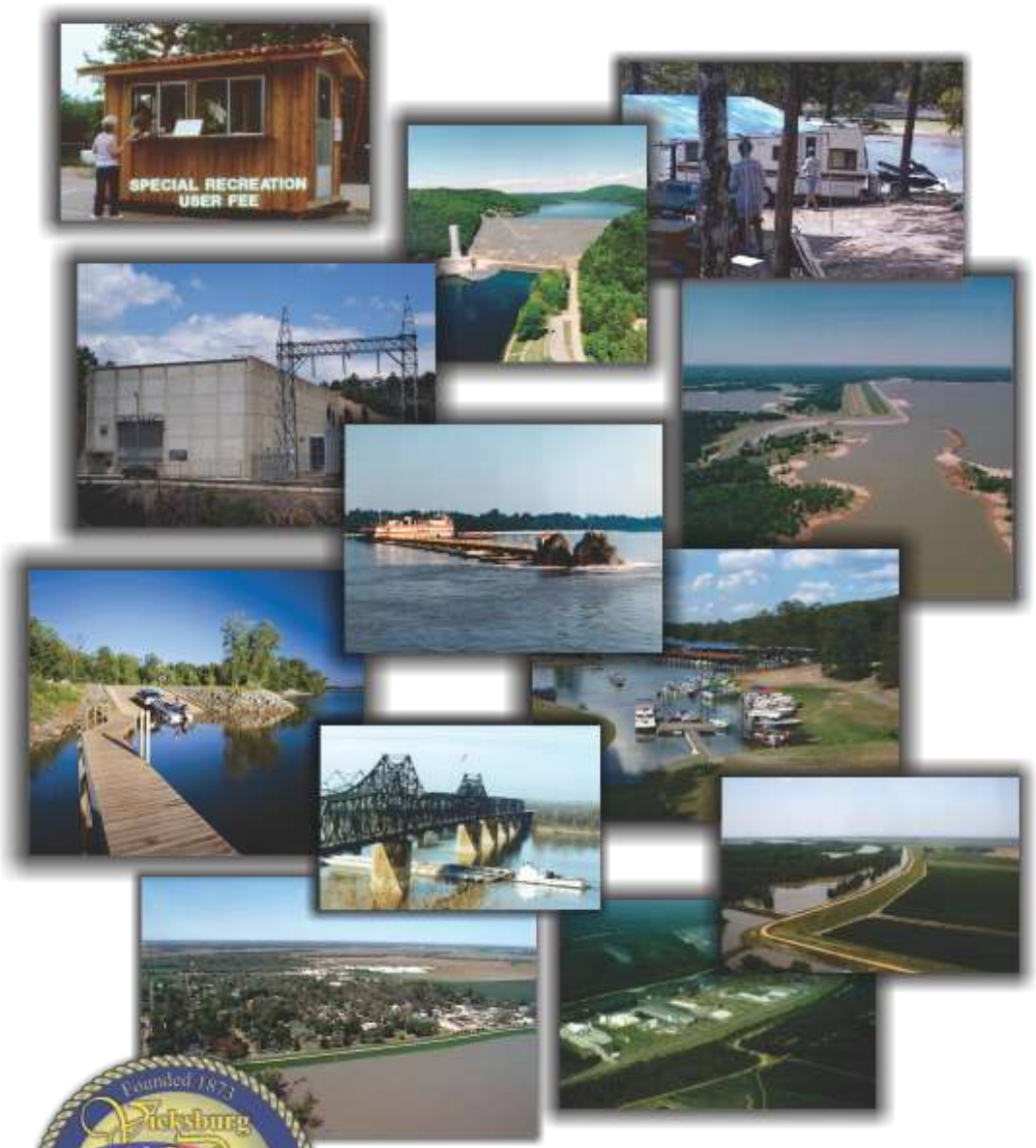
132 Miles of Ditch Enlargements

465 Miles of New Pipeline

Founded 1873 Vicksburg District of the Mississippi Valley Division

Value to the Nation

Vicksburg District Economic Benefits



From a program of $150M, the Vicksburg District returns these economic benefits!

Annual Direct Economic Contributions

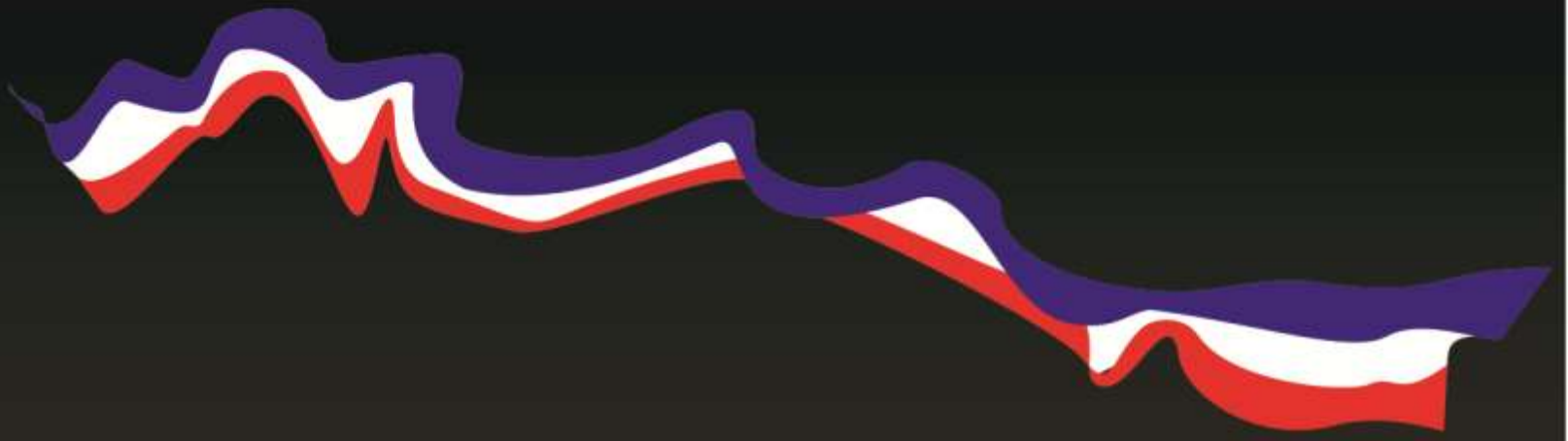
Fees Collected	$ 1,992,000
Agricultural	$ 576,000
General Leases and Concessions	$ 413,000
Water Supply Payments	$ 1,092,000
Hydropower	$ 12,000,000
Total Direct Contributions	**$ 16,073,000**

Indirect Economic Contributions

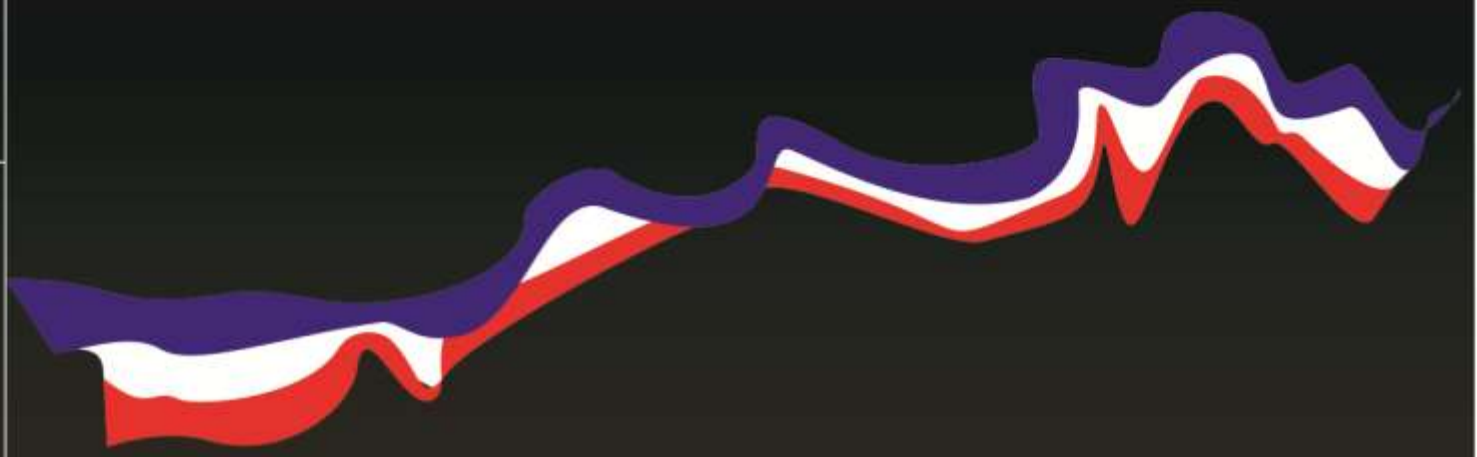
Flood Damages Prevented	$ 654,988,000
Recreation	$ 49,763,000
Water Supply Benefits	$ 115,792,000
Navigation Savings	$ 125,020,000
Total Indirect Contributions	**$ 945,563,000**

Value to the Nation

FUNDING INFO



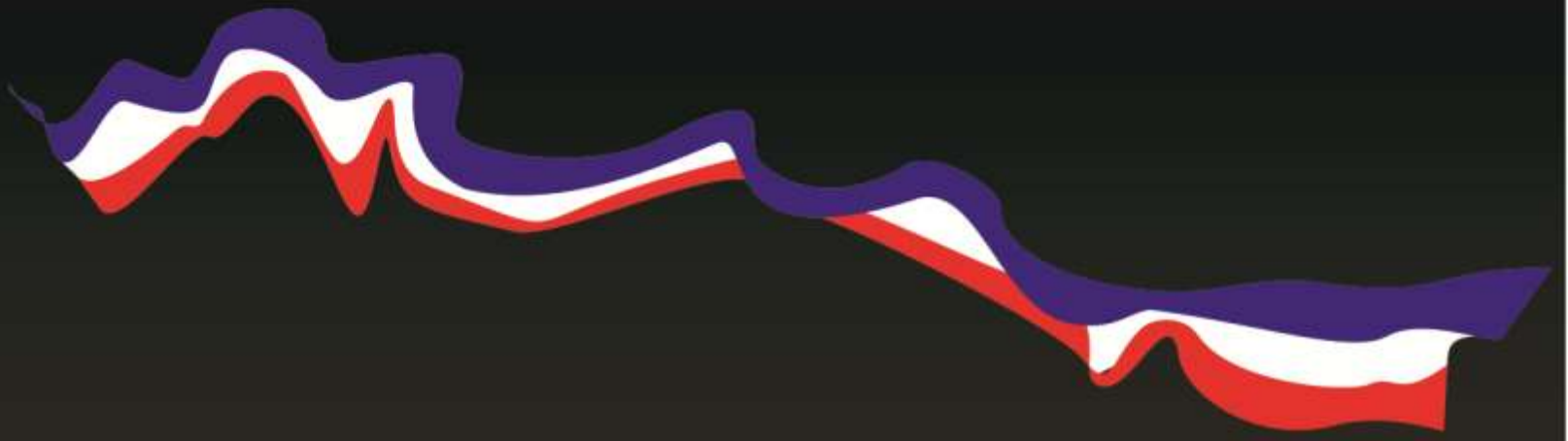
FUNDING INFO



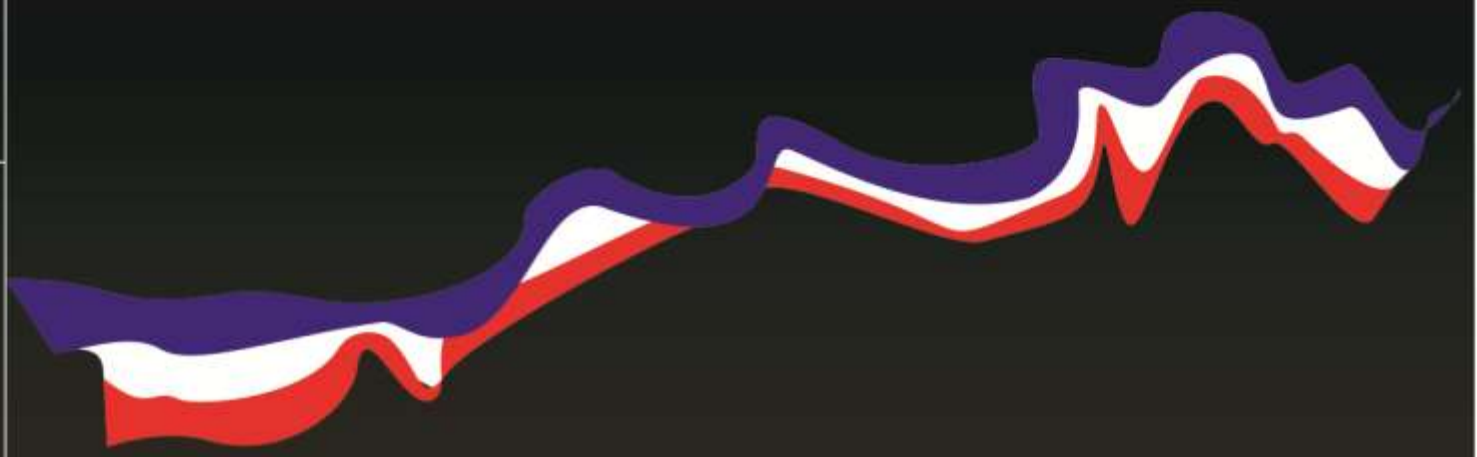
Cong Distr	Approp/Project	FY 15 Allocation	FY 16 President's Budget	Additional Capability Needs	FY 16 TOTAL CAPABILITY	FY 16 WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
Construction						
AR-4,LA-4,5	Red River Below Denison Dam	0		1,700,000	**1,700,000**	Fully fund Levee Item 9A Phase 2; rehabilitation of levee to meet new Post-Katrina levee standards. Work to include design, construction as well as project oversight, real estate activties, and environmental compliance, Fully fund construction of gravel surfacing for Louisiana levees
AR-4, LA-4	Red River Emergency	0		7,000,000	**7,000,000**	As a result of the 2015 flood Stone Bank Paving sites have been identified near Garland City, AR, River mile 267 and River Mile 327 on the Red River. This includes approximately 130,000 tons of rock, mobilization and demobilization, E&D and S&A
Total Construction		**0**	**0**	**8,700,000**	**8,700,000**	
Operation and Maintenance						
AR-4	Blakely Mtn-Lake Ouachita	7,587,400	7,513,000	11,201,000	**18,714,000**	High water debris cleanup ($900.0), Provide station power from Blakely Mtn Dam to Ouachita Project Office ($1,673.0),Transfer from commercial power grid service at Greeson, Ouachita, DeGray Project Office ($650.0), replace water lines ($33.0), replace water treatment plant ($300.0) upgrade water, wastewater and electrical systems ($350.0), dam maintenance ($57.0), and backlog maintenance items ($7,238.0).
AR-4	DeGray Lake	5,780,700	6,121,000	6,813,000	**12,934,000**	High water debris cleanup ($350.0), Rehab flood gate ($168.0), P&S to repair intake cylinder gate ($148.0), replace office building ($2,300.0), removal of trees, root balls on dam and dike ($250.0), coordinate and negotiate water supply agreements ($20.0), recreation management ($1,386.0), replacement of expansion joints ($75.0), and backlog maintenance efforts ($2,119.0).
AR, LA, MS	Insp of Completed Works	506,880	512,000		**512,000**	
AR-4	Narrows Dam-Lake Greeson	5,622,185	8,975,000	2,853,000	**11,828,000**	High water debris cleanup ($400.0); monitor dam and related facilities ($346.0) Prepare P&S for trash rack repair ($200.0); replace roofs on shower buildings ($48.0); road paving ($300.0); barge replacement/repair ($75.0); replace underground electric lines ($55.0); forest management activities ($80.0); rehabilitate campsites ($600.0); replace project signs ($160.0); update Emergency Action Plan ($102.0); and backlog maintenance items ($467.0).
	NEPP	311,500	147,000	28,000	**175,000**	Fully fund NEPP activities
AR-4,LA-5	Ouachita & Black Rivers-Navigation Project	11,638,200	8,076,000	6,178,000	**14,254,000**	Fully fund dredging ($2,000.0); maintenance on tainter gates ($1,800.0); raise customer service to desirable levels for the visiting public and local residents and repair/update recreation areas ($2,000.0); Replace ladders, handrails, and miter gates identified by OCA ($421.0); backlog maintenance items ($157.0).
AR-4	Yellow Bend Port, AR	395,500	3,000	112,000	**115,000**	Fully fund maintenance dredging.
Total Operation and Maintenance		**31,842,365**	**31,347,000**	**27,185,000**	**58,532,000**	
Regulatory Functions		**3,877,400**	**3,803,000**	**0**	**3,803,000**	
Flood Control & Coastal Emergency		**406,000**	**504,100**	**0**	**504,100**	
	SUBTOTAL REGULAR APPROP	**36,125,765**	**35,654,100**	**35,885,000**	**71,539,100**	
MR&T Investigations						
AR, LA, MS	Collection & Study of Basic Data	9,280,000	9,334,000	2,600,000	**11,934,000**	Preservation of data, maps, and aerial photographs ($2,000); Aquatic/Water Quality Monitoring ($600.0).
Total MR&T Investigations		**9,280,000**	**9,334,000**	**2,600,000**	**11,934,000**	
MR&T Construction						
AR, LA, MS	Mississippi River Levees	25,588,100	5,070,000	18,125,000	**23,195,000**	Leland--Vaucluse, AR, Item 536-R Phase I ($9,000.0), Magna Vista--Brunswick, MS, EB Paving, Items 468-L/463-L ($4,750.0); Willow Point-Youngs Point, LA, Item 457-R Relief Wells ($1,875.0) and continued engineering design for future construction ($2,000.0). Supplemental Environmental Impact Statement Development ($500.0).
AR, LA, MS	Channel Improvement(Dikes Const.)	3,270,000	1,076,000	12,000,000	**13,076,000**	Fully fund dike construction at Anconia Chute, AR ($3,000.0), and Refuge, MS ($2,700.0); and Refuge Dike Turndowns ($6,300.0)
AR, LA, MS	Channel Improvement(Revt Const.)	13,330,000	17,070,000	11,720,000	**28,790,000**	Design a new Articulated Concrete Mat Sinking Unit ($5,000.0); Reinforcement sinking to maintain existing revetments ($6,720.0)
Total MR&T Construction		**42,188,100**	**23,216,000**	**41,845,000**	**65,061,000**	
MR&T Maintenance						
AR-4,LA-5	Boeuf & Tensas Rivers	2,758,900	2,589,000	3,970,000	**6,559,000**	Repairs for two impeller bell housings/cones ($400.0);upgrade cranes ($920.0); replace Big Bayou Weir $695.0); design replacement for Big Bayou weir at 13.92 ($400.0); inspect underslab and backfill drains at Lake Chicot Pumping plant ($350.0); and backlog maintenance items ($1,206.0).
AR, LA, MS	Dredging Maint	4,518,000	5,023,000	0	**5,023,000**	
AR, LA, MS	Insp of Completed Works	671,000	371,000	483,000	**854,000**	Current Levee Safety requirements include more detailed inspections.; Includes 463 miles of levees, 516 miles of channels, 125 drainage structures, 1 pumping plant & 15 weirs ($308.0); 408 Permits ($50.0); Annual inspections for OHP ($75.0); Levee safety inspections MS ($50.0)
AR, LA, MS	Mapping	302,000	399,000	0	**399,000**	Additional mapping assistance for work in the CAD/GIS topographic,hydrographic or geospecial areas.
AR, LA, MS	Mississippi River Levees	3,139,000	2,331,000	3,055,000	**5,386,000**	Repair of levee slides ($1,200.0); Operation of Lower Mississippi River Museum ($80.0); Operation and Maintenance of Mitigation Lands ($225.0); gravel levee surfacing ($650.0); Design and Replace Exhibits at JBLMRM ($500.0); Maintenance of JBLMRM ($100.0); Walkway covering between JBLMRM and MVMS Exhibit ($300.0)
AR-1,4	North Bank, Arkansas River	225,800	294,000	300,000	**594,000**	Place stone on levees for inspection and emergency purposes ($300.0).
AR, LA	Red-Ouachita Basin Levees	0		500,000	**500,000**	Repairs to deficiencies affecting levee stability and further investigation of other issues along the levee/floodwall ($500.0)

Cong Distr	Approp/Project	FY 15 Allocation	FY 16 President's Budget	Additional Capability Needs	FY 16 TOTAL CAPABILITY	FY 16 WORK WHICH COULD BE ACCOMPLISHED WITH ADDITIONAL FUNDS
AR, LA, MS	Channel Improvement (Revetments & Dikes)	15,052,000	15,016,000	11,900,000	**26,916,000**	Fully fund stone repairs, stone bank paving, and additional revetment repairs. ($9,900.0); dike repair ($2,000.0)
AR-1,4	South Bank, Arkansas River	149,100	198,000	300,000	**498,000**	Place stone on levees for inspection and emergency purposes ($300.0)
Total MR&T Maintenance		**26,815,800**	**26,221,000**	**20,508,000**	**46,729,000**	
	SUBTOTAL MR&T APPROP	**78,283,900**	**58,771,000**	**64,953,000**	**123,724,000**	
TOTAL ALL APPROPRIATIONS		**114,409,665**	**94,425,100**	**100,838,000**	**195,263,100**	
	Investigations	9,280,000	9,334,000	2,600,000	**11,934,000**	
	Construction	42,188,100	23,216,000	50,545,000	**73,761,000**	
	Maintenance	58,658,165	57,568,000	47,693,000	**105,261,000**	
		110,126,265	90,118,000	100,838,000	**190,956,000**	

INVESTIGATIONS



INVESTIGATIONS



INVESTIGATIONS

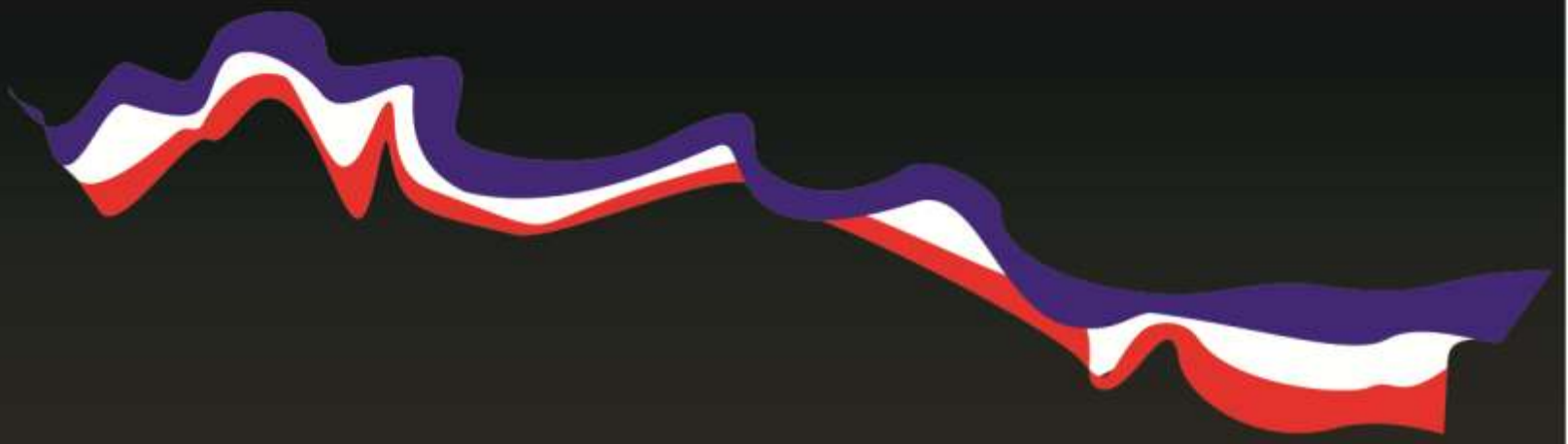
The major objective of the Investigations program is to study projects that provide solutions to water resource problems. The Corps undertakes studies in response to directives (authorizations) from Congress. Congressional authorizations are contained in public law and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

In the past, studies were conducted in two phases - reconnaissance and feasibility. WRDA 2014 revised the implementation for studies to: feasibility phase; cost no more than $3 million (Federal and non-Federal) and have 3 levels of vertical coordination.

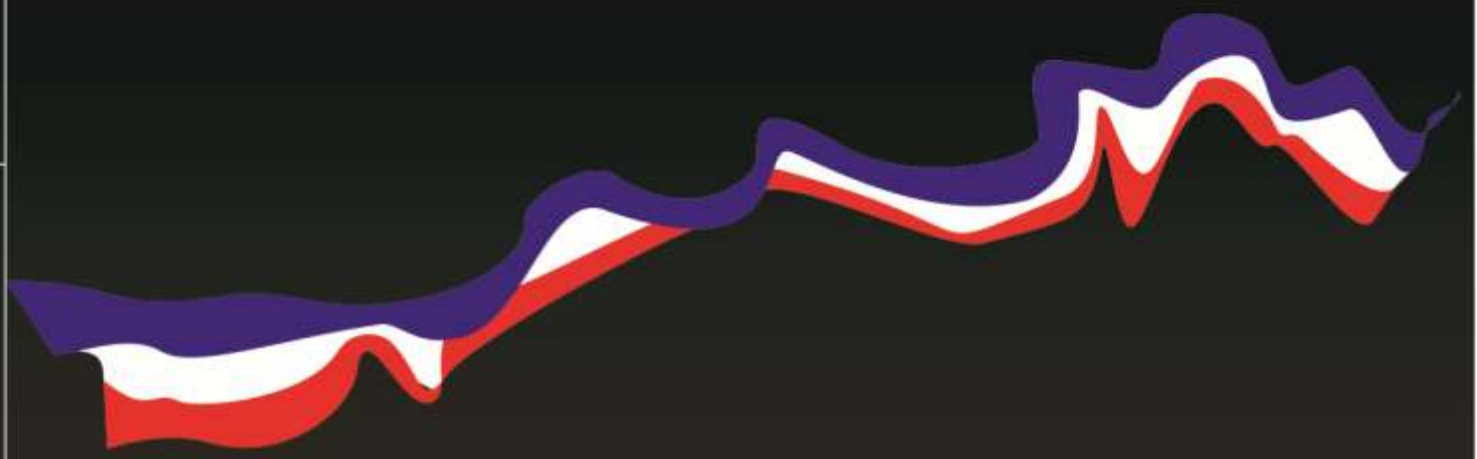
The report results in recommendations to Congress for or against Federal participation in solutions to the water resource problem and opportunities identified in the study. A recommendation for Federal participation identifies a recommended plan/project, generally for construction authorization and funding.

The Preconstruction, Engineering and Design Studies (PED) phase of project development encompasses all planning and engineering necessary for project construction, after release of the report and Division Engineer's public notice on a favorable study. Preparation of design memorandums and plans and specifications will be cost shared in accordance with the cost sharing required for project construction.

CONSTRUCTION



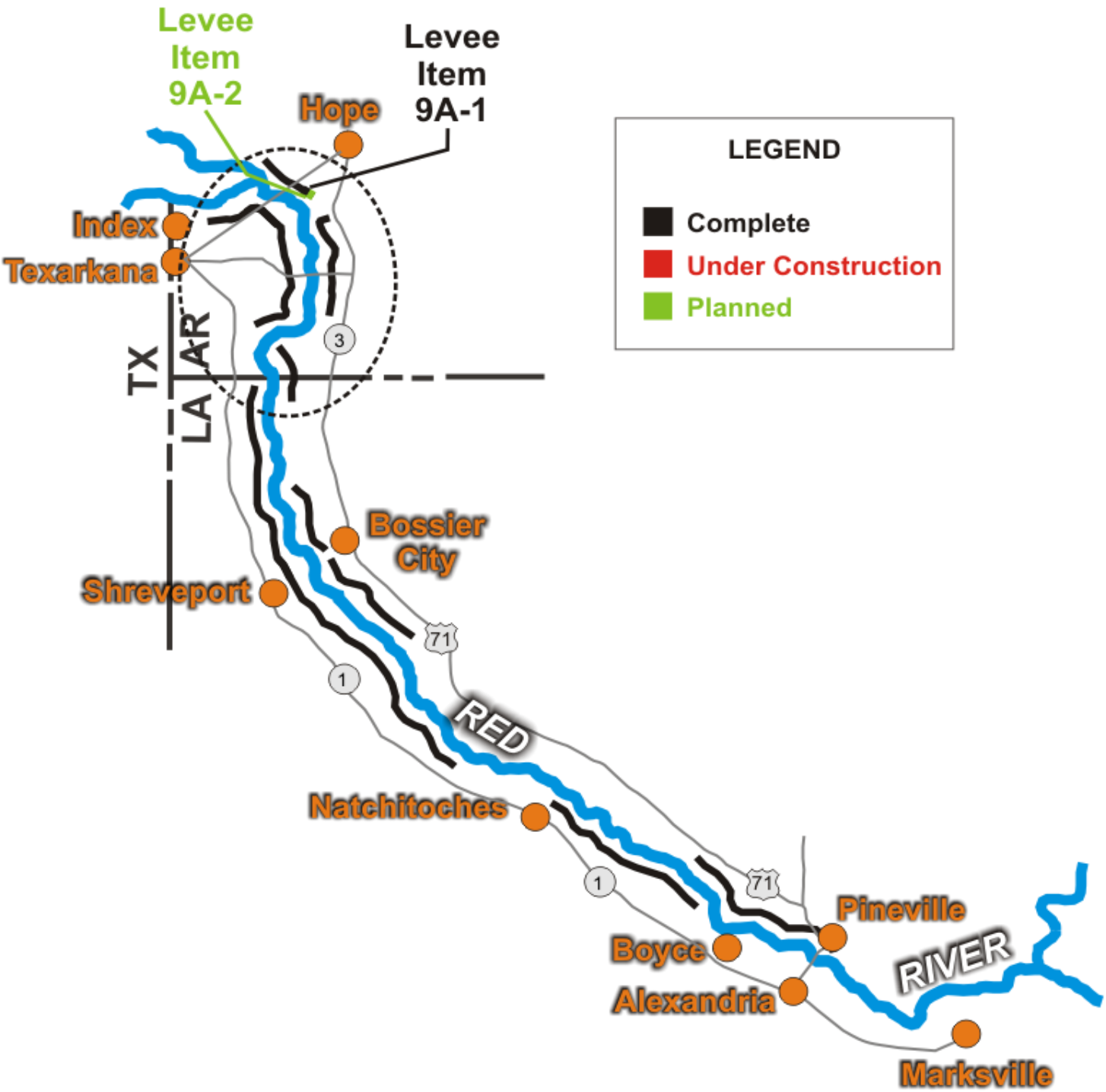
CONSTRUCTION



CONSTRUCTION

The main objective of a construction program is to complete authorized and appropriated projects as economically and quickly as practicable within program constraints and consistent with national priorities.

Under the provisions of a cost-shared project, prior to initiation of construction, the non-Federal sponsor and the government enter into a Project Partnership Agreement (PPA). The PPA describes all of the requirements and responsibilities relating to construction of the project including items of local cooperation required from the non-Federal



Red River
Below Denison Dam,
Arkansas and Louisiana

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Red River Below Denison Dam, AR, LA, and TX

Section 10, FCA 46; E&WDAA 92, 93, 94, 95, 96, 98, 02, 03, 04, 05, 06, 07, 08, 09, 10

Construction, FRM

Location: Project facilities are located along the Red River from the vicinity of Index, AR, to Boyce, LA, along the right bank, and to Pineville, LA, along the left bank.

Description: The overall project provides flood protection to about 1.7 million acres, half of which are located behind levees. The project protects the flood plain from crop damage; loss of livestock; damage to levees, railroads, highways, industries, and other river and urban development. The authorized project provides for enlargement and/or rehabilitation of existing levees and construction of new levees or bank protection or channel realignment where levee setbacks are impossible or uneconomical.

Issues: These project features are essential to maintenance of the existing levee system. Currently these levee systems protect over 103,000 people in AR and LA. Prior levee rehabilitation work did not include new standards that have been developed post Hurricane Katrina. Levees continue not to meet current inspection standards making them ineligible for PL 84-99 funds; therefore, creating higher potential for poor performance during flood events resulting in continued flood damage to homes, farms, and other improvements. Levee rehab is required to achieve positive levee evaluations. There is risk of increased flood insurance premiums with levee decertification.

Importance: These project features are essential to maintenance of the existing levee system. Currently this levee system protects over 103,000 people and 1.7 million acres of fertile farmland in AR and LA.

Risk: Without funding, additional levee rehabilitation cannot be completed. This levee system protects over 103,000 people and 1.7 million acres of fertile farmland in AR and LA. Levee rehab is required to achieve positive levee evaluations. There is risk of increased flood insurance premiums with levee decertification.

Consequence: Flood protection for the area could be compromised and local levee districts may face levee decertification.

Levee Item 9A-I

Activities for FY 15: None

Acquisition Strategy: No contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: There are no funds in the FY16 President's budget. Funds in the amount of $1,700,000 could be used to fully fund Levee Item 9A Phase 2, rehabilitation of levee to meet new Post-Katrina levee standards.

Project Sponsor/Customer: Multiple local levee districts

Congressional Interest: Senate: Boozman and Cotton (AR), Vitter (LA); House: Westerman (AR-4), Fleming (LA-4), Abraham (LA-5).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 14	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Construction	$96,941,000	$96,941,000	$0	$0	$1,700,000

Red River
Emergency Bank Protection
Arkansas, Louisiana, Oklahoma and Texas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet

Red River Emergency Bank Protection, AR, LA, OK, TX

Rivers and Harbors Act of 1968; Water Resources Development Act of 1976

Construction (NAV)

Location: The project is located in northwest Louisiana, southwest Arkansas, southeast Oklahoma, and northeast Texas, along the Red and Old Rivers between the mouth of Old River at its juncture with the Mississippi River and Denison Dam, Texas.

Description: The project provides for protection of critical infrastructure and land along the river. The project plan provides for revetment, dikes, or cutoffs that can be accomplished in advance of developing the design for the entire project.

Issues: During the 2015 flood Stone Bank Paving sites have been identified near Garland City, AR, River mile 267 and River Mile 327 on the Red River. This includes approximately 130,000 tons of rock, mobilization and demobilization. Dickson Phase I of V is complete, but with only limited success as the remaining phases are needed to prevent continued erosion towards a levee in the Long Prairie Levee District in Arkansas.

Importance: These project features are essential to maintaining the existing river channel.

Risk: Without funding, additional bank protection work cannot continue.

Consequence: Delay in bank stabilization will endanger levees, public roads and bridges, and other improvements to the river due to erosion.

Dickson Revetment Phase I

Activities for FY 15: None.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: There are no funds in the FY16 President's budget. Funds in the amount of $7,000,000 could be used to fully fund Stone Bank Paving.

Project Sponsor/Customer: Multiple local levee districts

Congressional Interest: Senate: Cotton and Boozman (AR), Vitter (LA); House: Westerman (AR-4) and Fleming (LA-4).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 14	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Construction	$161,700,000	$144,868,000	$0	$0	$7,000,000

The 8 Authorities of the CONTINUING AUTHORITIES PROGRAM or "CAP"

Section 14

Emergency Streambank & Shoreline Protection - Flood Control Act of 1946 as amended by WRDA 1996

This authority is to prevent erosion damages to highways, bridge approaches, public works, and other nonprofit public facilities by the emergency construction or repair of streambank and shoreline erosion protection. These are two-phase projects: Study cost for the first $100,000 is 100% Federal with any amount over $100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of $5 million per project and a national program limit of $20 million.

Section 107

Small Navigation Projects - River and Harbor Act of 1960

This authority provides improvement to navigation including dredging of channels, widening of turning basins, and construction of navigation aids. These are two-phase projects: Study cost for the first $100,000 is 100% Federal with any amount over $100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 80% Federal and 20% non-Federal with a Federal funding limit of $10 million per project and a national program limit of $50 million.

Section 205

Small Flood Control Projects - Flood Control Act of 1948 as amended by WRDA 1999

This authority for local protection from flooding by the construction or improvement of flood control works such as levees, channels, and dams. Nonstructural alternatives are also considered. These are two-phase projects: Study cost for the first $100,000 is 100% Federal with any amount over $100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of $10 million per project and a national program limit of $55 million.

Section 206

Aquatic Ecosystem Restoration - Water Resources Development Act of 1996, as amended by WRDA 1996

This authority provides for restoration of degraded aquatic ecosystems. A restoration project is adopted for construction only after investigation shows that the restoration will improve the environment , and/or elements and features of an estuary is in the public interest, and is cost effective. These are two-phase projects: Study cost for the first $100,000 is 100% Federal with any amount over $100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of $10 million per project.

Section 1135

Project Modification for Improvements to the Environment - Water Resources Development Act of 1986 as amended by WRDA 1996 and WRDA 1999

This authority provides for ecosystem restoration through modification to Corps structures or operation of Corps structures or implementation of restoration features when the construction of Corps projects has contributed to degradation of the quality of the environment. These are two-phase projects: Study cost for the first $100,000 is 100% Federal with any amount over $100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 75% Federal and 25% non-Federal with a Federal funding limit of $10 million per project and a national program limit of $40 million.

Section 208

Snagging and Clearing for Flood Control- Flood Control Act of 1954

This authority provides improvements for flood control by removing accumulated snags and other debris, and clearing and straightening of the channels in streams in the interest of flood control. Study cost for the first $100,000 is 100% Federal with any amount over $100,000 cost-shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a $500,000 Federal limit. This Federal cost limitation includes all project-related costs for feasibility studies, planning, engineering, construction, supervision, and administration.

Section 204

Ecosystem Restoration Projects in Connection with Dredging

Water Resources Development Act of 1992, as amended

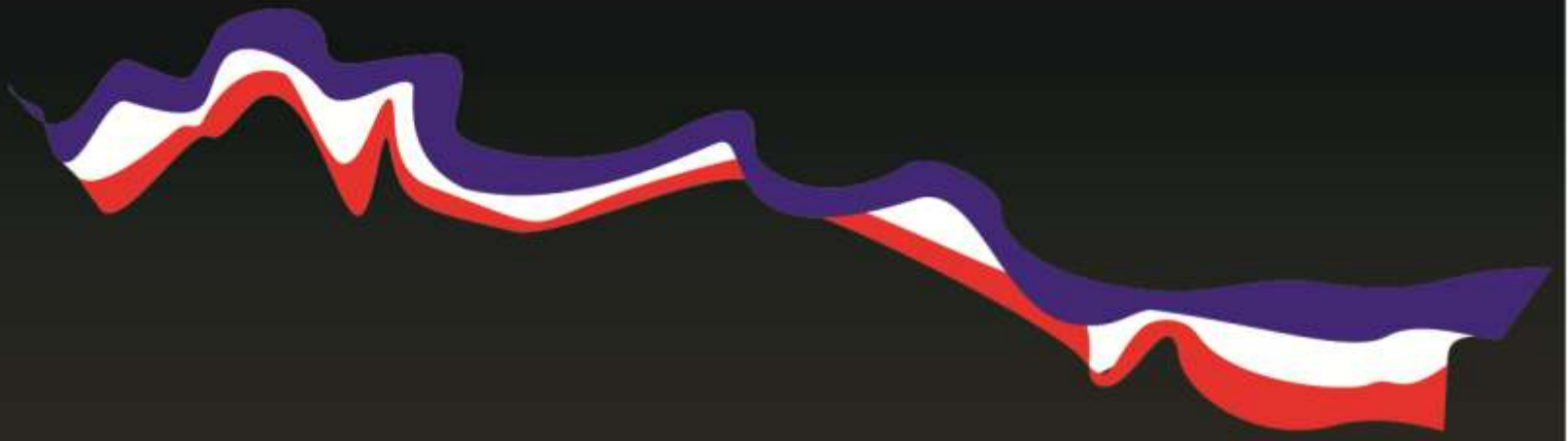
This authority provides for protection, restoration, and creation of aquatic and wetland habitats in connection with construction and maintenance dredging of an authorized project. Study cost for the first $100,000 are 100% Federal with any amount over $100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 75% Federal and 25% non-Federal with a Federal funding limit of $10 million per project and a national program limit of $50 million.

Section 111

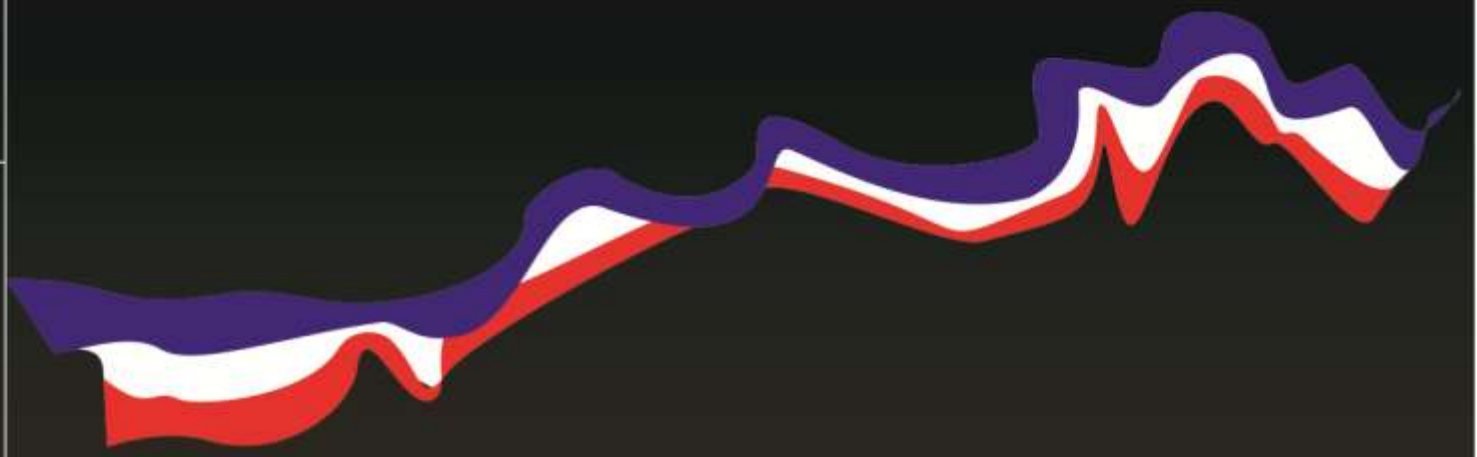
Mitigation of Shore Damages- Water Resources Development Act of 1968, as amended

This authority provides for the prevention or mitigation of erosion damages to public or privately owned shores along the coastline of the United States when these damages are a result of a Federal navigation project. This authority cannot be used for shore damages caused by river bank erosion or vessel-generated wave wash. It is not intended to restore shorelines to historic dimensions, but only to reduce erosion to the level that would have existed without the construction of a Federal navigation project. Cost sharing may not be required for this program. If the Federal cost limitation is exceeded, specific Congressional authorization is required. Study cost for first $100,000 is 100% Federal with any amount over $100,000 cost shared 50% Federal and 50% non-Federal. Implementation costs are cost-shared 65% Federal and 35% non-Federal with a Federal funding limit of $10 million per project.

O&M



O&M



OPERATION & MAINTENANCE

OR O&M

The Operation and Maintenance program focuses on the need to preserve the existing Civil Works Infrastructure such as locks, dams, navigation channels, recreation facilities and provide adequate levels of service.

DeGray Lake, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
DeGray Lake, AR

River and Harbor Act of 1950, and Water Supply Act of 1958, as amended by Federal Water Pollution Control Act of 1961

Operation and Maintenance (FRM, HYD, REC, ENS)

Location: DeGray Lake is located on the Caddo River in Clark and Hot Spring Counties, AR, northwest of Arkadelphia, AR.

Description: The project consists of an earth-fill dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 495,100 acre-feet. The power plant has a generating capacity of 68,000 kilowatts. There is a re-regulating pool below the main dam for water supply storage and pumped-storage power generation. Storage capacity is 495,100 acre-feet. Eighteen campgrounds and recreation areas are located on the project. Annual public visitation to the project is approximately 3,000,000.

Issues: Routine operation and maintenance activities are on-going at reduced levels. Campground availability will be the same as FY 14.

Importance: DeGray Lake is an economic engine for the local and regional area. The lake produces in excess of $15 million in direct economic benefits to the area while directly supporting over 262 jobs in the region. In FY 14 DeGray Power Plant generated 77,158 megawatt-hours of hydroelectric power and since being placed in operation, has produced gross revenues of over $97.0 million. Hydropower production, outdoor recreation opportunities, and extensive flood damage reduction enhance the direct regional benefits derived from this project.

Risk: The current funding amounts will have a minor impact to levels of service for visitors and will slightly delay routine maintenance. Overall, the project risks are minimal.

Consequence: Visitor assistance activities, enforcement of Rules and Regulations, environmental stewardship and natural resource protection activities will continue at reduced levels due to lack of adequate staff to accomplish those duties and meet program objectives. Loss of strategic support of programs and community partnerships will deteriorate positive relationships that have proven to leverage Federal dollars at a rate of 5 to 1 for project initiatives and benefit.

DeGray Dam and Lake

Activities for FY 15: Funds are being used for routine operation and maintenance of the project and maintain the same level of recreation service as in FY 14.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: Budgeted funds of $6,121,000 will be used for routine operation and maintenance of the project and maintain same level of recreation service and campground availability as in FY 15. Additional funds in the amount of $6,813,000 could be used for high water debris cleanup ($350,000), rehab flood gate ($168,000), P&S to repair intake cylinder gate ($148,000), replace office building ($2,300,000), removal of trees, root balls on dam and dike ($250,000), coordinate and negotiate water supply agreements ($20,000), recreation management ($1,386,000), replacement of expansion joints ($75,000), and backlog maintenance efforts ($2,119,000).

Project Sponsor/Customer: N/A

Congressional Interest: Senate: Boozman and Cotton (AR); House: Westerman (AR-4).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
O&M	$5,780,700	$6,121,000	$12,934,000

DeGray Lake, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet

DeGray Lake Water Storage Agreements

Water Supply Act of 1958 (Public Law 85-500, Title III)

Operation and Maintenance (WS)

Location: DeGray Lake is located in the Ouachita River Watershed is located in Arkansas.

Description: Water Supply is a project purpose for DeGray Lake under the provisions of the Water Supply Act of 1958 (Public Law 85-500, Title III), as amended by Public Law 87-88, Section 10. Although DeGray Lake is authorized for both hydropower and water supply, it was not originally designed to withdraw water from the upper pool. The withdrawal of water for water supply was to be from the reregulation pool below the dam. However, in 1992, MVK executed a water storage agreement with Kimzey Regional Water District, setting precedence to withdraw water from the upper combined hydropower/water supply pool. MVK's current position has previously been that all subsequent water supply agreements follow the precedence set by the Kimzey agreement and if water is withdrawn from the upper combined hydropower/water supply pool at DeGray Lake, the sponsor must pay hydropower benefits forgone. If the sponsor decides to withdraw water from the lower regulating pool, there would be no payments due for benefits forgone. The Water Supply MCX reviewed the agreement and determined that the practice of charging hydropower benefits foregone in a joint use pool and the calculations laid out in the Kimzey agreement (Kimzey is currently withdrawing water from the main pool) did not follow current water supply policy.

Issues: Hot Springs and Central Arkansas Water want to withdraw water from the main pool and not the reregulation pool. There is not clear guidance on how to execute these agreements.

Importance: These agreements are for future storage. Ouachita River Water District (ORWD), according to the 1988 Memorandum of Understanding (MOU), has the Right of First Refusal and has been paying the interest on the initial construction costs. Central Arkansas Water has been paying ORWD for the Right of First Refusal on 120 mgd of the 152 mgd. The MOU is for 50 years from the first water storage agreement (1992). Central Arkansas Water has let it be known that they intended to withdraw from the upper pool from the beginning.

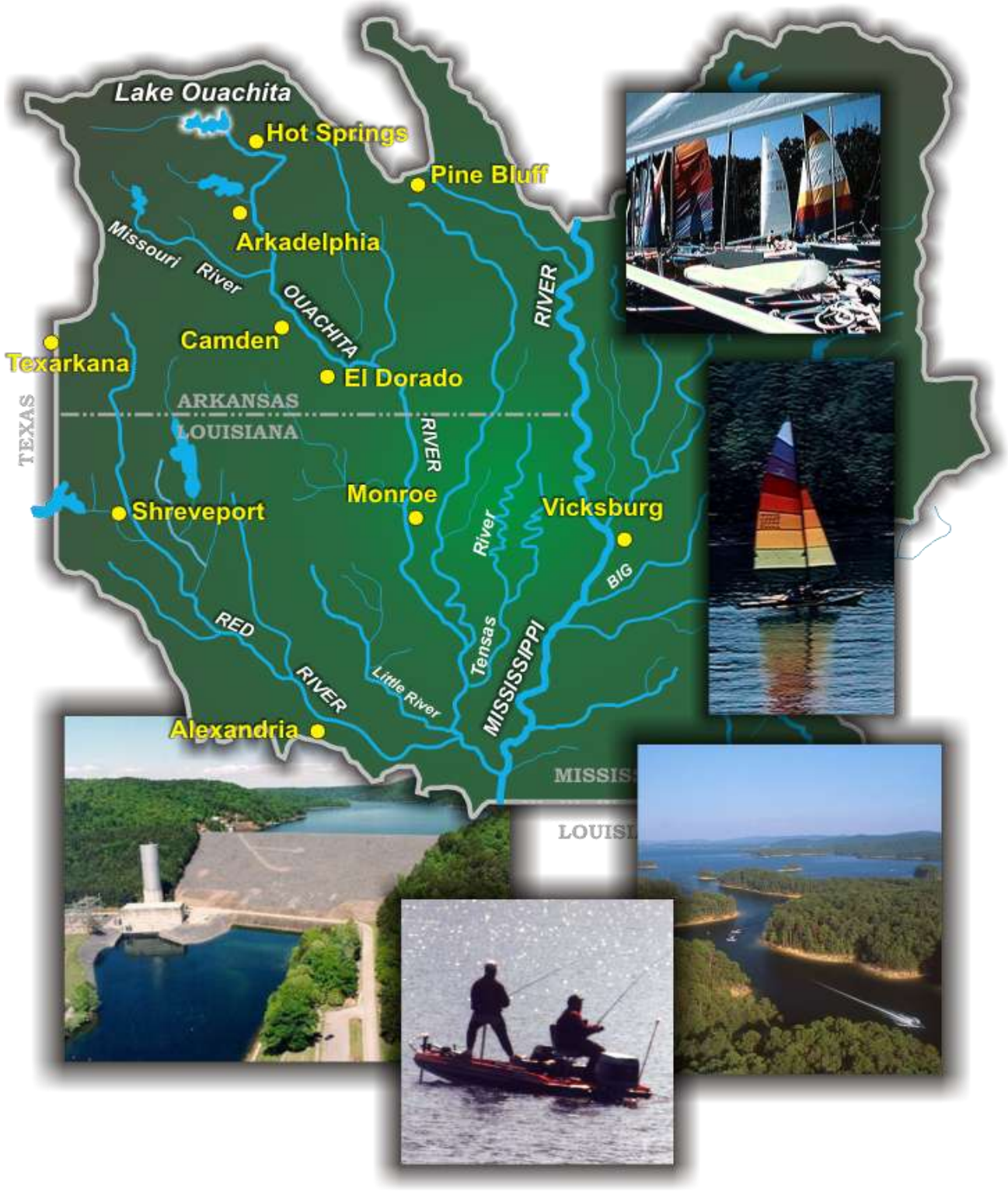
Risk: If the water storage agreement is not executed, then ORWD will be responsible for the construction costs for 120 MGD.

Activities in FY15: Continue to seek a solution to execute water storage agreements within current policy.

FY 16 Capabilities: Coordinate and negotiate water supply agreements ($20,000)

Project Sponsor/Customer: Ouachita River Water District (ORWD)

Congressional Interest: Senate: Boozman and Pryor (AR), House: Cotton (AR-04)



Blakely Mountain Dam
and Lake Ouachita, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Blakely Mountain Dam/Lake Ouachita, AR

Flood Control Act of 1944, Section 10

Operation and Maintenance (FRM, HYD, REC, ENS)

Location: Blakely Mountain Dam/Lake Ouachita is located on the Ouachita River in Garland and Montgomery Counties, Arkansas, west of Hot Springs, Arkansas.

Description: The project consists of earth-fill dam, power plant, and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity is 2,768,000 acre-feet. The power plant has a generating capacity of 75,000 kilowatts. There are 22 campgrounds and recreation areas on the project. Annual public visitation to the project is approximately 4,500,000.

Issues: Routine operation and maintenance activities are on-going at reduced levels. Campground availability will be the same as FY 14.

Importance: Blakely Mountain Dam/Lake Ouachita is an economic engine for the local and regional area. The lake produces in excess of $17 million in direct economic benefits to the area while directly supporting over 309 jobs in the region. In FY 14, Blakely Mountain Power Plant generated 179,149 megawatt-hours of hydroelectric power and since being placed in operation, has produced gross revenues of over $146.0 million. Hydropower production, outdoor recreation opportunities, and extensive flood damage reduction enhance the direct regional benefits derived from this project.

Risk: The current funding amounts may have a minor impact to levels of service for visitors and may slightly delay routine maintenance. Overall, the project risks are minimal.

Consequence: Visitor assistance activities, enforcement of Rules and Regulations, environmental stewardship and natural resource protection activities will continue at reduced levels due to lack of adequate staff to accomplish those duties and meet program objectives. Loss of strategic support of programs and community partnerships will deteriorate positive relationships that have proven to leverage Federal dollars at a rate of 5 to 1 for project initiatives and benefit.

Blakely Mountain Dam and Lake Ouachita

Activities for FY 15: Funds are being used for routine operation and maintenance for the project and maintain same level of recreation service and campground availability as in FY 14.

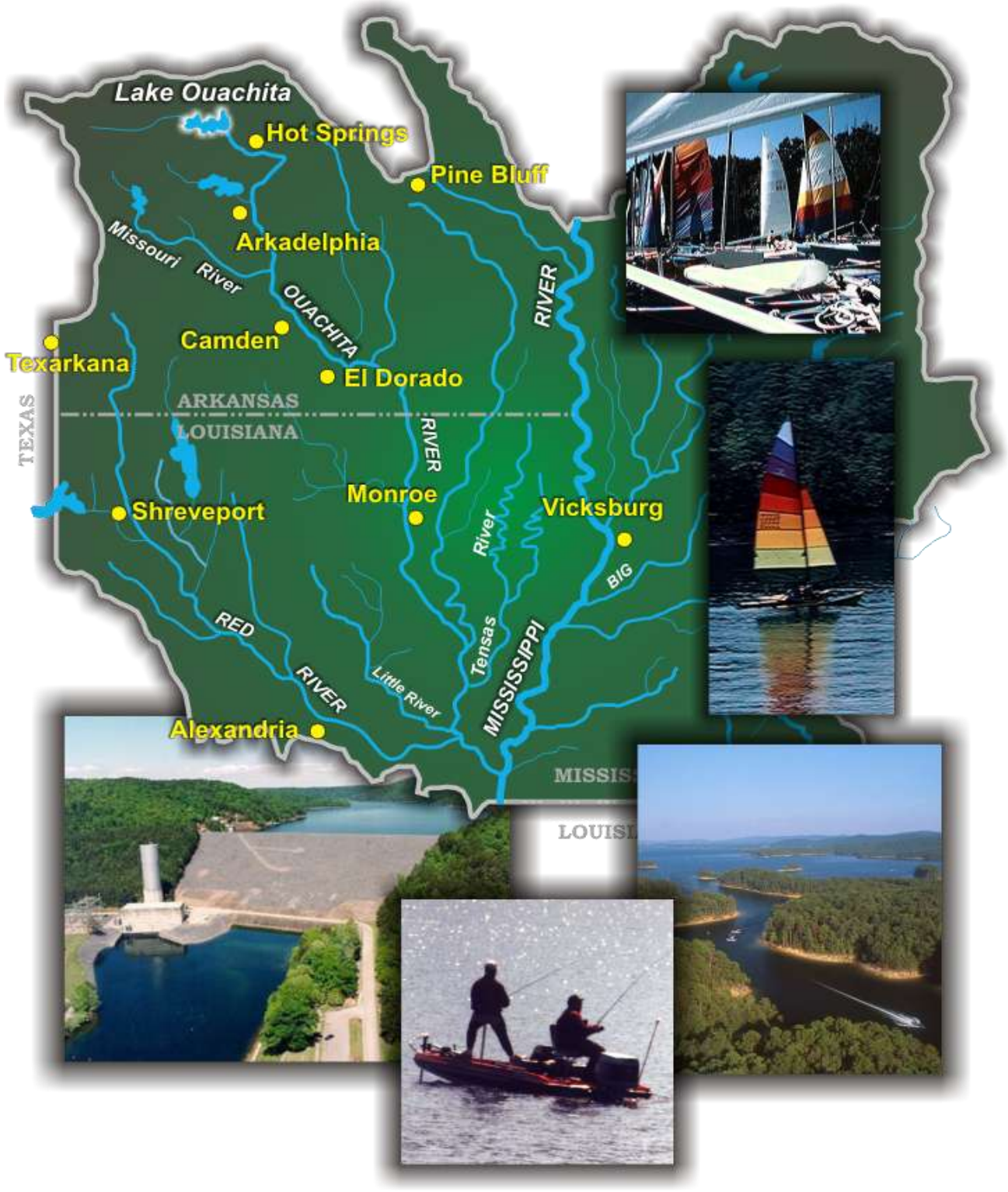
Acquisition Strategy: No contracts are scheduled for award in FY15.

Amount That Could Be Used in FY 16: Budgeted funds of $7,513,000 will be used to continue routine operations and maintenance. Additional funds in the amount of $11,201,000 could be used for high water debris cleanup ($900,000), provide station power from Blakely Mtn Dam to Ouachita Project Office ($1,673,000),transfer from commercial power grid service at Greeson, Ouachita, DeGray Project Office ($650,000), replace water lines ($33,000), replace water treatment plant ($300,000) upgrade water, wastewater and electrical systems ($350,000), dam maintenance ($57,000), and backlog maintenance items ($7,238,000).

Project Sponsor/Customer: N/A

Congressional Interest: Senate: Boozman and Cotton (AR); House: Westerman (AR-4).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
O&M	$7,587,400	$7,513,000	$18,714,000



Blakely Mountain Dam
and Lake Ouachita, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Lake Ouachita Water Storage Reallocation

Flood Control Act of 1944, Section 10

Operation and Maintenance (FRM, HYD, REC, ENS)

Location: Blakely Mountain Dam/Lake Ouachita is located on the Ouachita River in Garland and Montgomery Counties, Arkansas, west of Hot Springs, Arkansas.

Description: The project's specifically authorized purposes are flood control and hydropower. The project consists of earth-fill dam, power plant, lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity is 2,768,000 acre-feet at the top of the flood control pool. The reservoir covers approximately 48,300 acres at the top of the flood control pool and captures runoff from 1,105 square miles of drainage area above the dam.

Water storage reallocation studies were suspended in May 2011 due to a shortage of O&M funds. Approval was received to accept contributed funds in the amount of $150,000 to complete the study. An MOA for the acceptance of $150,000 was executed in FY13. Study was complete in FY15.

Issues: No current issues.

Importance: Mid Arkansas Water Alliance (MAWA) is comprised of 27 water systems in the state which represent approximately one-fourth of the state's population. Therefore, storage reallocation at Lake Ouachita is extremely important to the State of Arkansas, in particular, central Arkansas. Economic growth and social well-being are dependent upon adequate supplies of fresh water.

Risk: Lack of fresh water in central Arkansas to sustain economic and population growth. Water supply for the city of Hot Springs is especially critical.

Consequence: Economic growth will be curtailed in central Arkansas due to a lack of available fresh water.

Blakely Mountain Dam and Lake Ouachita

Activities for FY 15: The reallocation report will be complete with review by 30 October and out for public review in November.

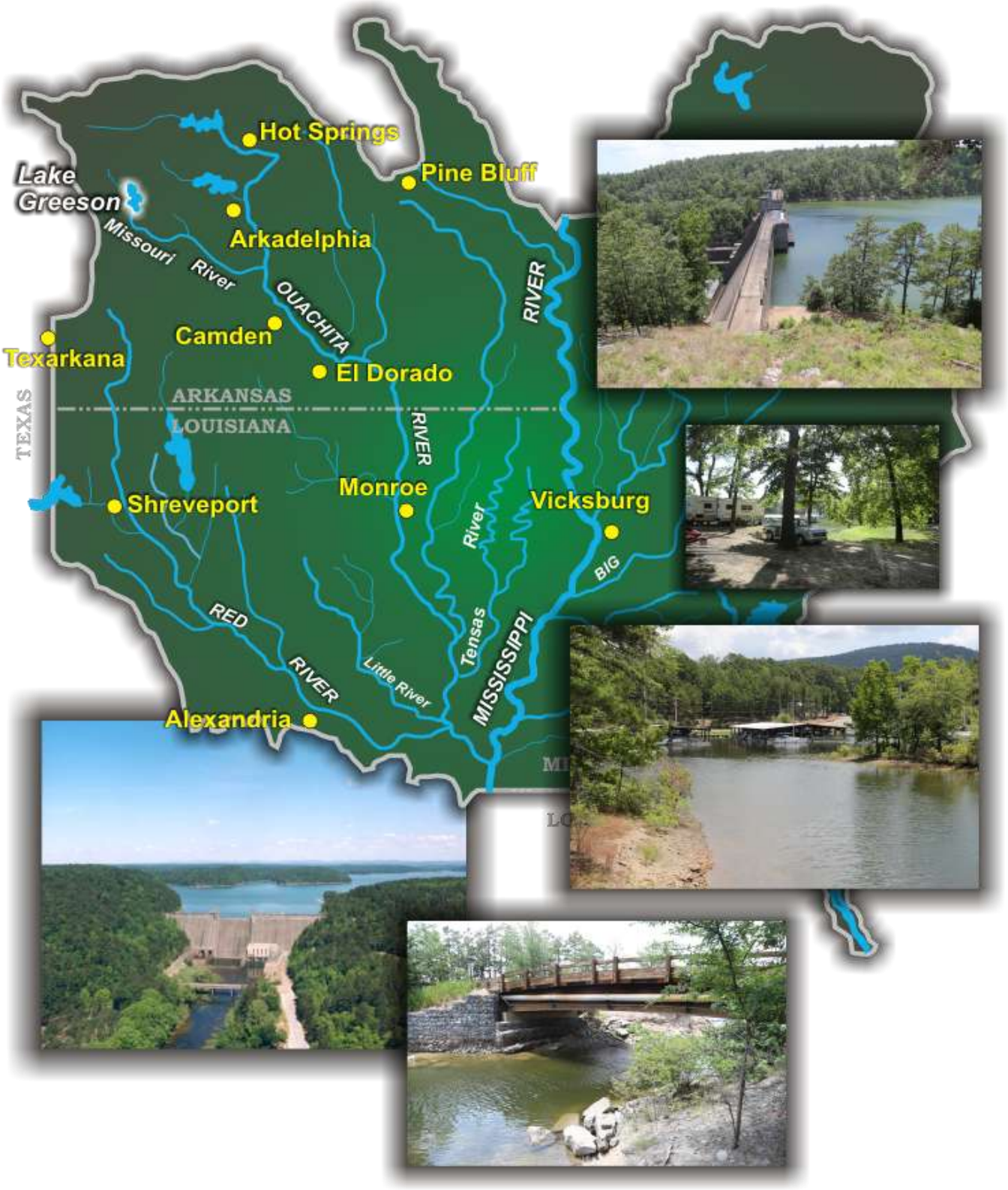
Acquisition Strategy: No contracts are scheduled to be awarded.

Amount That Could Be Used in FY 16: Study to be completed in FY 16. Additional funds could be used to coordinate new water supply agreements ($5,000).

Project Sponsor/Customer: Mid Arkansas Water Alliance

Congressional Interest: Senate: Boozman and Pryor (AR); House: Griffin (AR-02) and Cotton (AR-4).

Phase	FY 13 Allocation	FY 15 Budget	FY 15 Total Capability	FY 16 Budget	FY 16 Total Capability
O&M	$50,000	$0	0	$0	$5,000



Narrows Dam
and Lake Greeson, AR

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Narrows Dam/Lake Greeson, AR

Flood Control Act of 1944

Operation and Maintenance (FRM, HYD, REC, ENS)

Location: Narrows Dam/Lake Greeson is located on the Little Missouri River in Pike County, AR, north of Murfreesboro, AR.

Description: The project consists of a concrete dam, power plant and lake for hydropower generation, flood control, recreation, water supply, and natural resources management. Storage capacity of the lake is 407,000 acre-feet. The power plant has a generating capacity of 25,500 kilowatts. There are 16 campgrounds and recreation areas on the project. Annual public visitation to the project is approximately 2,000,000.

Issues: Routine operation and maintenance activities are on-going at reduced levels. Campground availability will be the same as FY 14.

Importance: Narrows Dam/Lake Greeson is an economic engine for the local and regional area. The lake produces in excess of $6 million in direct economic benefits to the area while directly supporting over 114 jobs in the region. In FY 14 Narrows Power Plant generated 39,350 megawatt-hours of hydroelectric power and since being place in operation, has produced gross revenues of over $44.0 million. Hydropower production, outdoor recreation opportunities and extensive flood damage reduction enhance the direct regional benefits derived from this project.

Risk: The current funding amounts will have a minor impact to levels of service for visitors and will slightly delay routine maintenance. Overall, the project risks are minimal.

Consequence: Visitor assistance activities, enforcement of Rules and Regulations, environmental stewardship and natural resource protection activities will continue at reduced levels due to lack of adequate staff to accomplish those duties and meet program objectives. Loss of strategic support of programs and community partnerships will deteriorate positive relationships that have proven to leverage Federal dollars at a rate of 5 to 1 for project initiatives and benefit.

Narrows Dam/Lake Greeson

Activities for FY 15: Funds are being used for routine operations and maintenance, to maintain same level of service and campground availability as in FY 14, and initial investigation and repair to dam trash rack failure.

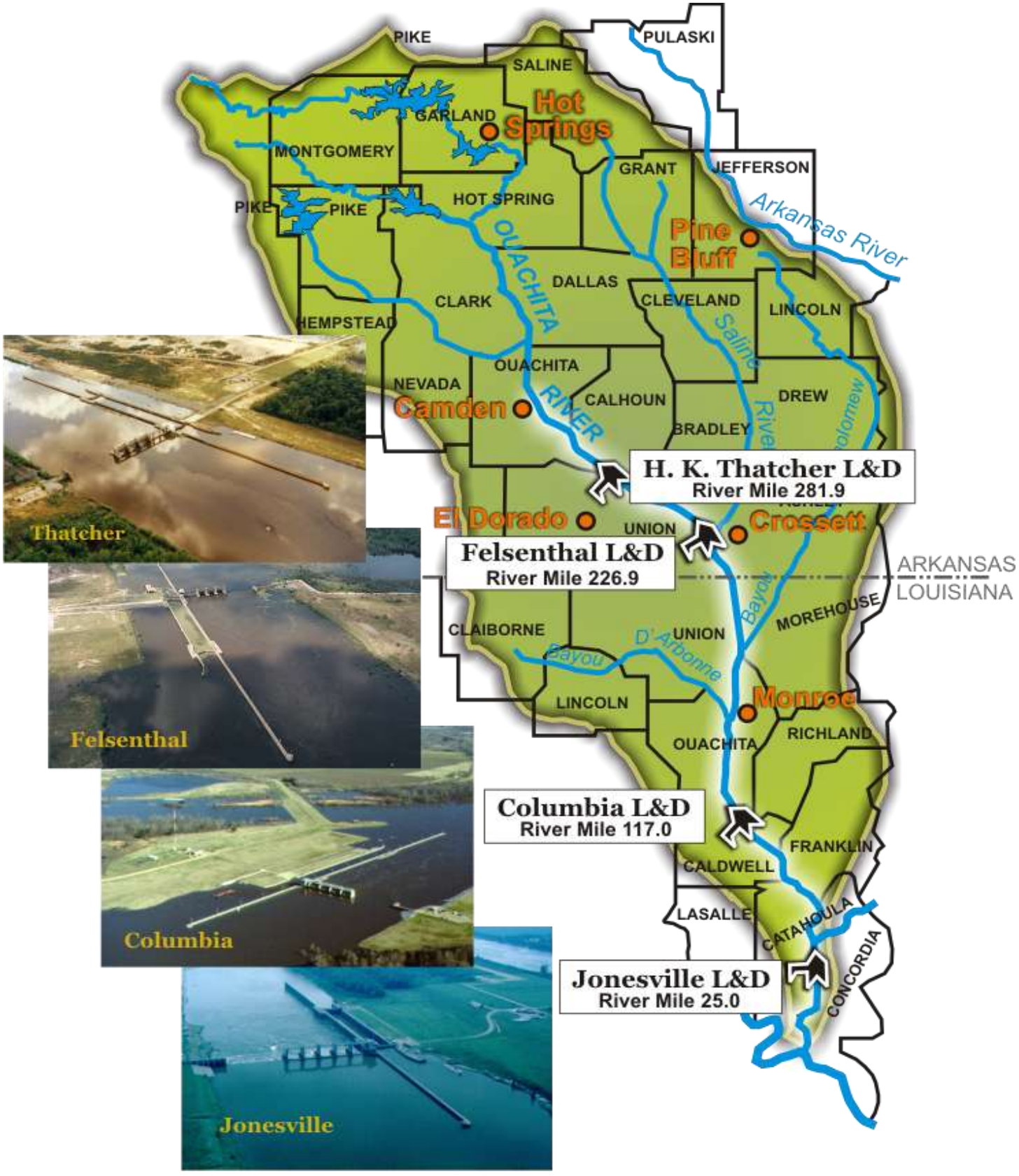
Acquisition Strategy: No contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: Budgeted funds of $8,975,000 will be used for routine operation and maintenance and maintain same level of service and campground availability as in FY 15, and also upgrade to transformer/switchyard. Additional funds in the amount of $2,853,000 could be used for high water debris cleanup ($400,000); monitor dam and related facilities ($346,000) prepare P&S for trash rack repair ($200,000); replace roofs on shower buildings ($48,000); road paving ($300,000); barge replacement/repair ($75,000); replace underground electric lines ($55,000); forest management activities ($80,000); rehabilitate campsites ($600,000); replace project signs ($180,000); update Emergency Action Plan ($102,000); and backlog maintenance items ($467,000).

Project Sponsor/Customer: N/A

Congressional Interest: Senate: Boozman and Cotton (AR); House: Westerman (AR-4).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
O&M	$5,622,000	$8,975,000	$11,828,000



Ouachita-Black Navigation Project

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Ouachita-Black Navigation Project, AR & LA

River and Harbor Act of 1950 as modified by River and Harbor Act of 1960

Operation and Maintenance (NAV, FRM, REC, ENS)

Location: The project for navigation on the Ouachita/Black Rivers extends 366 miles from the mouth of the Black River to Camden, Arkansas.

Description: The project provides for a 9- by 100-foot navigation channel and also includes a diversion channel through Catahoula Lake near Jonesville, Louisiana, for ecological reasons.

Issues: Uncertainty of sufficient annual dredging funding has adverse economic impacts to the navigation system and the users of the waterway. Failure to maintain the authorized depth for much of the year required shippers to light load or cease commercial navigation operations.

Importance: Recent river trends have shown a higher need for dredging at the approaches to the locks. Without dredging the lock approaches, the locks may become inaccessible affecting 32 companies and 18 shippers. Industries use the project to transport commodities such as calcium chloride, calcium bromide, and farm products, and gasoline; commercial fishermen and the public recognize the project as an important economic resource. FY13 commercial tonnage was 1,104,858.

Risk: Without dredging, the project will have less than authorized project depth for much of the year requiring shippers to light load or cease commercial navigation operations. Navigation could be closed, causing private sector workforce layoffs, along with traffic congestion and product price increases.

Consequence: Loss of navigation would have significant adverse economic impacts to the region. Significant private sector workforce layoffs would occur. Approximately 28,000 private sector jobs with an annual payroll of $325,000,000 are connected to the Ouachita-Black. Navigation above river mile 281 would be closed in the event lock chamber repairs are required at H. K. Thatcher.

Activities for FY 15: Funds are being used to perform dredging, operate and maintain the locks and dams, repairs to gates, operate the system at reduced hours in accordance with Inland Marine Transportation System (IMTS), design, purchase and installation of a system for remote operation of tainter gates on two locks and dams (Felsenthal and Thatcher) and recreation activities.

Ouachita/Black River

Acquisition Strategy: A contract for dredging was awarded

Amount That Could Be Used in FY 16: Budgeted funds of $8,076,000 will be used to perform minimal dredging, operate and maintain the locks and dams, natural resource management, real estate management, and update master plan. Additional funds in the amount of $6,178,000 could be used fully fund dredging ($2,000,000); maintenance on tainter gates ($1,600,000); raise customer service to desirable levels for the visiting public and local residents and repair/update recreation areas ($2,000,000); replace ladders, handrails, and miter gates ($421,000); backlog maintenance items ($157,000).

Project Sponsor/Customer: Ouachita River Valley Association

Congressional Interest: Senate: Boozman and Cotton (AR), Vitter and Cassidy (LA); House: Westerman (AR-4) and Abraham (LA-5).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
O&M	$11,638,200	$8,076,000	$14,254,000

Yellow Bend Port, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Yellow Bend Port, AR

River and Harbor Act of 1960, Section 107

Operation and Maintenance (NAV)

Location: Yellow Bend Port is an inland port on the Mississippi River, located in Desha County, AR.

Description: It was constructed in 1960 and has been maintained annually. The main channel is 1,500 feet long by 140 feet wide and the turning basin is 800 feet long by 300 feet wide. Both channels are maintained at a minimum depth of 9 feet.

Issues: Depending on river stages, the harbor experiences low-water conditions starting in July and lasting through November of each year. Maintenance dredging allows this port to continue shipping during these stages..

Importance: The port meets transportation needs for water-oriented industry in Desha and Chicot Counties, AR. FY13 commercial tonnage was 477,221.

Risk: Without maintenance dredging funds, this port will lose project dimensions requiring the port to be shut down during the busiest time of the year when crops are harvested and shipped. If not dredged, the economic impact at the port would be $600,000 and an estimated $4,200,000 economic impact to the region. The port is currently obtaining permits to construct a rail system which would increase its annual tonnage to over 1 million tons.

Consequence: This port services many small communities and farmers in the Arkansas delta. The loss of navigation will have significant adverse economic impacts on the region.

Yellow Bend Port

Activities for FY 15: Funds are being used for surveys and maintenance dredging of the Port.

Acquisition Strategy: A contract was awarded for all harbor and port dredging.

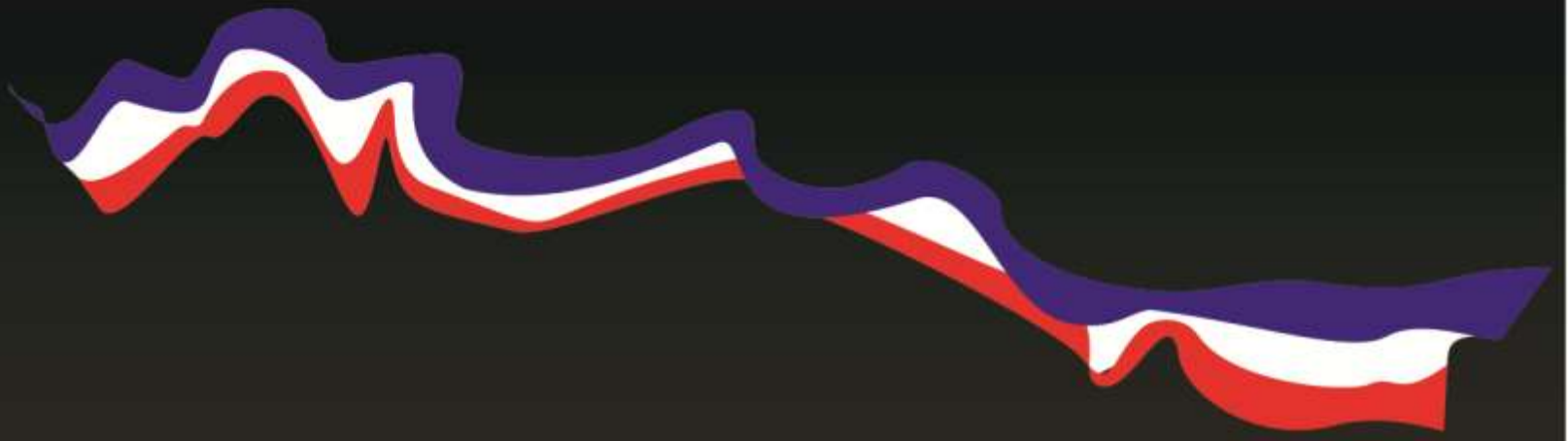
Amount That Could Be Used in FY 16: Budgeted funds of $3,000 will be used for surveys. Additional funds in the amount of $112,000 could be used to fund maintenance dredging.

Project Sponsor/Customer: Yellow Bend Port

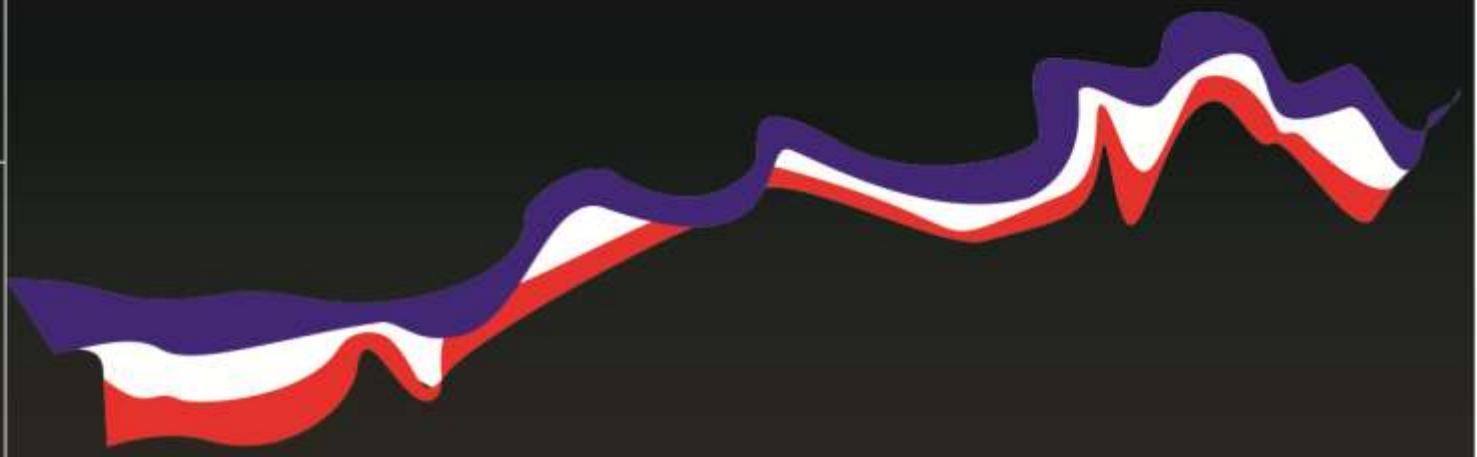
Congressional Interest: Senate: Boozman and Cotton (AR); House: Westerman (AR-4).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
O&M	$395,500	$3,000	$115,000

MR&T INVESTIGATIONS



MR&T INVESTIGATIONS



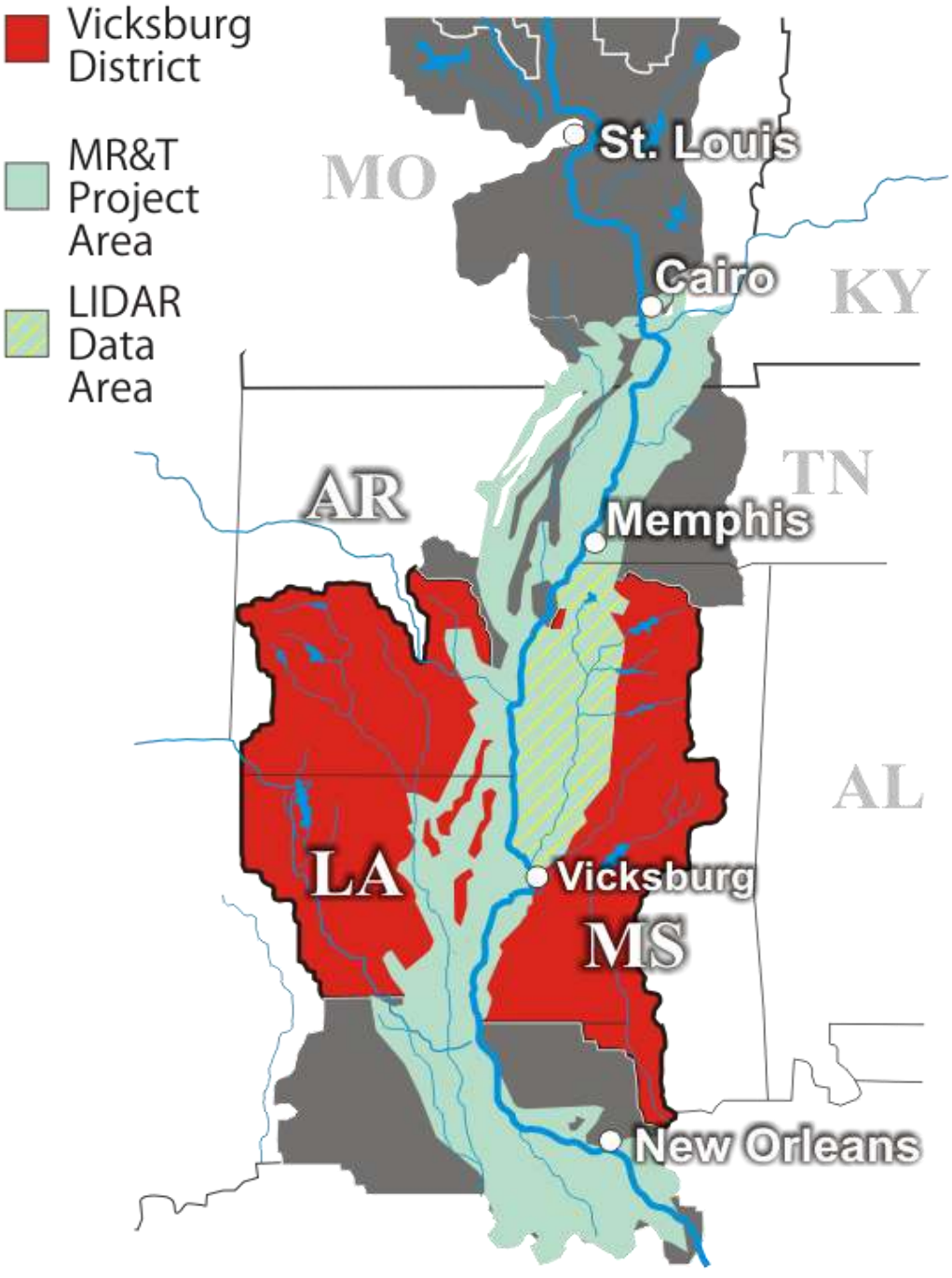
MR&T INVESTIGATIONS

The major objective of the MR&T Investigations program is to study projects that provide solutions to water resource problems for the area within the MR&T authorized project, generally from the area along the Mississippi River from Cairo, IL, to the Gulf of Mexico. The Corps undertakes studies in response to directives (authorizations) from Congress. Congressional authorizations are contained in public law and in resolutions of either the House Public Works and Transportation Committee or the Senate Environment and Public Works Committee.

In the past, studies were conducted in two phases - reconnaissance and feasibility. WRDA 2014 revised the implementation for studies to: feasibility phase; cost no more than $3 million (Federal and non-Federal) and have 3 levels of vertical coordination.

The report results in recommendations to Congress for or against Federal participation in solutions to the water resource problem and opportunities identified in the study. A recommendation for Federal participation identifies a recommended plan/project, generally for construction authorization and funding.

The Preconstruction, Engineering and Design Studies (PED) phase of project development encompasses all planning and engineering necessary for project construction, after release of the report and Division Engineer's public notice on a favorable study. Preparation of design memorandums and plans and specifications will be cost shared in accordance with the cost sharing required for project construction.



Collection and Study of Basic Data, Mississippi

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Collection and Study of Basic Data, AR, LA, MS, IL, TN, MO, KY

Flood Control Acts of 1928, Sections 1, 2, 3, and 10

Mississippi River and Tributaries, Investigations (FRM)

Location: The Collection and Study of Basic Data project is located throughout the Mississippi Valley Division.

Description: Data collected consist of information on stream flow, sediments and nutrients, rainfall, floods, water quality and quantity, aquatic resource monitoring and other items of related hydrologic nature. Regional investigations of flowline issues along with geomorphic and potamology (G&P) issues that arose from 2011 flood must be reviewed.

Issues: Data collected under this activity are for authorized flood control projects for which funds have been appropriated in the Memphis, Vicksburg, and New Orleans Districts. Data are used by numerous agencies and the public to determine when flooding will occur and to plan for any evacuations. In addition, the Environmental Protection Agency and state environmental quality agencies are now recognizing water quality and quantity as critical elements in environmental protection planning and construction. Aquatic resources are a good indication of the water quality and quantity of a particular stream. These data are vital to show projects are in conformance with state and Federal laws.

Importance: Data collection is essential in the planning, design, construction, and operation and maintenance of authorized flood control projects, especially significant after the Flood of 2011. The hydraulic and hydrologic data are being reviewed for how the MR&T system performed during the 2011 flood, evaluate any needed changes in the flowline/water management of the system, and identify areas/reaches in which the current 1976 Refined Project Flood Flowline may need revision. G&P issues are directly related to the flowline and future operation of the system.

Risk: Without adequate funding, the Mississippi River Commission would lose the ability to make accurate flood predictions and to determine whether the project flowline is correct to provide Project Design Flood protection to the Valley as directed by Congress. G&P studies must continue due to changes observed during the 2011 Flood and for utilization in long term management.

Consequence: If essential hydraulic and hydrologic and water quality data could not be collected and therefore data would not be available to accurately predict future flood and drought conditions on major rivers within the Lower Mississippi Valley.

Activities for FY 15: Funds are being used to collect essential basic data used in planning and design of authorized flood control projects. Funds are also being used for aquatic and water quality and quantity monitoring; conduct regional review of numerous Hydraulic and Hydrologic data, flowline, sedimentation and G&P related issues and/or concerns that were discovered during the 2011 flood.

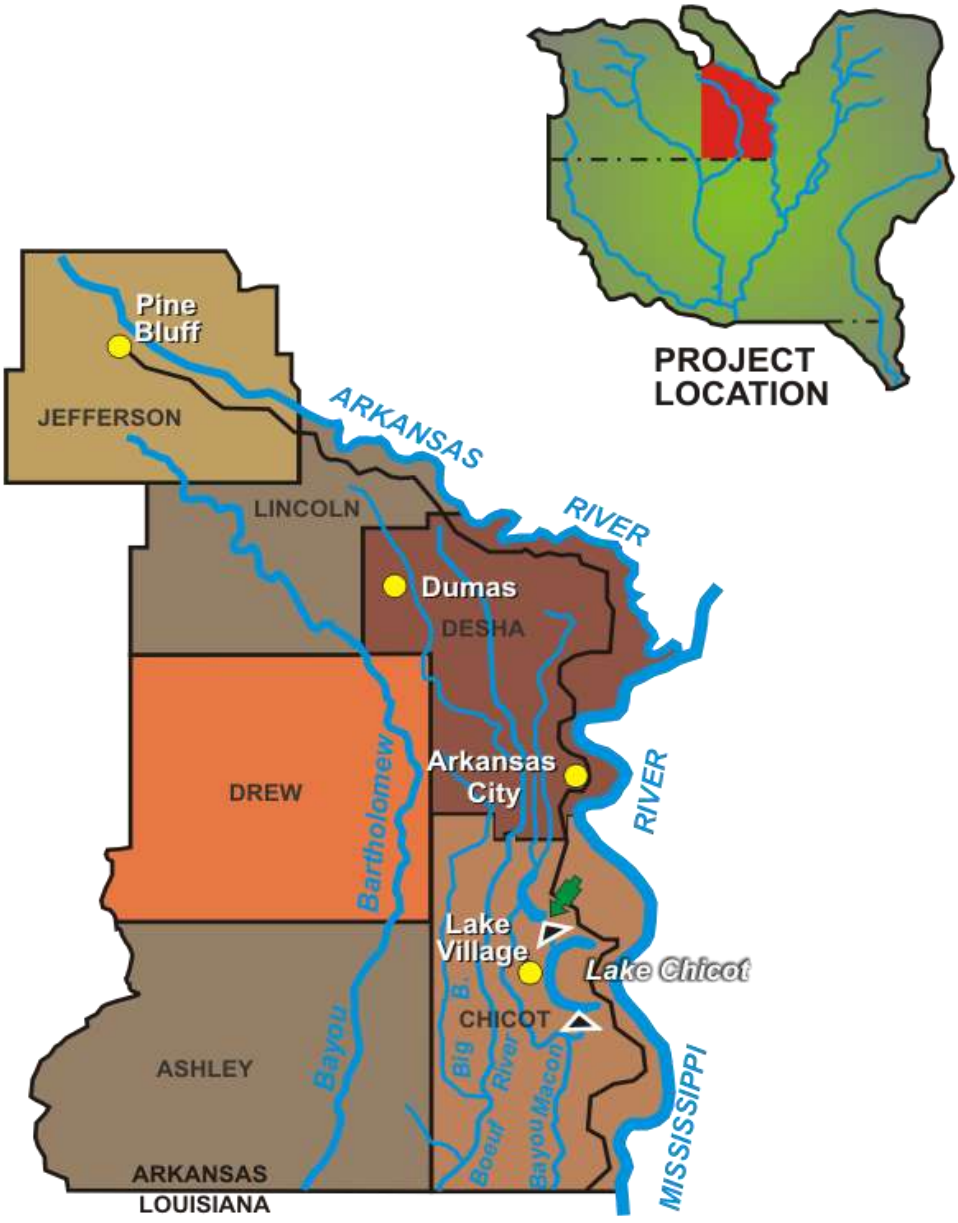
Acquisition Strategy: No construction contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: Budget funds of $9,334,000 will utilized to continue the Regional flowline ($5,000,000) and G&P studies ($4,034,000), and $300,000 will be used to collect basic steam flow data. Additional funds of $2,600,000 could be utilized for stream flow data, measurements and archive existing data ($2,000,000) water quality and quantity and aquatic monitoring ($600,000).

Project Sponsor/Customer: Levee boards along the Mississippi River from Cape Girardeau, Missouri to Head of Passes, Louisiana.

Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Vitter (LA), Cochran and Wicker (MS), Alexander and Corker (TN), McConnell and Rand (KY), Blunt and McCaskill (MO), and Durbin and Kirk (IL); House: Crawford (AR-1), Westerman (AR-4), Scalise (LA-1), Fleming (LA-4), Abraham (LA-5), TBD (MS-1), Thompson (MS-2), Fincher (TN-8), Cohen (TN-9), Whitfield (KY-11), Smith (MO-8), and Bost (IL-12).

Phase	Estimated Federal Cost of Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Feasibility	N/A	$9,280,000	$9,334,000	$11,934,000



Southeast Arkansas, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Southeast Arkansas, AR

Resolution of the Senate Committee on Environment and Public Works adopted 23 June 1988

Mississippi River and Tributaries, Investigations (FRM)

Location: The Southeast Arkansas, AR, project area includes the Boeuf-Tensas and Bayou Bartholomew Basins of southeast Arkansas. Counties included are Jefferson, Lincoln, Drew, Ashley, Chicot, and Desha.

Description: The study is addressing current flooding, ecosystem restoration and water supply problems and needs throughout the 1.2-million-acre watershed.

Issues: Flooding between November 1982 and January 1983 caused damages in excess of $47 million to approximately 1,170,000 acres of primarily agricultural lands in the Boeuf-Tensas Basin. Significant ecosystem restoration opportunities have been identified since completion of the reconnaissance report. Extensive multipurpose water use has induced ground-water reduction and salt water intrusion in the area. Flood damage reduction and ecosystem restoration are in the Federal interest and justify continuation of this important effort.

Importance: Prolonged periods of inundation are causing infrastructure, agricultural, and environmental damages within the study area. In addition to those damages, future agricultural water supply needs could be in jeopardy without additional water supply options and this could cause land use to convert from agriculture to non-agricultural uses.

Risk: There are approximately 430,000 acres of agricultural lands currently flooded by the existing 100-year flood event.

Consequence: Significant economic impacts would be felt with another major flood event.

Activities for FY 15: An amendment to the Feasibility Cost sharing Agreement (FCSA) is being negotiated with the Sponsor to include the contributed funds in the amount of $300,000 to study the additional alternative requested by the sponsor.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 16.

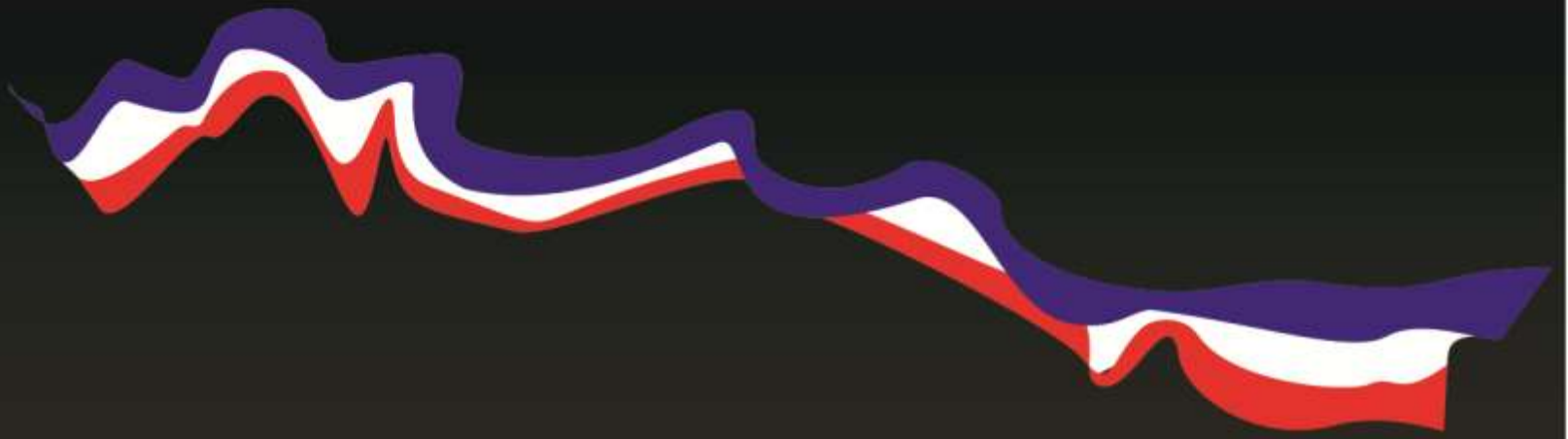
Amount That Could Be Used in FY 16: Contributed funds will be used to formulate a multi-purpose alternative including water supply on Canal 19.

Project Sponsor/Customer: Arkansas Natural Resources Commission and Boeuf-Tensas Regional Irrigation Water Distribution District

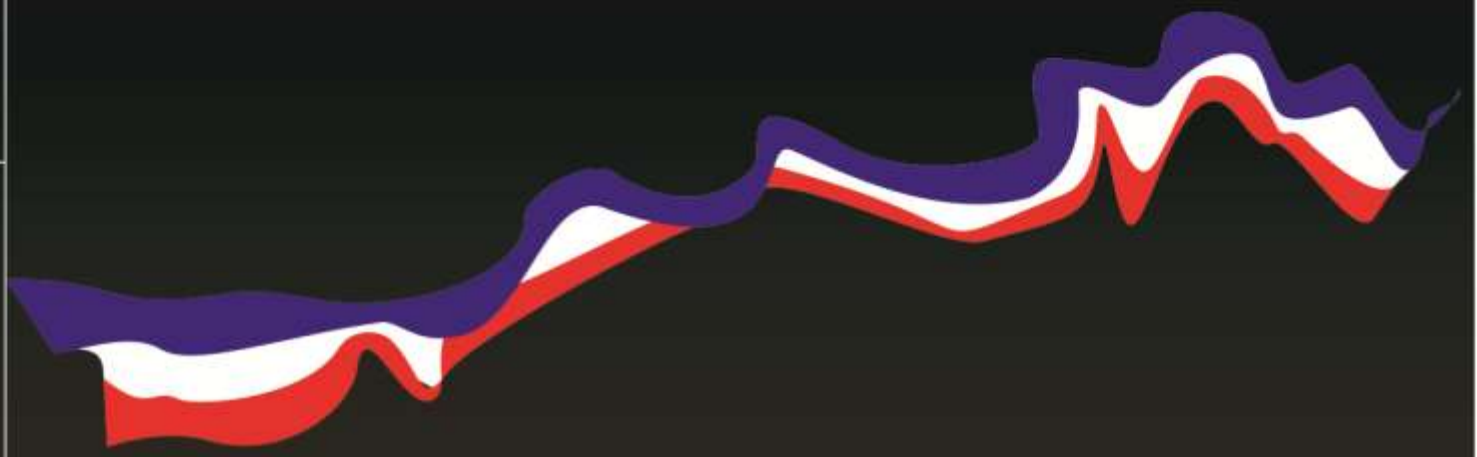
Congressional Interest: Senate: Boozman and Cotton(AR); House: Westerman (AR-4) and Crawford (AR-1).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY 14	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Feasibility	$5,653,000	$4,936,000	$0	$0	$0

MR&T CONSTRUCTION

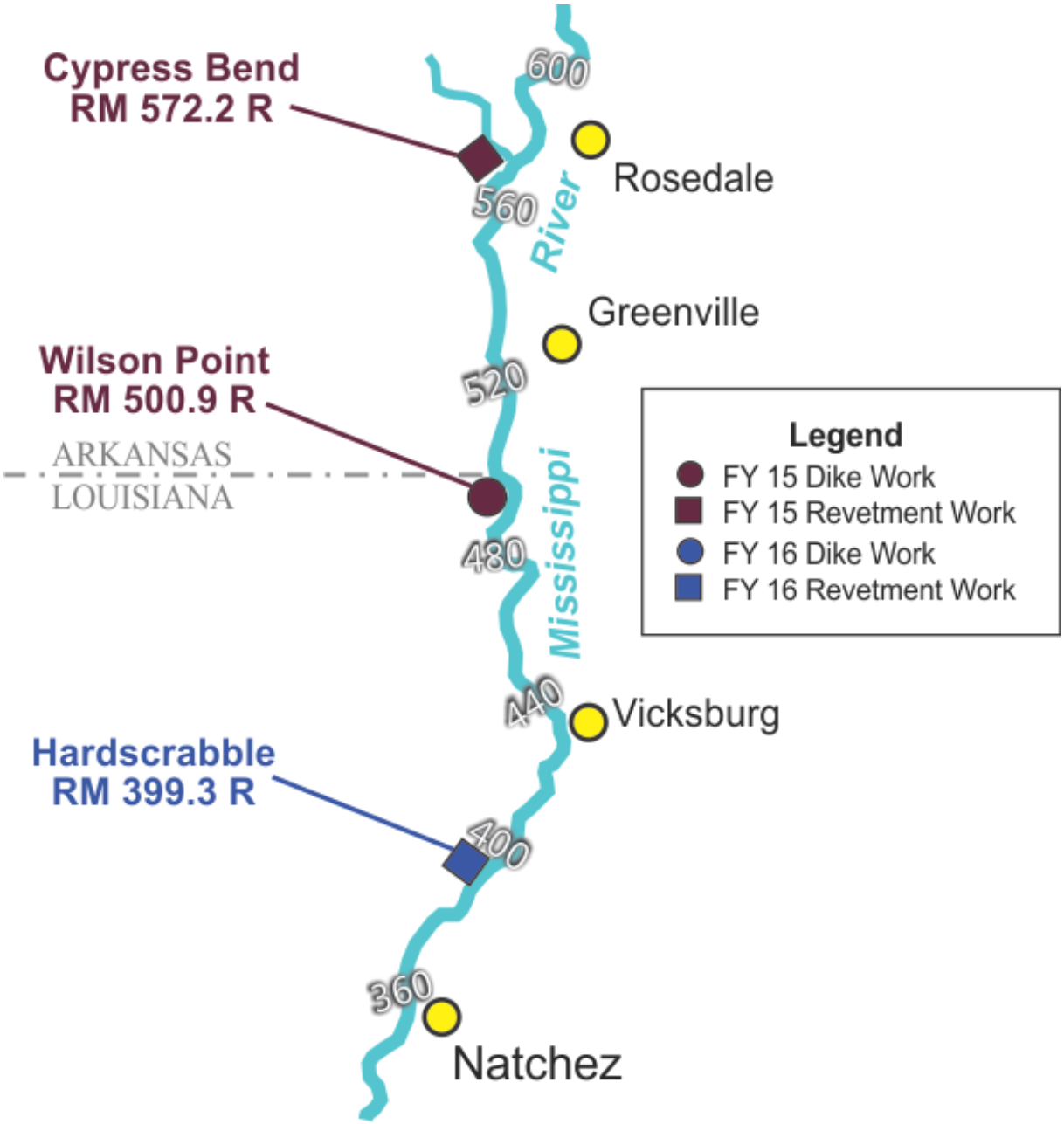


MR&T CONSTRUCTION



MR&T CONSTRUCTION

The objective of the MR&T construction program is to construct and complete authorized and appropriated MR&T projects as economically and quickly as practicable within program constraints and consistent with current national priorities.



Mississippi River Channel Improvement

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Mississippi River Channel Improvement, AR, LA, & MS

Flood Control Acts of 1928 (Section 1); 1936 (Section 1); 1938 (Section 4); 1941 (Section 3); 1944 (Section 10); 1962 (Section 203); 1965 (Section 201, 204); 1966 (Section 202, 203); and 1970 (Section 207)

Mississippi River and Tributaries, Construction (FRM, NAV)

Location: The project is located in the Mississippi River and along its banks from the vicinity of Cessions Towhead at River Mile 616 AHP, to Union Point at River Mile 326 AHP, a distance of approximately 290 miles.

Description: The plan of improvement consists of stabilization of the Mississippi River main channel in a desirable alignment for purposes of flood control and navigation by means of revetments, river training structures (dikes, chevrons, and bendway weirs), and improvement dredging.

Issues: The Mississippi River channel improvement construction project is not complete. The remaining planned revetments and dikes are required to provide a complete system capable of providing protection for the flood risk management levees and providing an efficient channel for commercial navigation. The plant used for sinking is at the end of its useful life and requires $5 million per year in maintenance alone.

Importance: River training structures improve navigation conditions, stabilize bends, and reduce required maintenance dredging requirements. Revetment construction maintains channel alignment and protects the banks from erosion.

Risk: Catastrophic damage to the navigation channel, river banks, and adjacent mainline levee is likely to occur if the system is not fully constructed as authorized.

Consequence: Failure to adequately fund will result in channel deterioration which would adversely impact the navigation industry in economically and efficiently transporting commodities on the Mississippi River. Continued erosion of banks and/or failure of revetments would adversely impact channel alignment and threaten the integrity of the mainline levee system.

Stone Dike Construction

Revetment Construction – Articulated Concrete Mat (ACM)

Activities for FY 15: Funds are being used for dike construction at Wilson Point, LA, and for revetment construction at Cypress Bend, AR. Funds are also being used to fund stone bank paving associated with revetment construction.

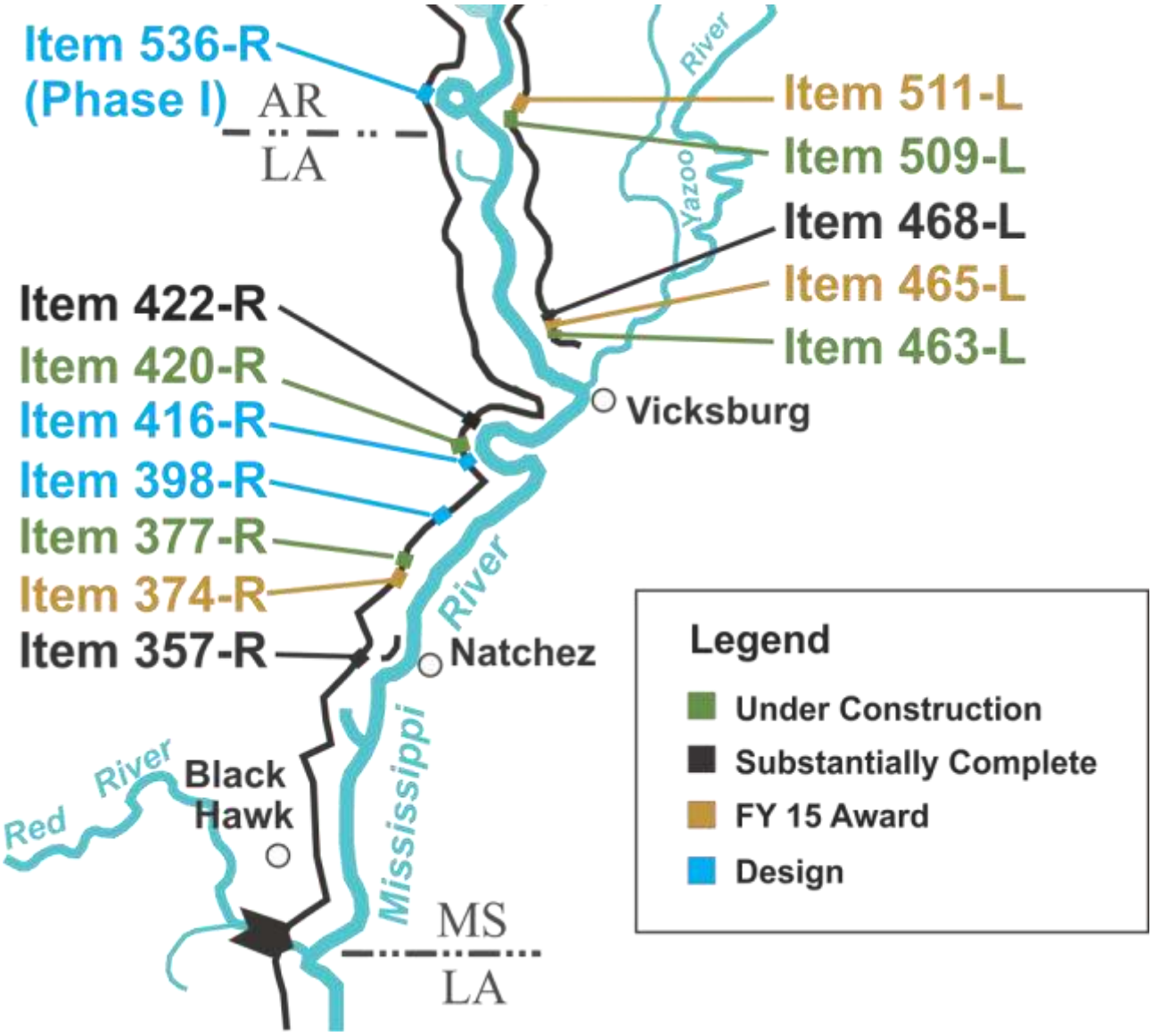
Acquisition Strategy Two contracts were awarded in FY 15.

Amount That Could Be Used in FY 16: Budgeted funds of $18,146,000 will be used continue design, construction and construction management of dikes, stone bank paving and revetments. Additional funds in the amount of $20,036,000 could be used to fully fund dike construction at Anconia Chute, AR, Refuge Dikes Turndowns, and Refuge MS and to continue revetment sinking reinforcement at Goldbottom 2, design a new articulated concrete Mat Sinking Unit and reinforcement sinking to maintain existing revetment .

Project Sponsor/Customer: Navigation industry, environmental community, and Mississippi Levee, 5th Louisiana Levee, and Southeast Arkansas Levee Boards.

Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Westerman (AR-4), Abraham (LA-5), Thompson (MS-2), and Harper (MS-3).

Estimated Federal Cost of Phase	Federal Funding Thru FY 14	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
$1,251,000,000	$1,023,458,000	$16,600,000	$18,146,000	38,182,000



Mississippi River Levees - Construction

Last Update: 1 September 2015

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet

Mississippi River Levees, AR, LA & MS

Flood Control Acts of 1928, 1936, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, WRDA 1992, Sec 103, WRDA 2000, Section 508

Mississippi River and Tributaries, Construction (FRM)

Location: The Mississippi River levee system on the west bank extends from Allenville, Missouri, on the Little River Diversion Channel generally southward to 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: Improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project design flood.

Issues: There are currently 110 miles remaining of deficient levees within the Vicksburg District.

Importance: The Mississippi River Levees are designed to protect people, property, infrastructure, and the environment in the alluvial valley against the project design flood by confining flow to the channel between the levees and natural hill lines, except where it enters natural backwater areas or is diverted purposely into floodway areas.

Risk: Catastrophic damage is likely to occur if the system is below authorized level of protection.

Consequence: A breach in the levee could result in over 1 million acres inundated, towns and cities flooded, and lives lost. Commercial impacts include roads, agricultural and timber production. Farmland is at risk of flooding, resulting in devastation of primary economic engine of the region. Environmental losses of terrestrial habitat and wildlife would be significant.

Activities for FY 15:
Funds are being used to award Item 511L, Lake Jackson-Palmetto, MS; Item 465L, Magna Vista-Brunswick, MS and Item 374-R, Waterproof Upper Lake Concordia; for relocation of utilities; engineering and design of future items of construction; complete construction on 420R, Bayou Vidal to Elkridge, LA and 422R, Reid Bedford to King, LA; and continue construction on Item 509L, Lake Jackson-Palmetto, MS; Item 463L, Magna Vista-Brunswick, MS and Item 377R, Waterproof – Upper Lake Concordia, LA.

Acquisition Strategy: Three contracts were awarded in FY15.

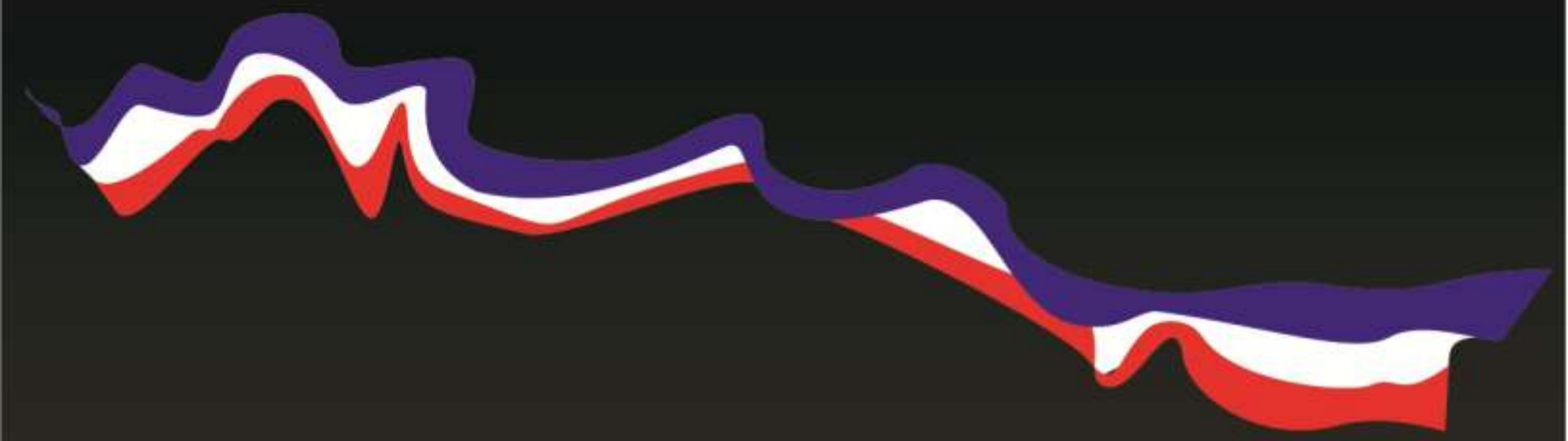
Amount That Could Be Used in FY 16:
Budgeted funds of $5,070,000 will be used to complete construction of ongoing contracts, economic evaluation and engineering design on a future item of construction. Additional funds in the amount of $18,125,000 could be used to construct Leland–Vaucluse, AR, Item 536-R Phase I ($9,000,000), Magna Vista–Brunswick, MS, EB Paving, Items 468-L/463-L ($4,750,000), Willow Point-Youngs Point, LA, Item 457-R Relief Wells ($1,875,000), Supplemental EIS ($500,000) and continued engineering design for future construction ($2,000,000).

Project Sponsor/Customer: Mississippi Levee Board, Fifth Louisiana Levee Board, and Southeast Arkansas Levee District.

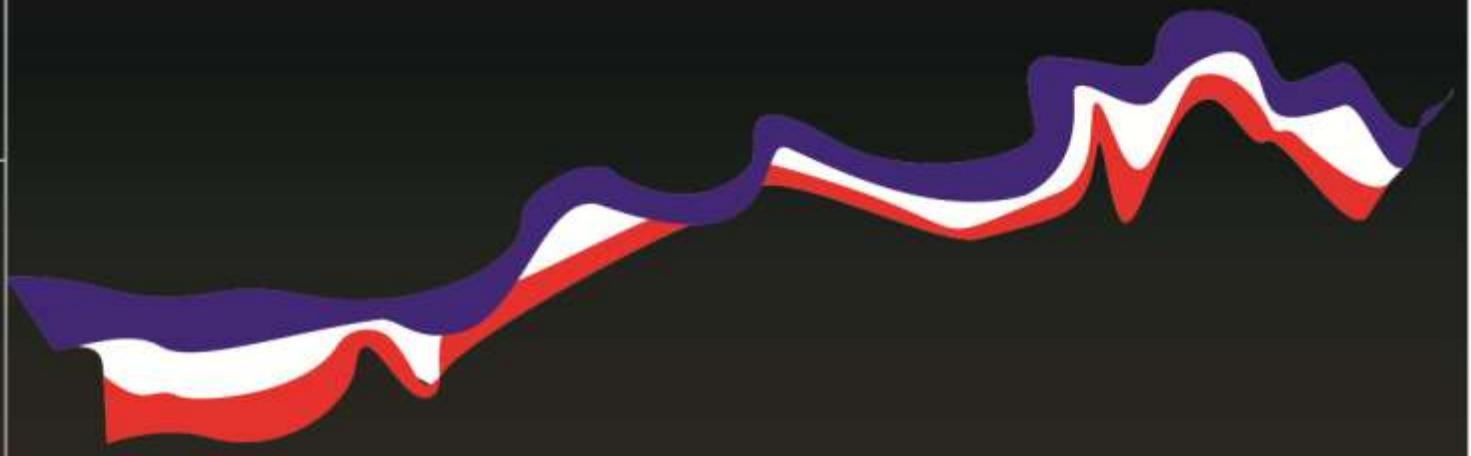
Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Vitter (LA), Cochran and Wicker (MS), House: Crawford (AR-1), Westerman (AR-4), Scalise (LA-01), Abraham (LA-5), Thompson (MS-2).

Phase	Estimated Federal Cost of Phase	Federal Funding Thru FY14	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Construction	$1,161,000,000	$703,667,302	$25,588,000	$5,070,000	$23,195,000

MR&T Maintenance



MR&T MAINTENANCE



MR&T MAINTENANCE

The MR&T Maintenance program focuses on the need to preserve the existing infrastructure and provide justified levels of service at the least cost.

Vicksburg District
Mississippi River Channel Improvement, Revetment

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Mississippi River Channel Improvement, AR, LA, & MS

FCA 1928, Sec 1; 1936, Sec 1; 1938, Sec 4; 1941, Sec 3; 1944, Sec 10; 1962, Sec 203; 1965, Sec 201, 204; 1966, Sec 202, 203; and 1970, Sec 207

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project is located in the Mississippi River and along its banks from the vicinity of Cessions Towhead at River Mile 616 AHP to Union Point at River Mile 326 AHP, a distance of approximately 290 miles.

Description: The plan of improvement consists of stabilization of the Mississippi River main channel banks by way of maintaining existing revetments to prevent erosion that would threaten the integrity of the mainline levees.

Issues: The Lower Mississippi River experienced the flood of record at many locations during 2011. As a result of this flood, many channel improvement revetments and dikes were damaged. The revetment flood damage to revetments has been repaired. However, other revetments have been damaged and many revetments are nearing or have exceeded their expected design life.

Importance: Revetment maintenance insures that desirable channel alignment can continue to be provided and the mainline levee can be protected from channel migration due to bankline erosion as revetments fail.

Risk: Catastrophic damage to the existing revetments, river banks and adjacent mainline levee is likely to occur if the system is not maintained as constructed.

Consequence: Failure to adequately fund will result in channel deterioration and continued damage to and/or failure of existing revetments which would adversely impact channel alignment and threaten the integrity of the mainline levee system.

Revetment – Articulated Concrete Mat

Activities for FY 15: Funds are being used to complete damage repairs at priority sites Milliken Bend, LA – RM 453R and Lake Karnac, MS/LA – RM 419L. Funds are also being used for stone bank paving at Milliken Bend and for stone repairs to both revetments and dikes. Funds are being used to purchase articulated concrete mat in advance of scheduled sinking.

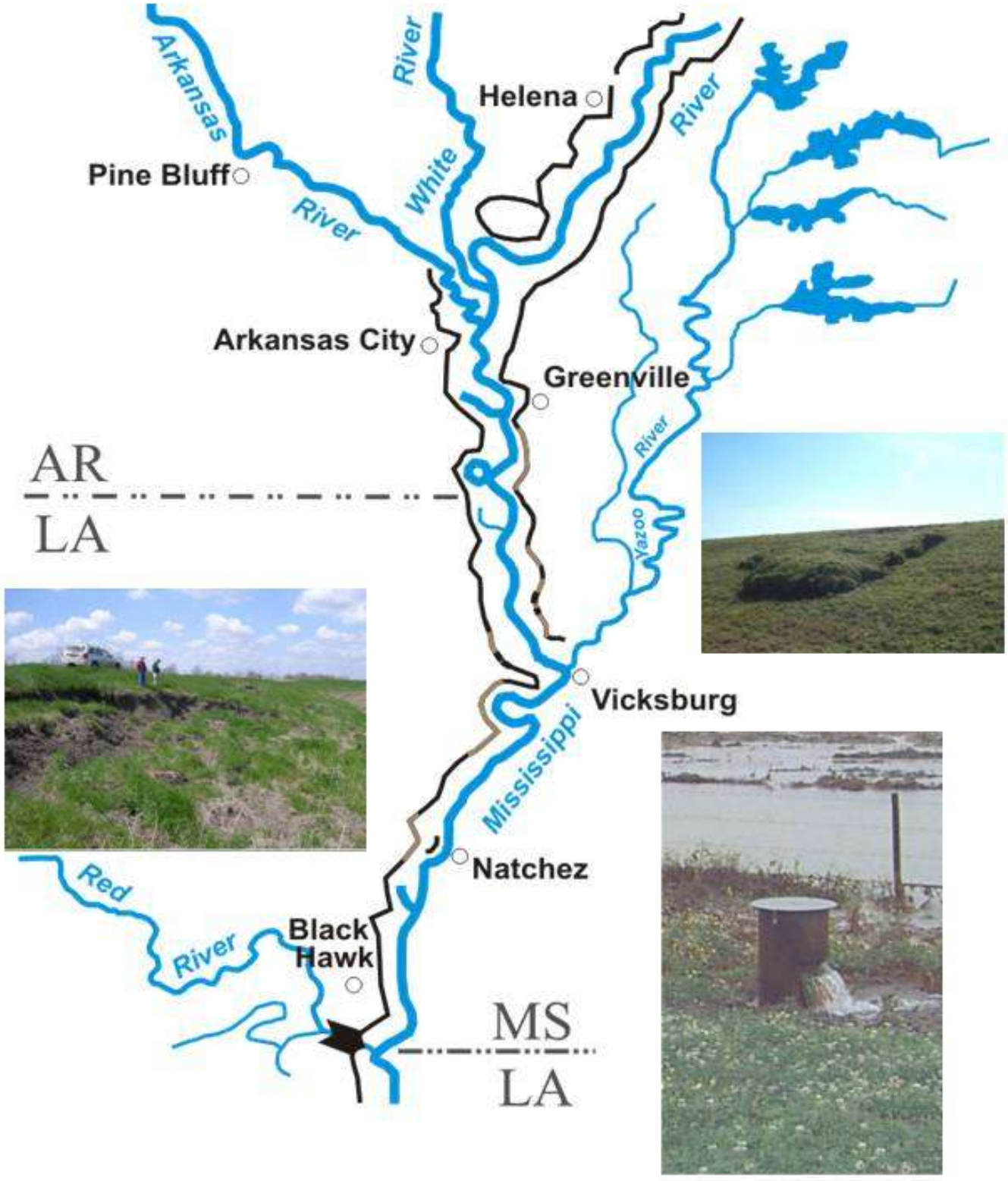
Acquisition Strategy: ACM Revetment repairs are conducted by hired labor. Two contracts were awarded during FY 15.

Amount That Could Be Used in FY 16: Budgeted funds of $15,016,000 will be used to perform routine maintenance on existing revetments. Specific sites will be determined by detailed site surveys. Additional funds of $11,900,000 could be used to fully fund stone repairs, stone bank paving, additional revetment repairs and dike repair

Project Sponsor/Customer: Mississippi Levee Board, 5th Louisiana Levee Board, and Southeast Arkansas Levee Board

Congressional Interest: Senate: Boozman and Cotton (AR), Vitter and Cassidy (LA), Cochran and Wicker (MS), House: Crawford (AR-1), Westerman (AR-4), Scalise (LA-01), Abraham (LA-5), Fleming (LA-04), Thompson (MS-2), and Harper (MS-3).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Maintenance	$15,052,000	$15,016,000	$26,916,000



Vicksburg District
Mississippi River Levees

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet

Mississippi River Levees, AR, LA & MS

FCA's 1928, 1936, 1938, 1941, 1944, 1946, 1950, 1954, 1962, 1965, 1968, River Basin Monetary Authorization Act of 1971, WRDA 92, WRDA 00

Mississippi River and Tributaries, Maintenance (FRM)

Location: The Mississippi River Levee system on the west bank extends from Allenville, MO, southward to Venice, LA, and on the east bank from Hickman, KY, to opposite Venice, LA, except where interrupted by hills and tributary streams.

Description: The Mississippi River Levee System provides flood risk reduction to over 23 thousand 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.

Issues: Levee slides are beginning to appear along the Mississippi River levee system on the East and West bank as a result of normal river fluctuations. Subsequent dry weather results in cracking of the levee surface and when rains soak the levee, a superficial slide occurs that requires repair to prevent further deterioration of the levee.

Importance: Although levee slides are an expected occurrence in any levee system, the repair of levee slides is of prime importance in maintaining a robust levee system capable of performing its design function during all flood events up to and including the project design flood.

Risk: Leaving slides in disrepair may lead to levee safety issues, levee certification issues, reduced levels of flood protection, and increased risk of flood damage.

Consequence: Failure to operate and maintain the levees appropriately jeopardizes project integrity, and places the safety of the public at increased risk.

(Typical MRL Levee Slide)

Activities for FY 15: Funds are being used to perform routine operation and maintenance activities, repair levee slides, mitigation management and resurface levees.

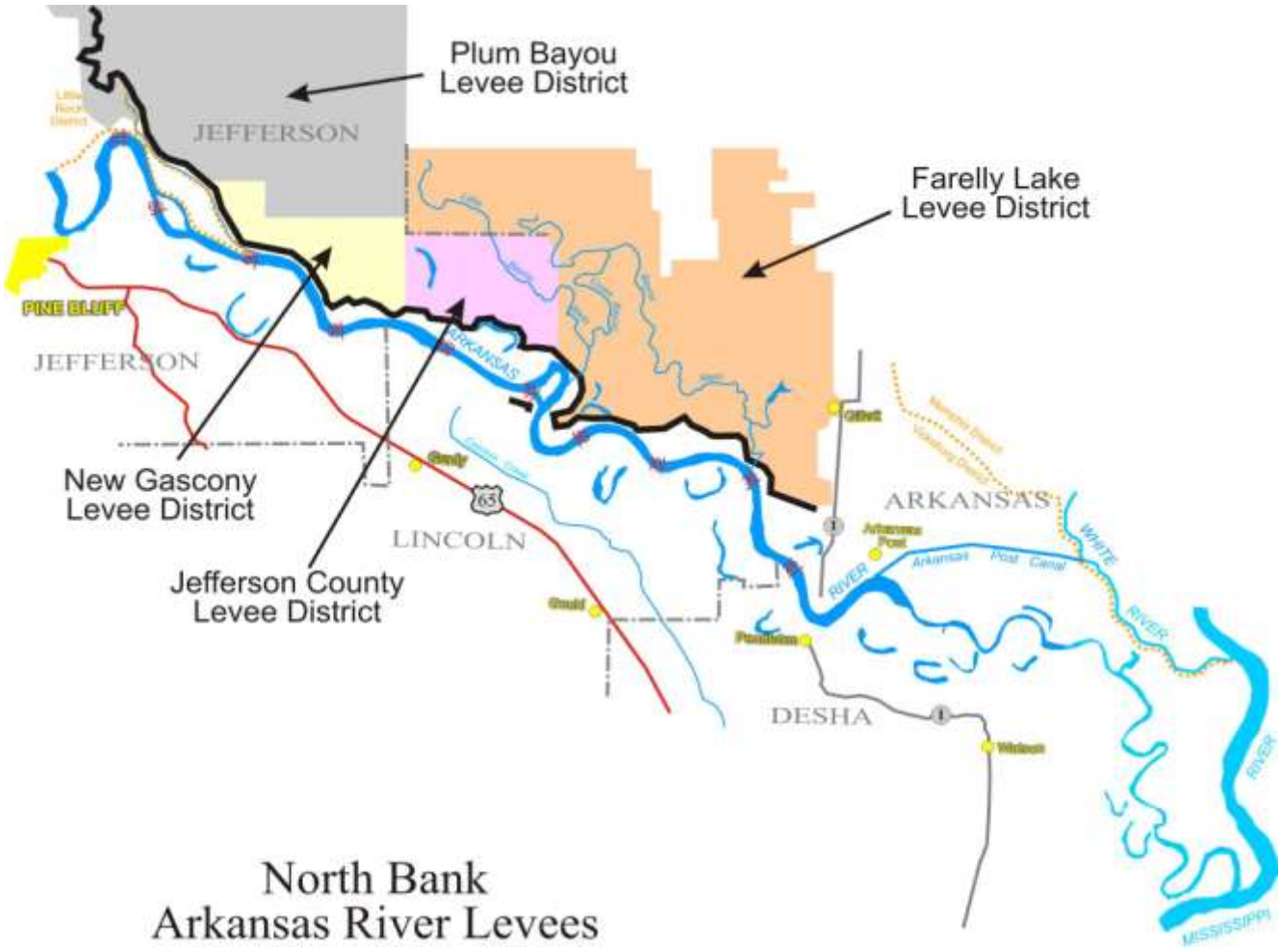
Acquisition Strategy: No contracts are scheduled to be awarded in FY15.

Amount That Could Be Used in FY 16: Budgeted funds of $2,331,000 will be used to perform routine operation and maintenance activities. Additional funds in the amount of $3,055,000 could be used for repair of levee slides ($1,200,000), gravel surfacing ($650,000), repair damages to mitigation areas such as reforestation and roads ($175,000), and operation and maintenance of the museum ($980,000).

Project Sponsor/Customer: 5th LA Levee District, Southeast Arkansas Levee District, & the Board of Mississippi Levee Commissioners

Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Vitter (LA), Cochran and Wicker (MS); House: Crawford (AR-1), Westerman (AR-4); Scalise (LA-1), Fleming (LA-4), Abraham (LA-5), Thompson (MS-2).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Maintenance	$3,139,000	$2,331,000	$5,386,000



Lower Arkansas River,
North Bank, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Lower Arkansas River, North Bank, AR
Flood Control Acts of 1928, 1936, 1946, and 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The flood control project is located in southeast Arkansas.

Description: The lower Arkansas River levees prevent overflow of the alluvial valleys of the Arkansas River below the Pine Bluff, Arkansas. The north bank levee in conjunction with the west bank Mississippi River levee protects the Tensas Basin against flooding.

Issues: Critical work is needed to ensure the integrity of the levee system to protect people and property from flooding. This work consists of repairing levee slides and placing additional granular material on the levees to provide all weather access to the levees for flood fighting and inspection.

Importance: The lower Arkansas River levees prevent overflow of the alluvial valleys of the Arkansas River below Pine Bluff, Arkansas. Levees along the north bank, extending from Tucker in the vicinity of Pine Bluff to the vicinity of Gillett, protect approximately 720 square miles. The south bank levee in conjunction with the west bank MRL protects the Tensas Basin against the project flood.

Risk: Leaving slides in disrepair may lead to levee safety issues, levee certification issues and reduced levels of flood protection and higher risks.

Consequence: Failure to operate and maintain would jeopardize the project integrity and cause potential levee failure and flooding as in 2011.


Lower Arkansas River, North Bank Levee

Activities for FY 15: Funds are being used for routine maintenance and levee repair of project features.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: Budgeted funds of $294,000 will be used for routine maintenance and levee repair. Additional funds in the amount of $300,000 could be used to place stone on levees for inspection and emergency purposes.

Project Sponsor/Customer: N/A

Congressional Interest: Senate: Boozman, Cotton(AR); House: Westerman (AR-4).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Maintenance	$225,800	$294,000	$594,000

Lower Arkansas River,
South Bank, Arkansas

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet
Lower Arkansas River, South Bank, AR
Flood Control Acts of 1928, 1936, 1946, and 1965

Mississippi River and Tributaries, Maintenance (FRM)

Location: The flood control project is located in southeast Arkansas.

Description: The lower Arkansas River levees prevent overflow of the alluvial valleys of the Arkansas River below the Pine Bluff, Arkansas. The north bank levee in conjunction with the west bank Mississippi River levee protects the Tensas Basin against flooding.

Issues: Critical work is needed to ensure the integrity of the levee system to protect people and property from flooding. This work consists of repairing levee slides and placing additional granular material on the levees to provide all weather access to the levees for flood fighting and inspection.

Importance: The lower Arkansas River levees prevent overflow of the alluvial valleys of the Arkansas River below Pine Bluff, Arkansas. Levees along the north bank, extending from Tucker in the vicinity of Pine Bluff to the vicinity of Gillett, protect approximately 720 square miles. The south bank levee in conjunction with the west bank MRL protects the Tensas Basin against the project flood.

Risk: Leaving slides in disrepair may lead to levee safety issues, levee certification issues and reduced levels of flood protection and higher risks.

Consequence: Failure to operate and maintain would jeopardize the project integrity and cause potential levee failure and flooding as in 2011.


Lower Arkansas River, South Bank Levee

Activities for FY 15: Funds are being used to continue operation and maintenance of project features.

Acquisition Strategy: No contracts are scheduled to be awarded in FY 15.

Amount That Could Be Used in FY 16: Budgeted funds of $198,000 will be used for routine operation and maintenance to protect the integrity of the levee system. Additional funds in the amount of $300,000 could be used to place stone surfacing on levees.

Project Sponsor/Customer: N/A

Congressional Interest: Senate: Boozman and Cotton (AR); House: Westerman (AR-4).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Maintenance	$149,100	$198,000	$498,000

Tensas Basin, Boeuf-Tensas River, Arkansas and Louisiana

US Army Corps of Engineers
Vicksburg District

Project Fact Sheet

Tensas Basin, Boeuf-Tensas River, AR and LA

Flood Control Acts of 1944, 1946, 1950, 1958, 1962, 1965, 1968, and WRDA of 1986

Mississippi River and Tributaries, Maintenance (FRM)

Location: The flood control project is located in central and northeast Louisiana and southeast Arkansas and includes the Lake Chicot pumping plant.

Description: The project provides for channel improvement for flood control and to afford adequate outlet drainage for 5,300 square miles in southeast Arkansas and northeast Louisiana.

Issues: Critical work is needed to ensure the integrity of the project to protect people and property from flooding. This critical work consists of inspecting the under slab and backfill drains for siltation to ensure proper drainage of the substrate under the downstream slab of the pumping plant to prevent uplift. The tributaries in the Boeuf-Tensas Basin have aging weirs that have already failed or are in danger of failing and need replacing. Severe erosion and corrosion have been discovered on multiple pumping plant components that need repairs to prevent catastrophic pump failure.

Importance: The Lake Chicot Pumping Plant diverts local storm-water runoff into the Mississippi River upstream of Lake Chicot in Chicot County, AR. The proper operation of this pumping plant significantly reduces the amount of storm runoff that must be transferred by the Boeuf-Tensas River system from southeast Arkansas through Louisiana into the Ouachita-Black River system. The portion of the Boeuf-Tensas River system in southeast Arkansas is contained by a series of weirs in the various tributaries that are 50-60 years old and have reached their design and in some cases their useful life. These weirs effectively control the rate of runoff and the amount of in-channel vegetation present in the tributary channels reducing the annual maintenance costs for these channels to the local sponsors of the project.

Risk: Leaving the project in disrepair may lead to reduced levels of flood protection and flooding in southeast Arkansas.

Consequence: Failure to operate and maintain channels and weirs would jeopardize the project integrity and benefits.

Lake Chicot Pump Plant

Activities for FY 15: Funds are being used to continue operation and maintenance at a reduced level of service) and repair failed electrical bus to the Lake Chicot Pumping Plant.

Acquisition Strategy: No contracts are scheduled to be awarded in FY15.

Amount That Could Be Used in FY 16: Budgeted funds of $2,579,000 will be used to continue operation and maintenance of project features, gather data, contract guards, perform water control analysis, inspect the bridge and hydraulic steel structure and perform work needed to ensure the integrity of the project. Additional funds in the amount of $3,970,000 could be used for repairs for two impeller bell housings/cones ($400,000),replace Big Bayou weir at mile 9.68 ($920,000), design replacement for Big Bayou weir at 13.92 ($400,000), inspect underslab and backfill drains at Lake Chicot Pumping plant ($350,000), upgrade cranes ($920,000) and backlog maintenance items ($1,205,000).

Project Sponsor/Customer: Tensas Basin Levee District

Congressional Interest: Senate: Boozman, Cotton (AR); Vitter, Cassidy (LA); House: Westerman (AR-4), Abraham (LA-5).

Phase	FY 15 Allocation	FY 16 Budget	FY 16 Total Capability
Maintenance	2,758,900	$2,579,000	$6,559,000

Value to the Nation