



US Army Corps
of Engineers®
Vicksburg District



Project Status

Arkansas

MARCH 2020





**USACE VICKSBURG DISTRICT IS COMMITTED TO PROVIDING THE
HIGHEST QUALITY OF ENGINEERING EXCELLENCE TO ENSURE THE
SAFETY AND IMPROVEMENT OF OUR COMMUNITIES AND THE
STRENGTH OF OUR NATION**

USACE, VICKSBURG DISTRICT
4155 CLAY STREET
VICKSBURG, MS 39183

M V K . U S A C E . A R M Y . M I L

INDEX

M V K . U S A C E . A R M Y . M I L

Status of Vicksburg Projects in the State of Arkansas

This Project Status Book contains information on the latest progress of the Vicksburg District's projects in the State of Arkansas. 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 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 Jacob Brister, Deputy Chief, Programs and Project Management Division.

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Our Missions:

- Flood Risk Management
- Navigation
- Hydropower
- Recreation
- Water Supply
- Emergency Operations
- Regulatory
- Environmental Stewardship
- Support to Contingency Operations

Vicksburg District encompasses 68,000 square miles in three states, with a \$220-million annual water resources program. Established in 1873, the district has been recognized as Vicksburg's second oldest business.

Our multi-disciplined team of engineers, planners, and environmental, municipal, and recreation specialists are also available, as needed, for other Federal and state customers on a reimbursable basis.

One of the largest civil works districts in the nation, Vicksburg is a center of expertise for many engineering and environmental capabilities. New programs allow us to partner with local agencies and groups to meet their engineering needs.



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VICKSBURG DISTRICT



General

District

Information



VICKSBURG DISTRICT
of the

Mississippi Valley Division

1 of **9** division commands

6 district offices

12 Governors

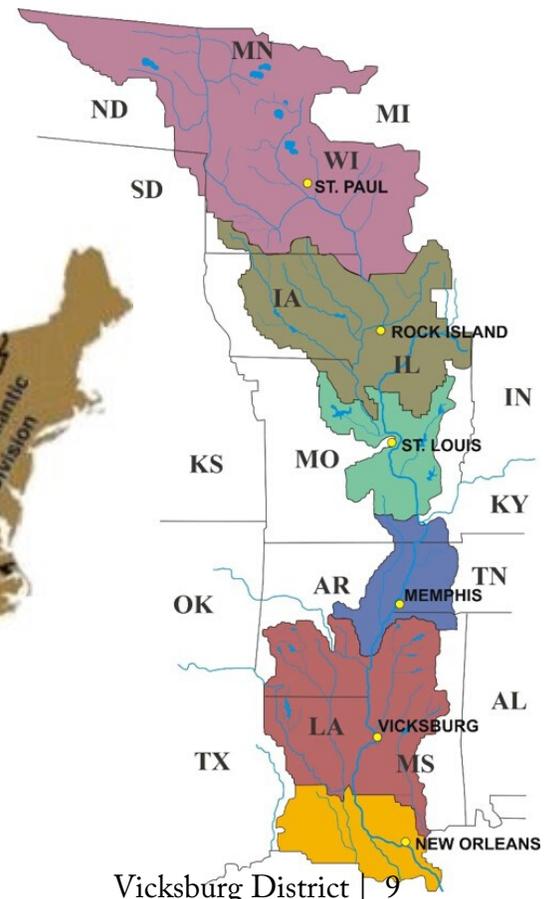
24 Senators

58 Congressional Districts

4,600+ employees

The Mississippi Valley Division's boundaries straddle the world's third largest watershed as the mighty Mississippi River meanders from Canada to the Gulf of Mexico. The Mississippi River watershed serves as a continental funnel that collects vast flows from 41% of the nation's interior, including 31 states, 2 Canadian provinces, 1.5 million square miles and more than 250 tributaries. As North America's most important waterway, MVD's civil works along the Mississippi represent critical investments in our nation's future. The division's effectiveness in orchestrating the river's immense power greatly benefits America's economy, environment and defense.

MVD's borders encompass 370,000 square miles and portions of 12 states bordering the 2,348-mile river.





BIOGRAPHY



Colonel Robert A. Hilliard

Commander, Vicksburg District

Col. Robert A. Hilliard assumed the duties of commander, Vicksburg District, Vicksburg, Mississippi, June 26, 2019. He came to the district after serving as the deputy commander for the Mississippi Valley Division.

A native of Georgia, Hilliard graduated from Auburn University in Alabama, where he received his commission in the U.S. Army Corps of Engineers in 1996.

Previous assignments include deputy commander, Mississippi Valley Division, Vicksburg, Mississippi. He also served as secretary of the Mississippi River Commission, senior engineer observer/controller at the U.S. Army's National Training Center, Fort Irwin, California (2016-2017); commander, 4th Engineer

Battalion, Fort Carson, Colorado (2014-2016); brigade operations and executive officer, 555th Engineer Brigade (2012-2013), executive officer, 14th Engineer Battalion (2010-2011), and chief of plans, I Corps Engineer Section, Joint Base Lewis-McChord, Washington (2009-2010); project manager, Wilmington District, U.S. Army Corps of Engineers (2006-2008); commander, C Company, 70th Engineer Battalion, Fort Riley, Kansas (2002-2004); and platoon leader and company executive officer, A Company, 40th Engineer Battalion, Baumholder, Germany (1997-2000).

Hilliard served two tours supporting operations in the Balkans, two tours in Iraq supporting Operation Iraqi Freedom and two tours in Afghanistan supporting Operation Enduring Freedom.

His civilian education includes a bachelor's degree in civil engineering from Auburn University, a master's degree in engineering management from the University of Missouri-Science and Technology (Rolla) and a master's degree in civil engineering from Montana State University (Bozeman). Hilliard's military education includes the U.S. Army Command and General Staff College and the U.S. Army War College. He is a registered professional engineer in the state of Missouri.

His awards and decorations include the Bronze Star Medal (3), Meritorious Service Medal (5), Navy Commendation Medal, Army Commendation Medal (3), Joint Achievement Medal, Combat Action Badge, Parachutist Badge and Ranger Tab.

The Mississippi Valley Division is responsible for water resources engineering solutions in a 370,000-square-mile area, extending from Canada to the Gulf of Mexico and encompassing portions of 12 states. Work is carried out by district offices located in St. Paul, Minnesota; Rock Island, Illinois; St. Louis, Missouri; Memphis, Tennessee; Vicksburg, Mississippi; and New Orleans, Louisiana.

Since 1879, the seven-member presidentially appointed Mississippi River Commission has developed and matured plans for the general improvement of the Mississippi River from the Head of Passes to the Headwaters. The Mississippi River Commission brings critical engineering representation to the drainage basin, which impacts 41% of the United States and includes 1.25 million square miles, over 250 tributaries, 31 states and two Canadian provinces.

Hilliard and Donna Davenport have been married for 23 years and have two children.

Vicksburg District Congressional Districts



Governors and U.S. Senators

ARKANSAS
 Governor Asa Hutchinson
 Senator John Boozman
 Senator Tom Cotton

LOUISIANA
 Governor John Bel Edwards
 Senator John Kennedy
 Senator Bill Cassidy

MISSISSIPPI
 Governor Phil Bryant
 Senator Cindy Hyde-Smith
 Senator Roger Wicker

VICKSBURG DISTRICT



Value to the Nation



Value to the Nation



Vicksburg District Assets

9

9 Watersheds in Arkansas, Louisiana and Mississippi, including Bayou Meto, Big Black, Boeuf Tensas, Homochitto, Mississippi, Ouachita, Pearl, Red and Yazoo



7

7 Mississippi River ports handling over 8.5 million tons of cargo



5

5 Red River ports handling over 1 million tons of cargo



12
9

12 locks and 9 dams on the Pearl, Red and Ouachita Rivers



3

3 power plants capable of generating 168,000 kilowatts of electricity



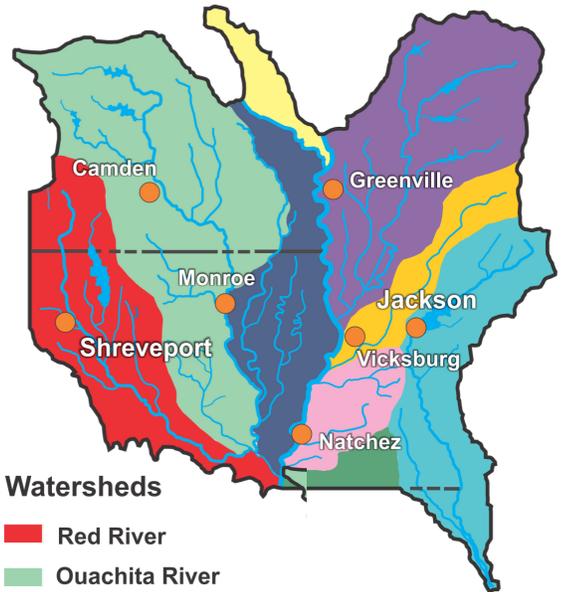
10

10 lakes with 1,673 miles of shoreline



21

21 pumping plants



Watersheds

- Red River
- Ouachita River
- Boeuf Tensas River
- Bayou Meto
- Yazoo River
- Big Black River
- Amite River
- Pearl River
- Southwest Tributaries

450,603 acres of project & mitigation lands managed for forestry & wildlife enhancement

478 flood control structures

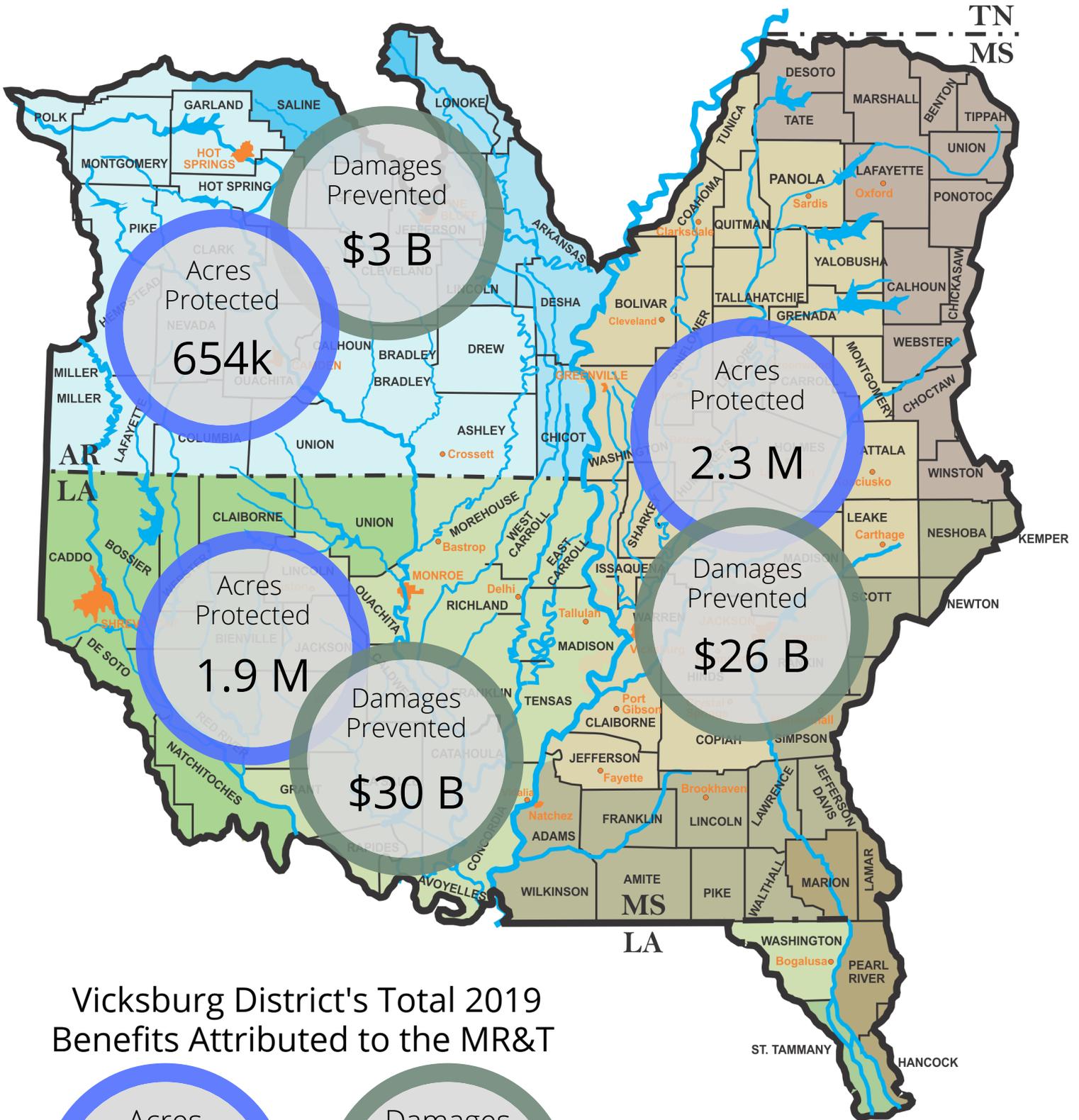
146 recreation areas with 2,772 campsites and 1,529 picnic sites with estimated total visits of 8.1 million

1,910 miles of levees, including 460 miles along the Mississippi River

1,252 miles of navigable channel

VICKSBURG DISTRICT

2019 Benefits Attributed to the MR&T by State

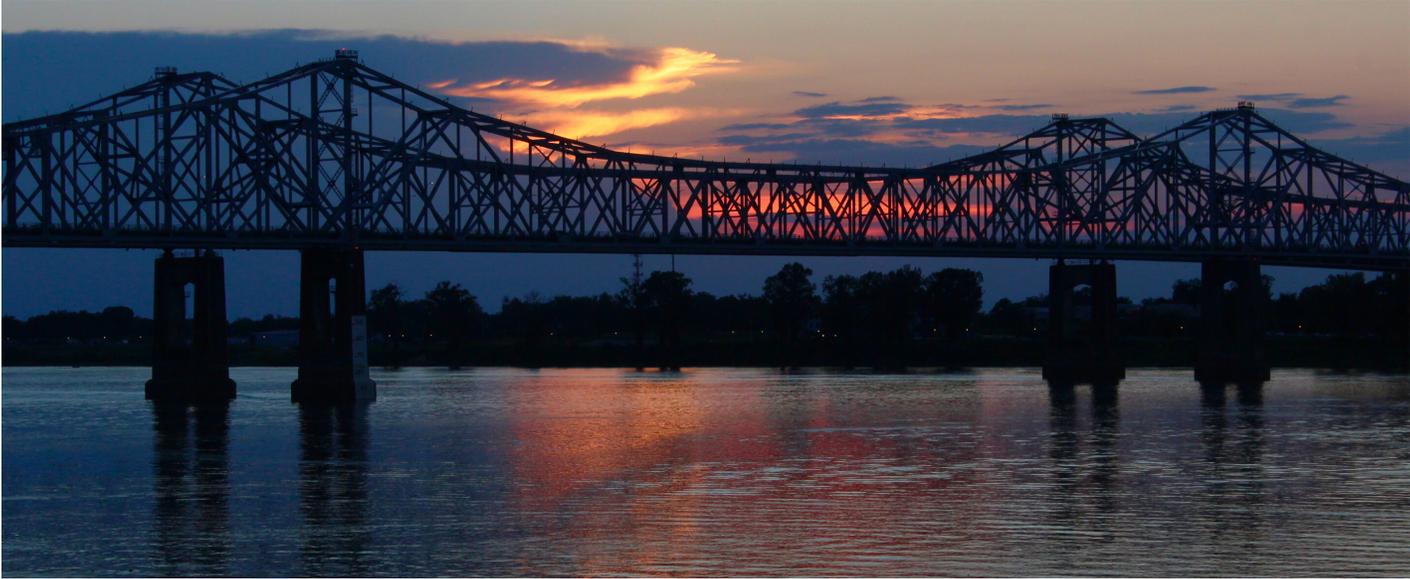


Vicksburg District's Total 2019 Benefits Attributed to the MR&T

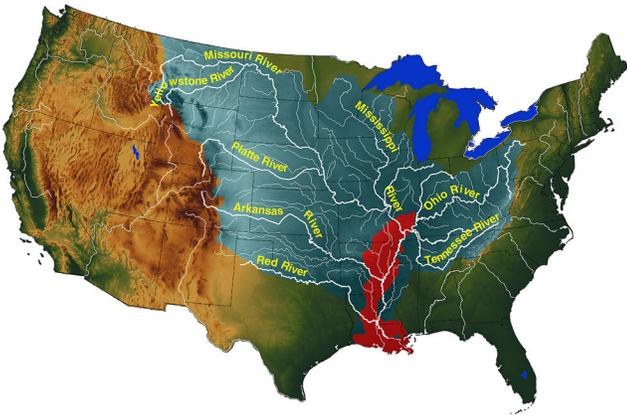


Value to the Nation

Mississippi River

World's 3rd Largest Watershed
Drainage Basin for 41% of the United States



For thousands of years, the Mississippi River meandered through its valley unhindered, flooding lowlands and crating oxbow lakes when it changed course. But, as men began to settle and develop the valley, they tried to place restrictions on the whims of the river and make it conform to their needs. Sometimes the river would cooperate, but many times it would not. Caving banks would claim buildings or valuable farmlands, the shifting channel would leave prosperous ports high and dry, and numerous floods devastated crops and economies. More than a century ago, the Vicksburg District began working with the Mississippi River and its tributaries seeking their cooperation. Thought the river may seem tame to some, it still has a will of its own, fighting to go where it pleases. However, as long as there is a need, the Vicksburg District will continue to work with the Mississippi, developing the required technology to meet the needs of new challenges.

MR&T Ports

| MR&T Port | 2018 Commercial Tonnage | Jobs Sustained |
|----------------|-------------------------|----------------|
| Greenville, MS | 4,000,000 | 540 |
| Vicksburg, MS | 3,600,000 | 4,000 |

Mississippi River and Tributaries (MR&T) Benefits

| Average Annual Costs | Average Annual Benefits |
|----------------------|-------------------------|
| \$210 Million | \$1.46 Billion |

O&M Ports

| O&M Port | 2018 Commercial Tonnage | Jobs Sustained |
|---------------------|-------------------------|----------------|
| Rosedale, MS | 1,200,000 | 325 |
| Yellow Bend, AR | 400,000 | N/A |
| Lake Providence, LA | 1,300,000 | 291 |
| Madison Parish, LA | 750,000 | 300 |
| Claiborne Co., MS | N/A | N/A |

Benefit-to-Cost Ratios

The current remaining benefit-to-cost ratio for the MR&T system is 54 to 1, and, likewise, the total benefit-to-cost ratio for the system is 3.3 to 1 at the 7% interest rate.

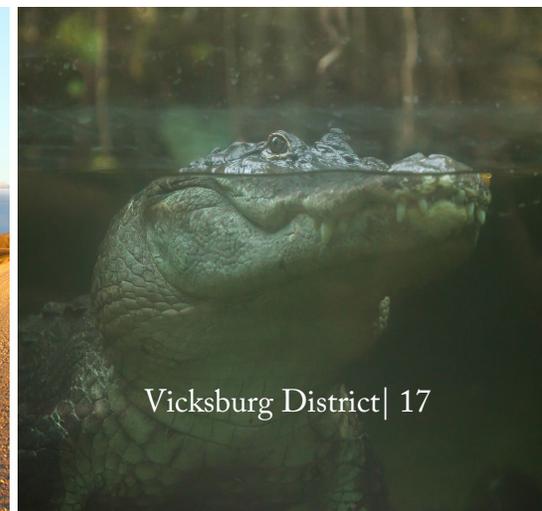
Value to the Nation

Vicksburg District Missions



Flood Risk Management
Navigation
Environmental Stewardship
Emergency Operations
Support to Contingency Operations

Water Supply
Regulatory
Recreation
Hydropower





Value to the Nation

J. Bennett Johnston Waterway



Did you know?

- The \$1.9 billion Red River Waterway Project was opened to commercial traffic 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 10,800 acres of mitigation lands have been purchased to offset losses caused by project construction.





Project Benefits

| Project Benefit | Dollar Amount |
|----------------------------|-----------------|
| Total injection (spending) | \$4,629,600,000 |
| Total Sales | \$8,471,300,000 |
| Total Earnings | \$2,770,200,000 |
| Total Taxes | \$58,200,000 |
| Total Jobs (average) | 2,107 |



Navigation

| Port | 2015 Commercial Tonnage | Jobs Sustained |
|-------------------|-------------------------|----------------|
| Caddo-Bossier | 684,799 | 7,550 |
| Red River Parish | 157,358 | N/A |
| Natchitoches | 413,000 | 291 |
| CLRP (Alexandria) | 233,450 | 2,009 |





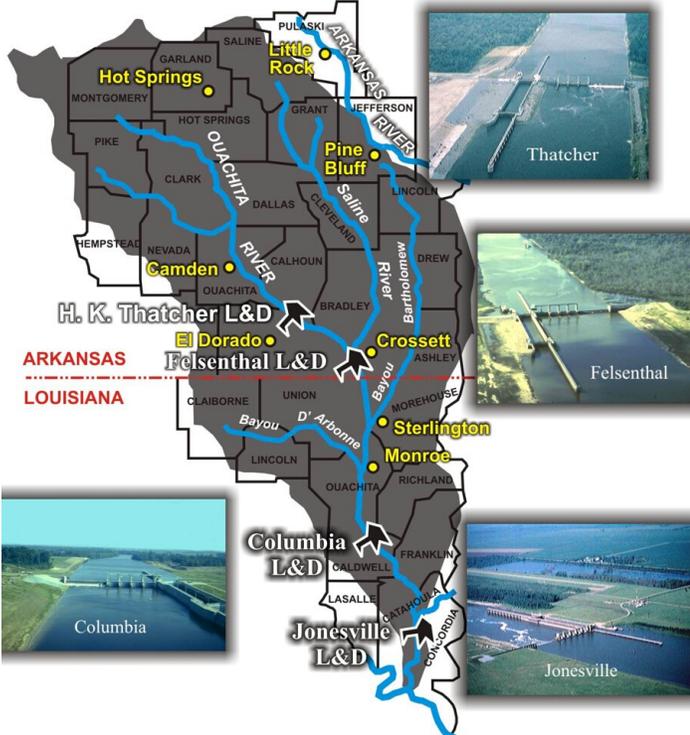
Value to the Nation

Ouachita-Black Navigation Project



Did you know?

- The watershed has water storage reservoirs with over 3.5 million acre-feet of capacity.
- There are 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.
- Five pumping plants of 300 cfs, 500 cfs, 750 cfs, 4,000 cfs and 6,500 cfs are located in the watershed to aid in flood risk management.
- The watershed provides water supply for the cities of Hot Springs, Malvern, Arkadelphia and Camden in Arkansas, as well as the city of Monroe in Louisiana.
- Watershed management is provided through a coordinated, system-wide water management program.



Project Features

The 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. The project operates four locks and dams to regulate pool height and pass navigation along the waterway. There are 18 Corps recreational areas located along the 4 pools of the project which host approximately 700,000 visitors annually.

Project Benefits

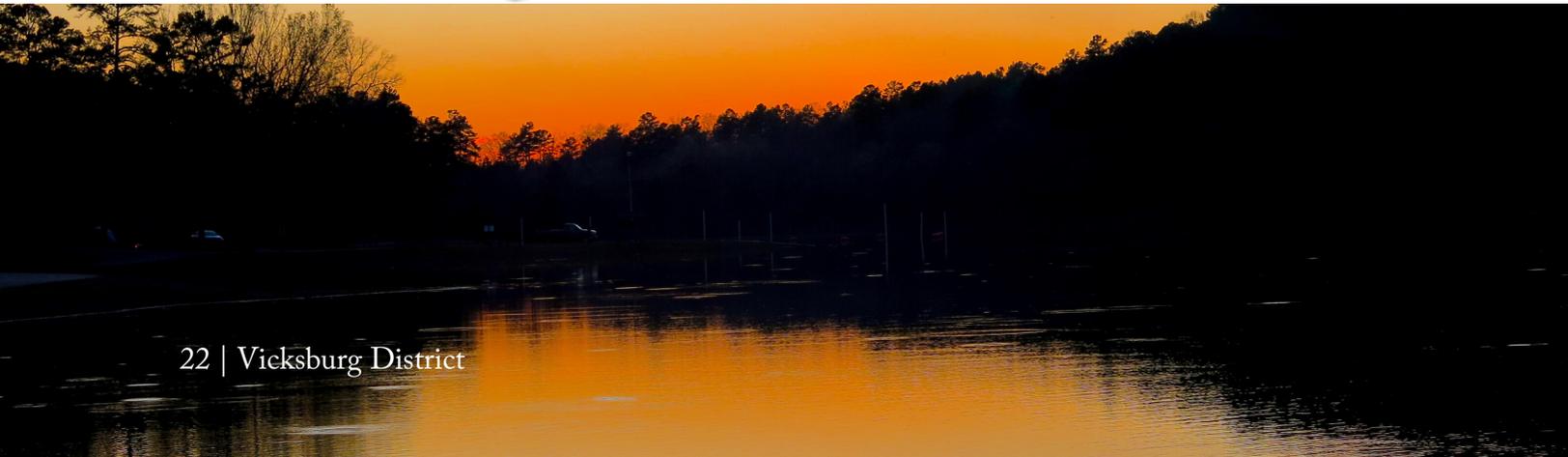
| Benefit | Value |
|------------------------|-----------------|
| Transportation Savings | \$1,100,000,000 |
| Impact on Economy | \$3,900,000,000 |
| Taxes Paid | \$180,000,000 |
| Annual Payroll | \$325,000,000 |
| Jobs Sustained | 28,000 |

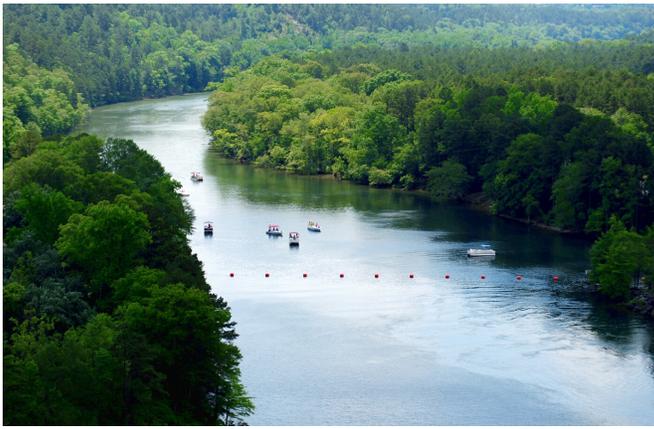




Did you know?

- Narrows Dam is the only "all concrete" dam in the Vicksburg District.
- The three Arkansas Lakes of the Vicksburg District 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.

DeGray Lake - 1972

Located along the Caddo River in south central Arkansas, the multi-purpose project includes 32,400 acres, DeGray Dam has a crest of 3,400 feet wide and rises 243 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.

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 feet 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.

Annual Local Economic Benefits

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

Hydropower

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





Value to the Nation



Yazoo River Watershed



Did you know?

- The 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.
- The watershed 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.

Flood Risk Management

- 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





Upper Yazoo Projects

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

Main Stem

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

Flood Damages Prevented

| Yazoo River Watershed | FY 2018 Flood Damage Prevented | Cumulative Flood Damage Prevented |
|-----------------------|--------------------------------|-----------------------------------|
| Yazoo Backwater | \$406,000 | \$102,979,000 |
| Yazoo Headwaters | \$9,527,000 | \$1,952,940,000 |
| MS Lakes | \$6,573,630 | \$1,354,980,000 |
| Big Sunflower River | \$2,030,000 | \$425,411,000 |
| Total Yazoo Basin | \$18,536,630 | \$3,836,310,000 |

Delta Headwaters Project

The Mississippi Delta Headwaters Project demonstrates a systems approach to addressing watershed stability problems. The typical problems encountered include: erosion, sedimentation, flooding, and environmental degradation. MDHP contains sixteen watersheds within the Yazoo Basin. The types of structures utilized to achieve the project goals include: low drop grade control structures, high drop grade control structures, box culvert grade control structures, floodwater retarding structures, bank stabilization, and riser pipe structures.





Mississippi Lakes



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 1,400 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.

Enid Lake - 1952

Located approximately one 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.

Sardis Lake - 1940

Sardis Lake stretches over 98,000 acres through Panola, Lafayette and Marshal counties in northwest Mississippi. Located approximately one 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.

Grenada Lake - 1954

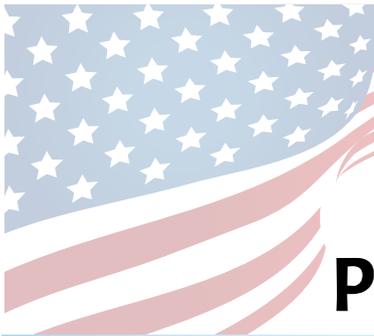
Located in the gently rolling hills of pine and hardwood at the entrance to the Mississippi Delta, Grenada Lake covers 36,000 acres and offers some of the best fishing opportunities in the southeastern United States, as well as most any kind of water activity imaginable. Facilities include campgrounds,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



Project Costs vs. 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 |





Value to the Nation



Pearl River Watershed



Did you know?

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



Pearl River Basin Watershed, LA and MS

Flood Risk Management

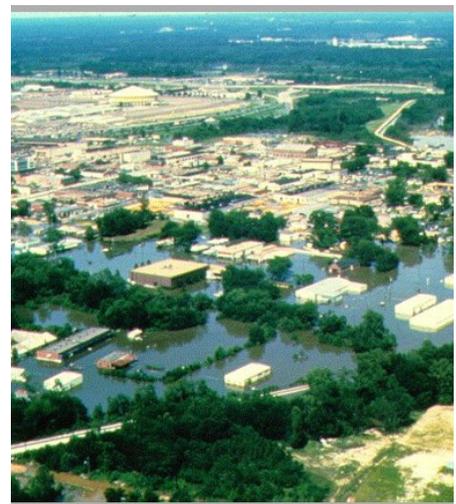
The Jackson (Fairgrounds) and East Jackson levees were completed in 1968 by the Corps. These protective works consist of two earthen levees, four gated outlets and two pumping stations. Approximately 5.34 miles of river channel work was involved in constructing the plan. The Fairgrounds levee protects 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.

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.

Levee Plan

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





Big Black River Watershed

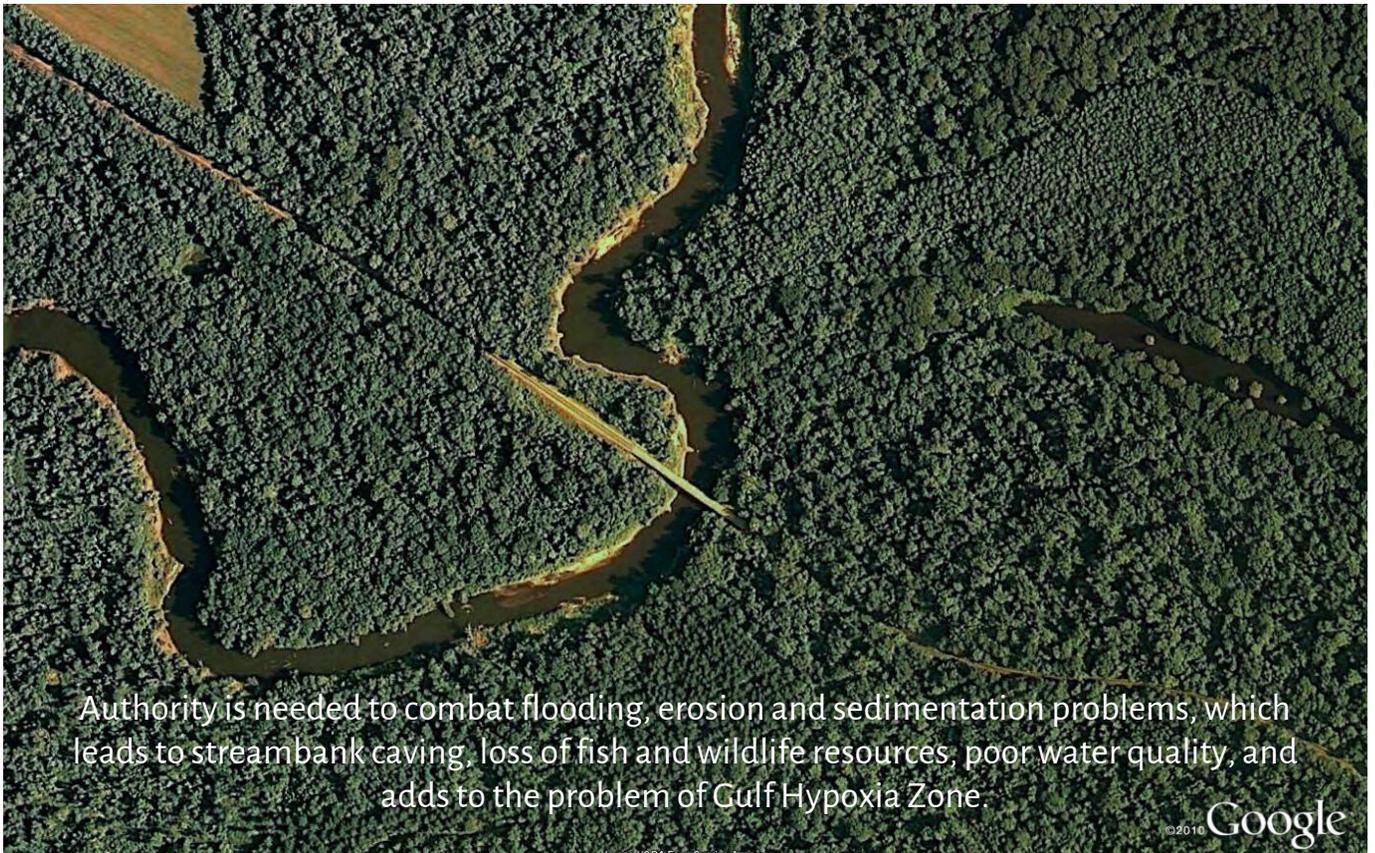


Environmental Stewardship

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, gully, and sheet and rill erosion. Sources of sediment include the following:

- 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





Authority is 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 the problem of Gulf Hypoxia Zone.

©2010 Google



Value to the Nation



Southwest Tributaries



Southwest Tributaries Basin

The basin comprises a drainage area of approximately 2,300 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, to 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.



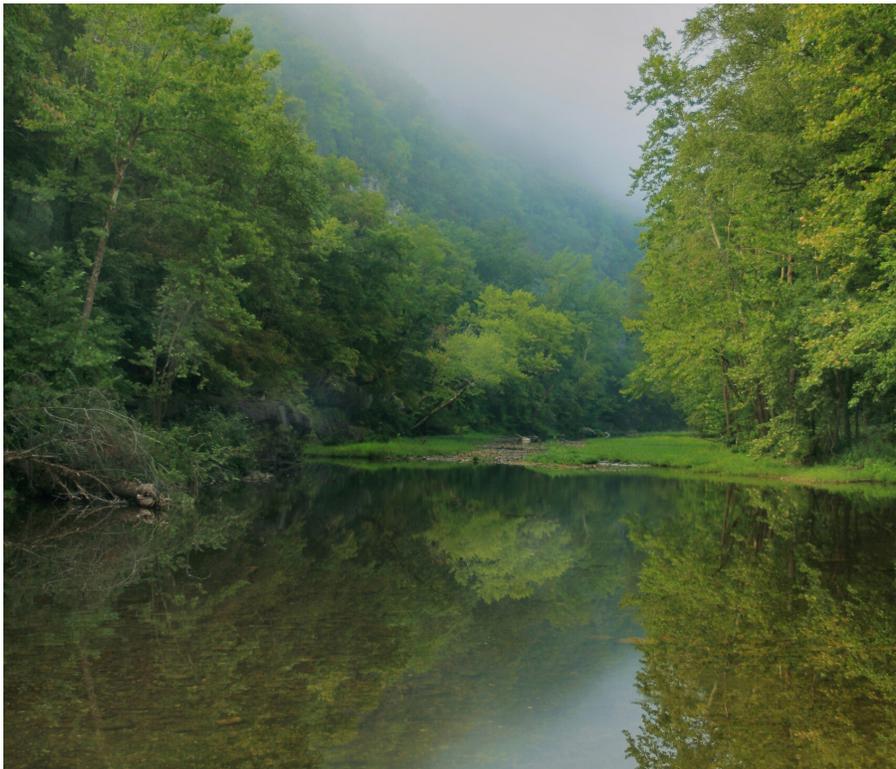
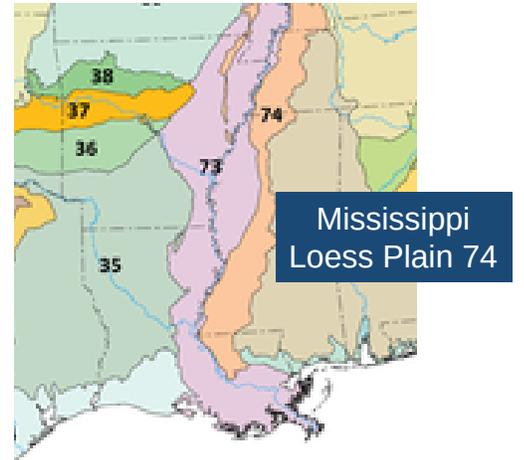
Environmental Stewardship

USACE needs authority in this area to combat flooding, erosion and sedimentation problems which leads to streambank caving, loss of fish and wildlife resources, poor water quality and increase of Gulf Hypoxia Zone problem.

Gulf Hypoxia Zone



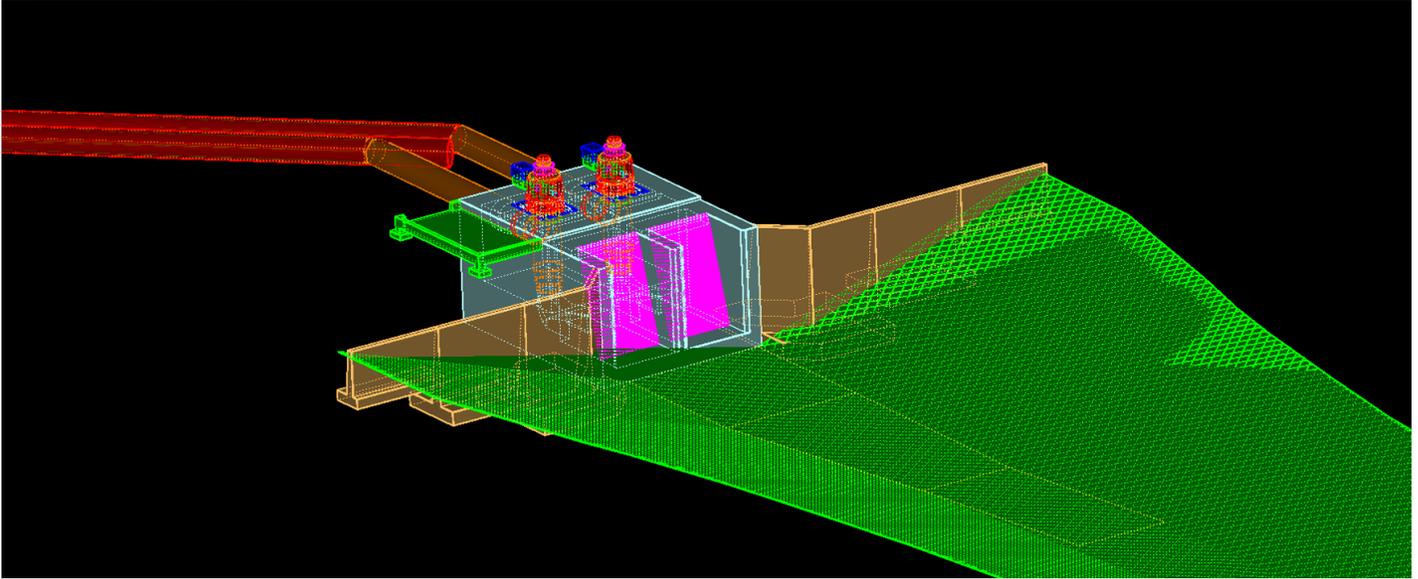
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Value to the Nation

Bayou Meto



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
- Bayou Meto Wildlife Management



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.



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 and incorporates a system of new canals, existing streams and pipelines to deliver water to depleted areas.

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.

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.





Value to the Nation



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 among 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. It is recognized as Vicksburg's second oldest business operating and maintaining over \$2.3 billion in real property and projects which, in turn, generate both direct and indirect economic value for the Nation.

**From a program of 150 million dollars,
the Vicksburg District returns nearly
1 billion dollars in economic benefits**

ANNUAL DIRECT ECONOMIC BENEFITS

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

ANNUAL INDIRECT ECONOMIC BENEFITS

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

VICKSBURG DISTRICT



District
Financial
Information



Construction General – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|--|---|-------------------------|--|--|
| Construction General | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Red River Below Denison Dam , AR, LA, and TX | \$0 | There are no funds in the FY 20 President’s Budget for this project. | | \$0 | There are no funds in the FY 21 President’s Budget for this project. | Funds in the amount of \$21,020,000 could be used to construct gravel surfacing on Louisiana levees (\$5,000,000), design of levee rehabilitation on Items 9B and 9A, Phase II (\$4,000,000), and repair levee slide, stone revetment, seepage and stabilize the bank in Miller County, Arkansas (\$12,020,000). |
| Red River Emergency Bank Protection, AR,LA,OK,TX | \$0 | There are no funds in the FY 20 President’s budget for this project. | | \$0 | There are no funds in the FY 21 President’s Budget for this project. | Funds in the amount of \$18,100,000 could be used to construct Dickson Revetment (\$5,000,000), design of Float and Glycerine Revetment (\$600,000), Construct Stone Bank Paving Revetment near Plain Dealing (\$10,000,000), and bank stabilization near Riverside Drive in Pineville, Louisiana (\$2,500,000). |

Operations and Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|----------------------------------|----------------------------|--|---|-------------------------|--|---|
| Operations and Maintenance (O&M) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Blakely Mountain Dam | \$8,035,000 | Funds in the amount of \$8,035,000 are being used for routine operation and maintenance for the project, maintain same level of recreation service, and campground availability campground availability. | | \$8,385,000 | Funds in the amount of \$8,385,000 will be used to continue routine operations and maintenance, to maintain same level of recreation service as in FY20, environmental stewardship, flood risk management operations and maintenance, water management data collection and hydropower operations and maintenance, recreational and environmental compliance. | Additional funds in the amount of \$12,534,000 could be used for environmental stewardship (\$138,000), flood risk management operations and maintenance (\$465,000), construction of storage building (\$1,000,000), hydropower operations and maintenance (\$1,234,000), replace riprap blanket (\$6,000,000), recreation operations and maintenance (\$1,867,000), and other various maintenance activities (\$1,830,000). |

Operations and Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|--|---|-------------------------|--|---|
| Operations and Maintenance (O&M) (Cont.) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| DeGray Lake | \$7,166,000 | Funds in the amount of \$7,166,000 are being used for maintenance and operation for hydropower, maintenance and operation for flood risk management, and operation for recreation. | | \$6,605,000 | Funds in the amount of \$6,605,000 will be used for routine operation and maintenance of the project and maintain the same level of recreation service as in FY 20, hydropower operations and maintenance, increase recreation services, environmental stewardship, forest and wildlife habitat management, flood risk management, and all other activities. | Additional funds in the amount of \$7,571,500 could be used for hydropower operations and maintenance (\$835,500), construction of storage building (\$1,000,000), replace power plant roof (\$500,000), replace field office (\$2,300,000) and all other activities (\$2,936,000). |
| ICW, AR | \$0 | TBD | | \$0 | TBD | Additional funds in the amount of \$415,000 could be used for levee and channel inspections. Reports will be generated and provided to local sponsors for their use to incorporate and schedule repair of deficiencies into their levee maintenance program. |

Operations and Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|--|---|-------------------------|---|--|
| Operations and Maintenance (O&M) (Cont.) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Narrows Dam | \$5,733,000 | Funds in the amount of \$5,733,000 are being used for routine operations and maintenance, to maintain same level of service and campground availability. | | \$5,851,000 | Funds in the amount of \$5,851,000 will be used for hydropower operations and maintenance, water management data collection, recreation, environmental stewardship, and flood risk management. | Additional funds in the amount of \$4,363,000 could be used for generator exciter replacements (\$500,000), construction of storage building (\$1,000,000), recreation and environmental stewardship (\$2,060,000), update emergency action plan (\$102,000), hydropower operations and maintenance (\$663,000) and all other activities (\$38,000). |
| Ouachita Black | \$7,339,000 | Funds in the amount of \$7,339,000 are being used to continue to operate and maintain the locks and dams, operate the system at reduced hours in accordance with IMTS; maintenance dredging. | | \$7,625,000 | Funds in the amount of \$7,625,000 will be used to perform flood risk management, water management data gathering, environmental stewardship, recreation, and operation and maintenance for navigation. | Additional funds in the amount of \$18,819,000 could be used to fully fund dredging (\$3,300,000), environmental stewardship (\$152,000), water management data gathering (\$170,000), operation for recreation (\$1,217,000), repairs at H.K. Thatcher lock and dam (\$8,300,000), periodic inspection and assessment surveys (\$730,000), Felsenthal lock and dam operations and maintenance (\$3,750,000) and all other activities (\$1,200,000). |

Operations and Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|--|---|-------------------------|--|---|
| Operations and Maintenance (O&M) (Cont.) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Yellow Bend Port | \$0 | There are no funds in the FY 20 President's budget for this project. | | \$125,000 | Funds in the amount of \$125,000 will be used for surveys to determine the need for and extent of annual dredging and dredging activities. | Additional funds in the amount of \$50,000 could be used for additional dredging to restore project dimensions. |

MR&T Investigations and MR&T Construction Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|------------------------------------|----------------------------|--|---|-------------------------|--|---|
| MR&T-Investigations | | | | | | |
| Study | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Collection and Study of Basic Data | \$2,250,000 | Funds in the amount of \$2,250,000 are being used for survey of permanent ranges, Aquatic/Water Quality and Quantity Monitoring, base stream flow analysis, and collections and surveys. | | \$500,000 | Funds in the amount of \$500,000 will be used for management and prediction of flood risk. | Funds in the amount of \$3,750,000 could be used for management and prediction of flood risk (\$900,000), water quality and preservation of historical records (\$2,850,000). |

MR&T Investigations and MR&T Construction Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|--|---|-------------------------|--|--|
| MR&T-Construction | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Channel Improvement, Revetment and Dikes | \$21,800,000 | Funds in the amount of \$21,800,000 are being used to award a construction contract for Victoria Bend Dikes, Phase I, plan and design of channel dikes construction, and construction of articulated concrete mattress projects. | | \$12,750,000 | Funds in the amount of \$12,750,000 are being used to award a contract for Tarpley Cutoff Dikes, Plan and Design of Channel Dikes Construction at Victoria Bend, Tarpley Cutoff and Anconia, and articulated concrete mattress projects. | Funds in the amount of \$58,790,000 could be used for awarding new contracts (\$15,610,000), design and construction of new dikes design and construction of articulated concrete mattress revetment (\$32,340,000), and Refuge Stone Bank Paving at Dikes 1A, 1B & 1C and Anconia Chute Dike 1U (\$10,840,000). |
| Mississippi River Levees, AR, LA & MS | \$14,750,000 | Funds in the amount of \$14,750,000 are being used to complete design for Mississippi River Levee Items 414-R, 401-R and 368-R, award a contract for Item 414-R, and for a USGS Resistivity study. | | \$13,666,000 | Funds in the amount of \$13,666,000 are being used to award a contract for Item 401-R, Yucatan-Lake-Lake Bruin, Louisiana and to complete design and S&A for multiple Items. | Funds in the amount of \$43,650,000 could be used to award contracts (\$30,050,000) (Items 614-L, 555-R, 525-R, 520-R, 401-R, 393-R, 370-R, 368-R, 367-R, and 366-R) and continue design on future award items (\$13,600,000). |

MR&T Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|---|---|-------------------------|---|--|
| MR&T Maintenance (M) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Channel Improvement, Dredging | \$3,844,000 | Funds in the amount of \$3,844,000 are being used for operation for navigation and studies and surveys for navigation. | | \$5,900,000 | Funds in the amount of \$5,900,000 will be used to conduct surveys, annual maintenance dredging on main line MS River navigation channel. | Funds in the amount of \$4,550,000 could be used for annual maintenance dredging on main line Mississippi River navigation channel. |
| Channel Improvement, Revetment and Dikes | \$14,600,000 | Funds in the amount of \$14,600,000 are being used to award stone repair contracts, planning engineering, and design of articulated concrete mattress revetments and repairs to existing dikes. | | \$18,500,000 | Funds in the amount of \$18,500,000 will be used for operation for dike maintenance stone repairs and ACM revetments. | Funds in the amount of \$41,203,000 could be used for articulated concrete mattress revetments (\$7,600,000), award contract for stone repairs to existing structures (\$2,000,000), dike repairs (\$4,500,000), and revetment repairs (\$27,103,000). |
| Inspection of Completed Works (ICW) AR | \$70,000 | Funds in the amount of \$70,000 are being used for routine levee inspections. | | \$0 | TBD | Funds in the amount of \$129,000 could be used to perform minimum level inspections and to perform inspections and documentation. |

MR&T Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|---------------------------------------|----------------------------|--|---|-------------------------|---|--|
| MR&T Maintenance (M) (Cont.) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Lower Arkansas River, North Bank, AR | \$1,532,000 | Funds in the amount of \$1,532,000 are being used for levee inspections, levee safety risk assessments, and risk communication, and operation and maintenance of the project. | | \$225,000 | Funds in the amount of \$225,000 will be used for maintenance for flood risk management, operation and maintenance of levees, and water management. | Funds in the amount of \$360,000 could be used for structure continuation to provide support to the local sponsors and levee surfacing material. |
| Lower Arkansas River, South Bank, AR | \$148,000 | Funds in the amount of \$148,000 are being used for levee inspections, levee safety risk assessments, and risk communication, operation and maintenance of the project, and data collection. | | \$298,000 | Funds in the amount of \$298,000 will be used for periodic levee inspections, maintenance of project, program management, and water management. | Funds in the amount of \$125,000 could be used for levee resurfacing material. |
| Mississippi River Levees, AR, LA & MS | \$7,673,000 | Funds in the amount of \$7,673,000 are being used for periodic inspections, operation and maintenance for flood risk management, slide repairs, relief well rehabilitation, and data collection. | | \$3,713,000 | Funds in the amount of \$3,713,000 will be used for data collection, inspections, relief well rehabilitation, and major maintenance of the project. | Funds in the amount of \$1,914,000 could be used for maintenance for flood risk management (\$872,000), levee surfacing (\$812,000) and mitigation features (\$230,000). |

MR&T Maintenance – Arkansas

| FY 2020 Synopsis | | | | FY 2021 Synopsis | | |
|--|----------------------------|---|---|-------------------------|--|--|
| MR&T Maintenance (M) (Cont.) | | | | | | |
| Project | FY 2020 Allocation (\$000) | FY 2020 Description of Work | How Project Efforts Enable the FY 2021 Budget | FY 2021 Bud Amt (\$000) | FY 2021 Description of Work | Remarks/Issues |
| Red-Ouachita River Basin Levees, AR & LA | \$185,000 | Funds in the amount of \$185,000 are being used for levee safety program oversight, inspections, and data management and operation and maintenance of levees and levee repairs. | | \$0 | There are no funds in the FY 21 President’s Budget for this project. | Funds in the amount of \$293,000 could be used in the operation and maintenance of USACE-owned levees and levee repairs. |

VICKSBURG DISTRICT



Project Fact Sheets and Maps





VICKSBURG DISTRICT



Construction





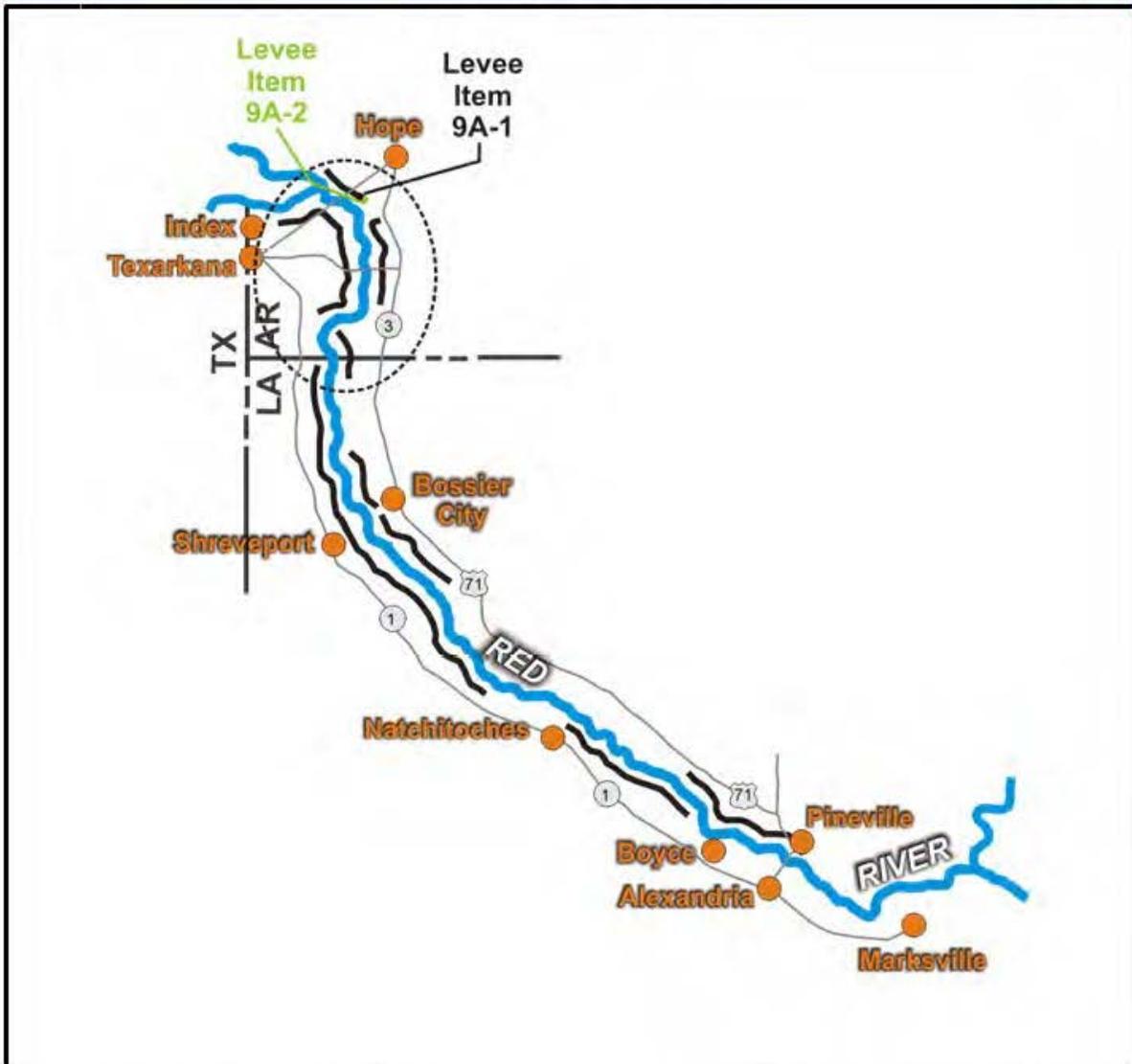
CONSTRUCTION

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 sponsor.

M V K . U S A C E . A R M Y . M I L

RED RIVER BELOW DENISON DAM
 Arkansas, Louisiana and Texas
CONSTRUCTION (FRM)





**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 20: There are no funds in the FY 20 President’s Budget for this project.

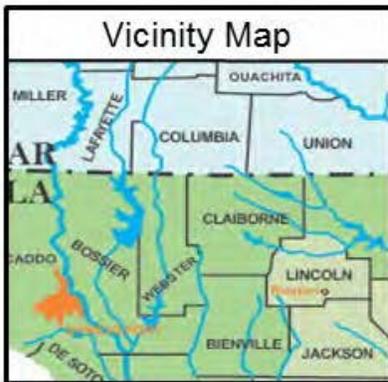
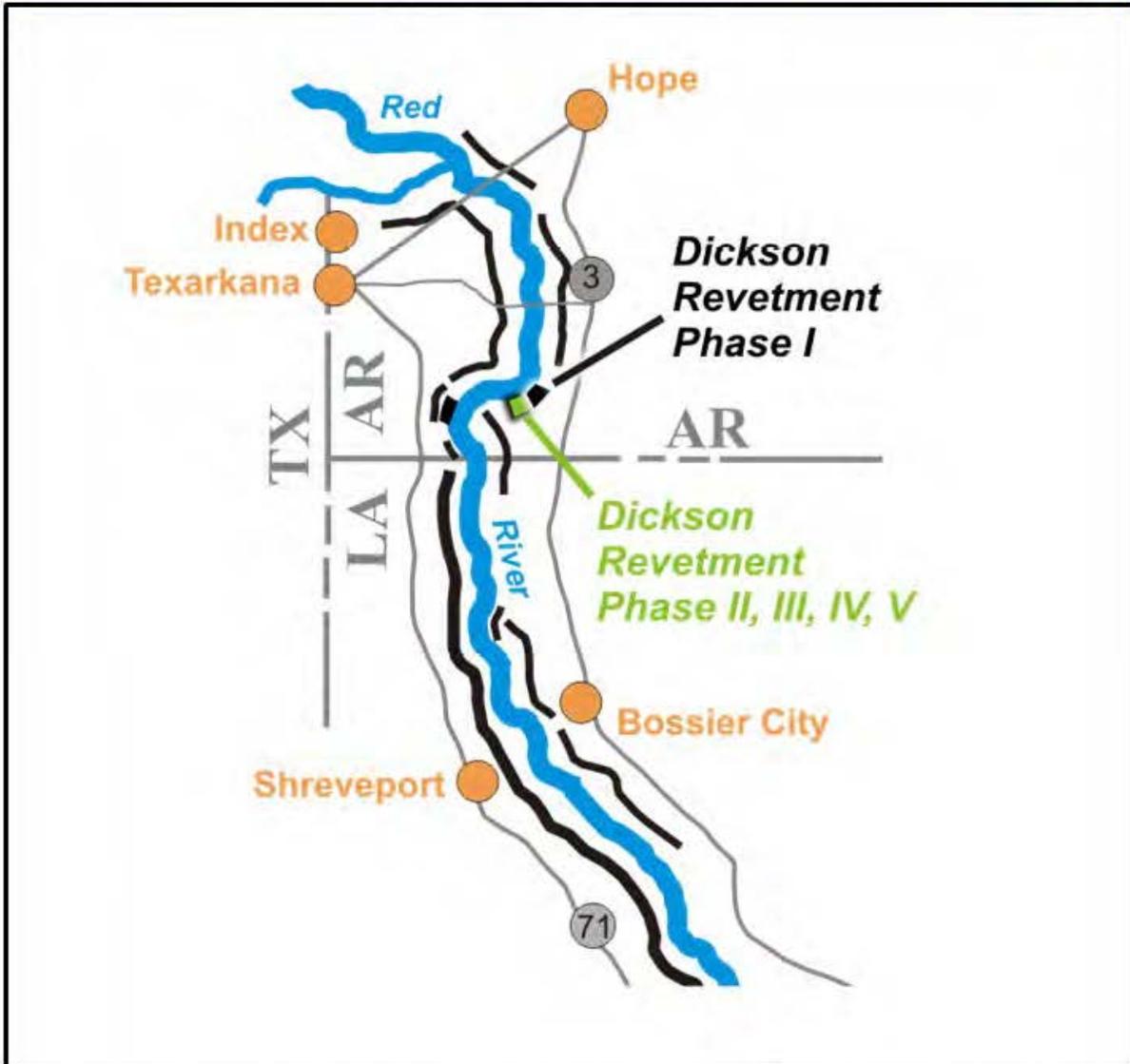
Acquisition Strategy: N/A

Amount That Could Be Used in FY 21: There are no funds in the FY 21 President’s Budget for this project. Funds in the amount of \$21,020,000 could be used to construct gravel surfacing on Louisiana levees (\$5,000,000), design of levee rehabilitation on Items 9B and 9A, Phase II (\$4,000,000), and repair levee slide, stone revetment, seepage and stabilize the bank in Miller County, Arkansas (\$12,020,000).

Project Sponsor/Customer: Multiple local levee districts

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

| Phase | Estimated Federal Cost of Phase | Federal Funding Thru FY 19 | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|--------------|---------------------------------|----------------------------|------------------|--------------|------------------------|
| Construction | \$130,000,000 | \$95,705,000 | \$0 | \$0 | \$21,020,000 |





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: 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.

Activities for FY 20: There are no funds in the FY 20 President's budget for this project.

Acquisition Strategy: N/A



Dickson Revetment Phase I

Amount That Could Be Used in FY 21: There are no funds in the FY 21 President's Budget for this project. Funds in the amount of \$18,100,000 could be used to construct Dickson Revetment (\$5,000,000), design of Float and Glycerine Revetment (\$600,000), Construct Stone Bank Paving Revetment near Plain Dealing (\$10,000,000), and bank stabilization near Riverside Drive in Pineville, Louisiana (\$2,500,000).

Project Sponsor/Customer: Multiple local levee districts

Congressional Interest: Senate: Cotton and Boozman (AR), Kennedy and Cassidy (LA); House: Westerman (AR-4) and Johnson (LA-4).

| Phase | Estimated Federal Cost of Phase | Federal Funding Thru FY 19 | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|--------------|---------------------------------|----------------------------|------------------|--------------|------------------------|
| Construction | \$171,700,000 | \$152,594,000 | \$0 | \$0 | \$18,100,000 |

VICKSBURG DISTRICT

Continuing Authorities Program

The Continuing Authorities Program (CAP) allows the Corps to respond more quickly than is possible through the specific Congressional authorization process. This is because Congress has delegated to the Corps general authority to study and, if proven feasible, approve and construct certain water resources development projects.

The program is comprised of eight different types of projects applicable to the Vicksburg District, each with its own project authority and strict limit on the Federal contribution. With all CAP projects, the initial feasibility study is 100% federally funded up to \$100,000. If the feasibility study exceeds \$100,000, the sponsor must contribute 50 percent of the study cost exceeding the \$100,000 limit. As favorable studies progress towards more detailed design and construction, certain project costs must be shared with the local sponsor including any and all costs in excess of Federal project limits. For this reason, the local sponsor must be a non-Federal entity with the power to raise revenue sufficient to satisfy requirements of local cooperation.

| Project | Authority | Federal Study Limit (\$) | Study Cost Share if Exceeds Study Limit | Implementation Cost Share Fed/Non-Fed | Federal Project Limit (\$) |
|--|---|---------------------------------|--|--|-----------------------------------|
| Small Flood Control Projects | Section 205 1948 Flood Control Act, as amended | 100,000 | 50%/50% | 65%/35% up to 50%/50% | 10,000,000 |
| Streambank and Shoreline Protection | Section 14 1946 Flood Control Act, as amended | 100,000 | 50%/50% | 65%/35% up to 50%/50% | 5,000,000 |
| Snagging and Clearing for Flood Control | Section 208 1954 Flood Control Act, as amended | 100,000 | 50%/50% | 65%/35% up to 50%/50% | 500,000 |
| Small Navigation Projects | Section 107 1960 River and Harbor Act, as amended | 100,000 | 50%/50% | 80%/20% up to 50%/50% | 10,000,000 |
| Mitigation of Shore Damage Attributable to Navigation Works | Section 111 1968 River and Harbor Act, as amended | 100,000 | 50%/50% | 65%/35% | 10,000,000 |
| Environmental Restoration | Section 1135 1986 Water Resources Development Act, as amended | 100,000 | 50%/50% | 75%/25% | 10,000,000 |
| Ecosystem Restoration in Connection with Dredging | Section 204 1992 Water Resources Development Act, as amended | 100,000 | 50%/50% | 75%/25% | 10,000,000 |
| Aquatic Ecosystem Restoration | Section 206 1996 Water Resources Development Act, as amended | 100,000 | 50%/50% | 65%/35% | 10,000,000 |

CONTINUING AUTHORITIES PROGRAM MANAGER
Barry Moore

Phone: 601.631.5450

Email: Barrett.G.Moore@usace.army.mil

Vicksburg District | 59

8 Authorities of the Continuing Authorities Program (CAP)

Section 14

Emergency Streambank & Shoreline Protection

Flood Control Act of 1946 (PL 79-526), 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. The federal funding limit is \$1.5 million per project and the national program limit is \$15 million. These are two-phase projects: feasibility studies that exceed \$100,000 are cost-shared 50/50 and design and implementation are typically cost-shared 65% federal and 35% non-federal.

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. The federal funding limit is \$7 million per project and the national program limit is \$35 million. These are two-phase projects: feasibility studies that exceed \$100,000 are cost-shared 50/50 and design and implementation are typically cost-shared 80% federal and 20% non-federal.

Section 205

Small Flood Control Projects

Flood Control Act of 1948 (PL 80-858), as amended by WRDA 1999

This authority provides 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. The federal funding limit is \$7 million per project and the national program limit is \$55 million. These are two-phase projects: feasibility studies that exceed \$100,000 are cost-shared 50/50 and design and implementation are typically cost-shared 65% federal and 35% non-federal.

Section 206

Aquatic Ecosystem Restoration

Water Resources Development Act of 1996 (PL 104-303), as amended by WRDA 1999

This authority provides for restoration and protection of aquatic ecosystems if the project will improve the environment and is in the public interest. The federal funding limit is \$5 million per project and the national program limit is \$50 million. These are two-phase projects: feasibility studies that exceed \$100,000 are cost-shared 50/50 and design and implementation are cost-shared 65% federal and 35% non-federal.

Section 1135

Project Modification for Improvements to the Environment

Water Resources Development Act of 1986 (PL 99-662), as amended by WRDA 1996

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 a Corps' project has contributed to degradation or the quality of the environment. The Federal funding limit is \$5 million per project and the national program limit is \$40 million. These are two-phase projects: feasibility studies that exceed \$100,000 are cost-shared 50/50 and design and implementation are cost-shared 75% federal and 25% non-federal.

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 costs 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 typically cost-shared 65% federal and 35% non-federal with a \$5000,000 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 costs 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 \$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 costs 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.

VICKSBURG DISTRICT



Operation
and
Maintenance





OPERATION AND MAINTENANCE

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.

M V K . U S A C E . A R M Y . M I L



**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, Arkansas.

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 122,658 megawatts. 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 ongoing at reduced levels. Campground availability will be the same as FY 19.

Importance: DeGray Lake is an economic engine for the local and regional area. The lake produces in excess of \$23 million in direct economic benefits to the area while directly supporting over 278 jobs in the region. In FY 17 DeGray Power Plant generated 122,658 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 20: Funds in the amount of \$7,166,000 are being used for maintenance and operation for hydropower, maintenance and operation for flood risk management, and operation for recreation.

Acquisition Strategy: NA

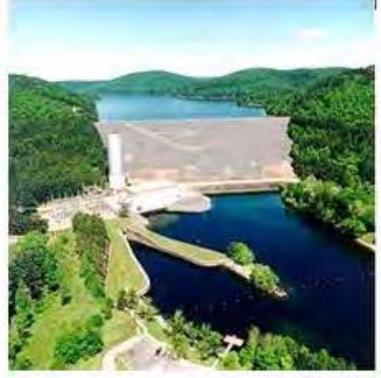
Amount That Could Be Used in FY 21: Funds in the amount of \$6,605,000 will be used for routine operation and maintenance of the project and maintain the same level of recreation service as in FY 20, hydropower operations and maintenance, increase recreation services, environmental stewardship, forest and wildlife habitat management, flood risk management, and all other activities. Additional funds in the amount of \$7,571,500 could be used for hydropower operations and maintenance (\$835,500), construction of storage building (\$1,000,000), replace power plant roof (\$500,000), replace field office (\$2,300,000) and all other activities (\$2,936,000)

Project Sponsor/Customer: NA

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

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------|------------------|--------------|------------------------|
| O&M | \$7,166,000 | \$6,605,000 | \$14,176,500 |

BLAKELY MTN. DAM AND LAKE OUACHITA
Arkansas
Operation and Maintenance (FRM, HYD, REC, ENS)





**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 megawatts. 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 ongoing at reduced levels. Campground availability will be the same as FY 19.

Importance: Blakely Mountain Dam/Lake Ouachita is an economic engine for the local and regional area. The lake produces in excess of \$65 million in direct economic benefits to the area while directly supporting over 607 jobs in the region. In FY 17, Blakely Mountain Power Plant generated 238,686 megawatt-hours of hydroelectric power and since being placed in operation, has produced gross revenues of over \$174.0 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.

Activities for FY 20: Funds in the amount of \$8,035,000 are being used for routine operation and maintenance for the project, maintain same level of recreation service, and campground availability.



Blakely Mountain Dam and Lake Ouachita

Acquisition Strategy: NA

Amount That Could Be Used in FY 21: Funds in the amount of \$8,385,000 will be used to continue routine operations and maintenance, to maintain same level of recreation service as in FY20, environmental stewardship, flood risk management operations and maintenance, water management data collection and hydropower operations and maintenance, recreational and environmental compliance. Additional funds in the amount of \$12,534,000 could be used for environmental stewardship (\$138,000), flood risk management operations and maintenance (\$465,000), construction of storage building (\$1,000,000), hydropower operations and maintenance (\$1,234,000), replace riprap blanket (\$6,000,000), recreation operations and maintenance (\$1,867,000), and other various maintenance activities (\$1,830,000).

Project Sponsor/Customer: NA

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

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------|------------------|--------------|------------------------|
| O&M | \$8,035,000 | \$8,385,000 | \$20,919,000 |



**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, Arkansas, north of Murfreesboro, Arkansas.

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 26,000 megawatts. 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 ongoing at reduced levels. Campground availability will be the same as FY 19.

Importance: Narrows Dam/Lake Greeson is an economic engine for the local and regional area. The lake produces in excess of \$18 million in direct economic benefits to the area while directly supporting over 198 jobs in the region. In FY 17 Narrows Power Plant generated 62,413 megawatt-hours of hydroelectric power and since being placed in operation, has produced gross revenues of over \$54.0 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 20: Funds in the amount of \$5,733,000 are being used for routine operations and maintenance, to maintain same level of service and campground availability.

Acquisition Strategy: NA

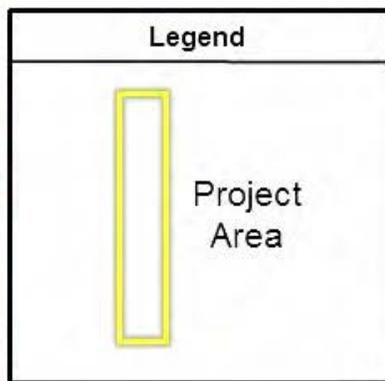
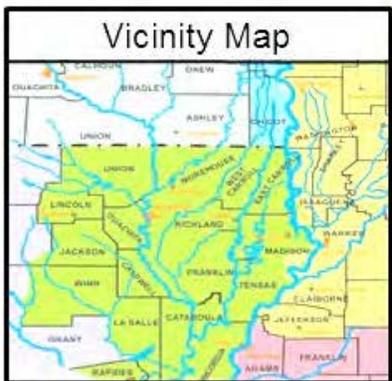
Amount That Could Be Used in FY 21: Funds in the amount of \$5,851,000 will be used for hydropower operations and maintenance, water management data collection, recreation, environmental stewardship, and flood risk management. Additional funds in the amount of \$4,363,000 could be used for generator exciter replacements (\$500,000), construction of storage building (\$1,000,000), recreation and environmental stewardship (\$2,060,000), update emergency action plan (\$102,000), hydropower operations and maintenance (\$663,000) and all other activities (\$38,000).

Project Sponsor/Customer: NA

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

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------|------------------|--------------|------------------------|
| O&M | \$5,733,000 | \$5,851,000 | \$10,214,000 |

OUACHITA-BLACK NAVIGATION PROJECT
Arkansas and Louisiana
OPERATION AND MAINTENANCE (NAV, FRM, REC, ENS)





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Ouachita-Black Navigation Project, AR

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. With implementation of Inland Marine Transportation System (IMTS) in February 2014, Lock operations remained unchanged with the 2 lower locks and dams operating 24 hours/day, 7 days/week, but operation on the upper 2 locks and dams changed to 10 hours/day, Monday-Friday.

Importance: 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.

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.

Activities for FY 20: Funds in the amount of \$7,339,000 are being used to continue to operate and maintain the locks and dams, operate the system at reduced hours in accordance with IMTS; maintenance dredging.

Acquisition Strategy: N/A



Ouachita/Black River

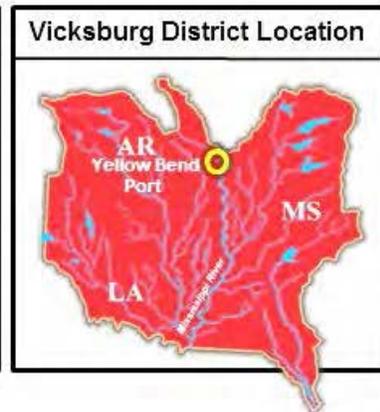
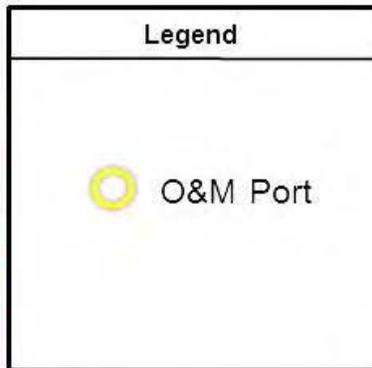
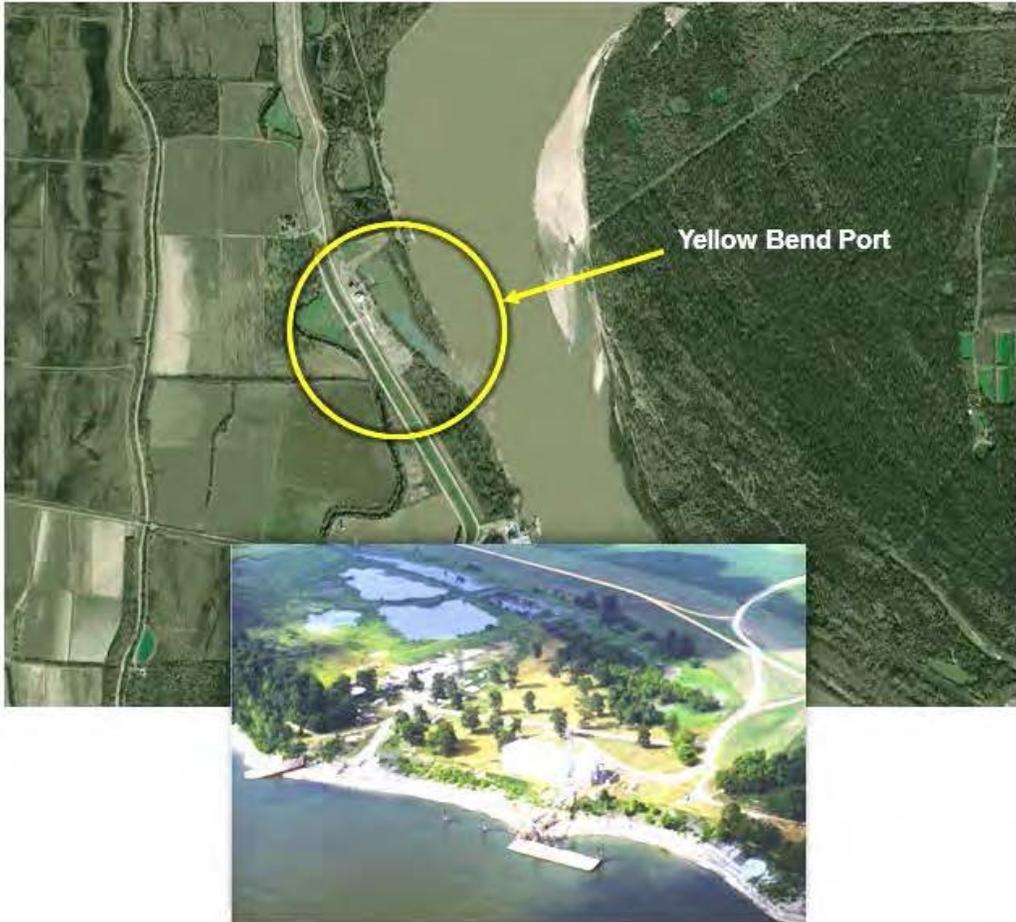
Amount That Could Be Used in FY 21: Funds in the amount of \$7,625,000 will be used to perform flood risk management, water management data gathering, environmental stewardship, recreation, and operation and maintenance for navigation. Additional funds in the amount of \$18,819,000 could be used to fully fund dredging (\$3,300,000), environmental stewardship (\$152,000), water management data gathering (\$170,000), operation for recreation (\$1,217,000), repairs at H.K. Thatcher lock and dam (\$8,300,000), periodic inspection and assessment surveys (\$730,000), Felsenthal lock and dam operations and maintenance (\$3,750,000) and all other activities (\$1,200,000).

Project Sponsor/Customer: Louisiana Department of Transportation and Ouachita River Valley Association

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

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------|------------------|--------------|------------------------|
| O&M | \$7,339,000 | \$7,625,000 | \$26,444,000 |

YELLOW BEND PORT Arkansas OPERATION AND MAINTENANCE (NAV)





**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, Arkansas.

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, Arkansas.

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 20: There are no funds in the FY 20 President’s budget for this project.

Acquisition Strategy: NA

Amount That Could Be Used in FY 21: Funds in the amount of \$125,000 will be used for surveys to determine the need for and extent of annual dredging and dredging activities. Additional funds in the amount of \$50,000 could be used for additional dredging to restore project dimensions.

Project Sponsor/Customer: Yellow Bend Port

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

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------|------------------|--------------|------------------------|
| O&M | \$0 | \$125,000 | \$175,000 |

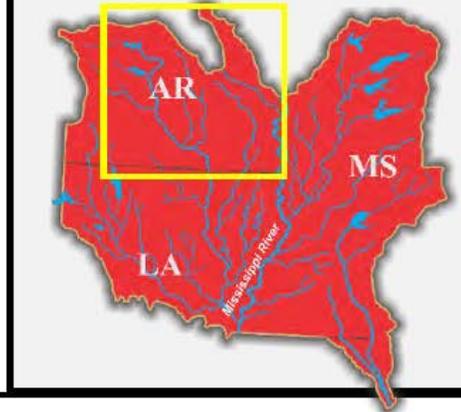


US Army Corps
of Engineers
Vicksburg District

INSPECTION OF COMPLETED WORKS Arkansas OPERATION & MAINTENANCE (FRM)



Vicksburg District Location





**US Army Corps
of Engineers
Vicksburg District**

Project Fact Sheet Inspection of Completed Works (ICW) AR

Rivers and Harbors Act (RHA) of 1899 (Section 408); Flood Control Act (FCA) of 1937 (Section 2); RHA of 1945 (Section 3); FCA of 1946 (Section 14); FCA of 1948 (Section 205); FCA 1970 (Section 221); 33 Code of Federal Regulations, Part 208

Operation & Maintenance (FRM)

Location: The project covers the portion of the Vicksburg District located within the state of Arkansas.

Description: Inspect Completed Works Projects to document, review, and report findings, and transmit letters to local sponsors, for 146 miles of levees, 91 miles of channels, 10 drainage structures, 2 pumping stations and 8 weirs in Arkansas.

Issues: The labor intensive requirement to perform periodic inspections on all levee systems is consuming excessive amounts of the limited ICW funding we traditionally have received to perform annual inspections. This is deferring the annual inspection of some infrastructure items.

Importance: These inspections allow the Vicksburg District to identify deficiencies that may have life safety consequences. These inspections also verify the adequacy of Operation and Maintenance activities by the sponsors and reveal where improvements are needed to ensure the flood damage reduction features function as designed.

Risk: The public relies on the flood damage reduction systems to protect life and infrastructure from high water events

Consequence: The population at risk is 1,971. Number of structures at risk is 1,234. The property value in leveed areas is \$313,950,000.



Channel Inspection

Activities for FY 20: Funds for FY 20 President’s Budget are to be determined.

Acquisition Strategy: N/A.

Amount That Could Be Used in FY 21: Funds for FY 21 President’s Budget are to be determined. Additional funds in the amount of \$415,000 could be used for levee and channel inspections. Reports will be generated and provided to local sponsors for their use to incorporate and schedule repair of deficiencies into their levee maintenance program.

Project Sponsor/Customer: Union County, Hempstead Levee District No. 1, Miller County Levee District No. 2, Red River Levee District No. 1, Garland Levee District, Miller County Improvement & Drainage District, McKinney Bayou Drainage District, Long Prairie Levee District, Maniece Bayou Drainage District No. 2.

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



Levee Inspection

| FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|------------------|--------------|------------------------|
| TBD | TBD | \$415,000 |

VICKSBURG DISTRICT



MR&T

Investigations

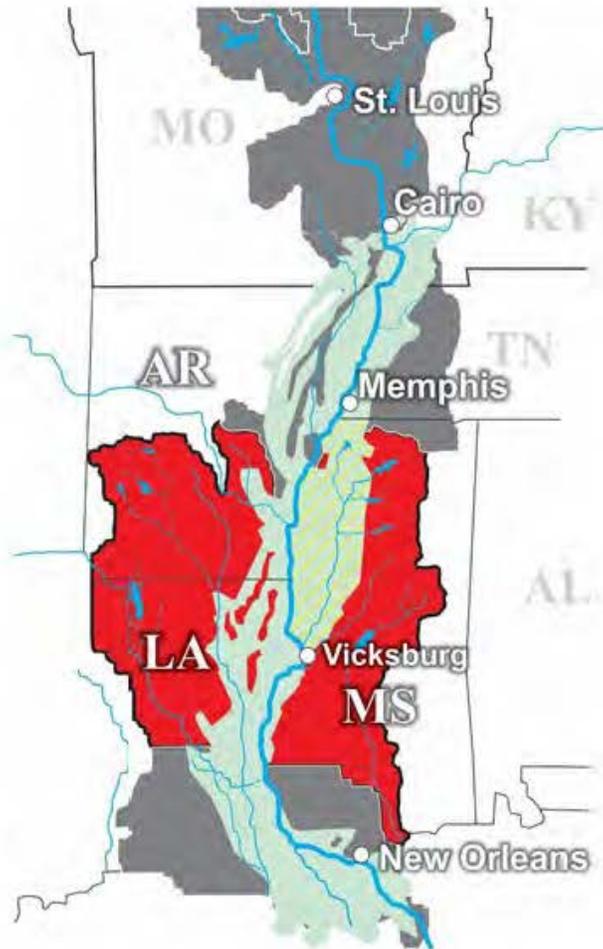




MR&T INVESTIGATIONS

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.

M V K . U S A C E . A R M Y . M I L



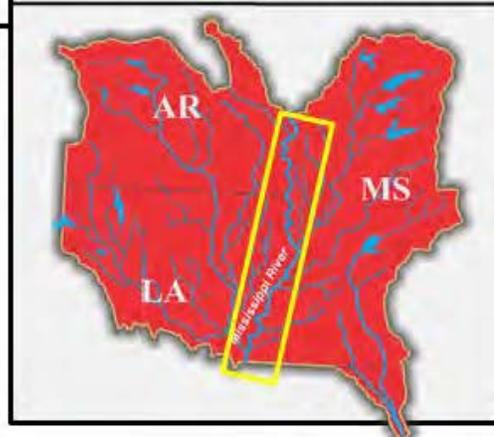
Vicinity Map



Legend

- Vicksburg District
- MR&T Project Area
- LIDAR Data Area

Vicksburg District Location





US Army Corps
of Engineers
Vicksburg District

Project Fact Sheet

Collection and Study of Basic Data, AR, LA, MS, IL, TN, MO, KY (MVK ONLY)

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 channel adequacy, water quality and quantity, aquatic resource monitoring and other items of related hydrologic nature.

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.

G&P issues are directly related to future operation of the system.

Risk: Without adequate funding of this data gathering, the Mississippi River Commission and Districts would lose the ability to make accurate flood predictions and to determine how to manage the systems over the long term.

Consequence: If essential hydraulic and hydrologic and water quality data could not be collected data would not be available to accurately predict future flood and drought conditions on major reservoirs and rivers within the Lower Mississippi Valley. Decision makers will be ill advised on when to operate structure and local citizens would be at risk of increased flooding.



Activities for FY 20: Funds in the amount of \$2,250,000 are being used for survey of permanent ranges, Aquatic/Water Quality and Quantity Monitoring, base stream flow analysis, and collections and surveys.

Acquisition Strategy: None.

Amount That Will Be Used in FY 21: Funds in the amount of \$500,000 will be used for management and prediction of flood risk. Additional funds in the amount of \$3,750,000 could be used for management and prediction of flood risk (\$900,000), water quality and preservation of historical records (\$2,850,000).

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 Kennedy (LA), Hyde-Smith and Wicker (MS); House: Crawford (AR-1), Westerman (AR-4), Scalise (LA-1), Johnson (LA-4), Abraham (LA-5), Kelly (MS-1), and Thompson (MS-2).

| Phase | Estimated Federal Cost of Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|---------------------------------|------------------|--------------|------------------------|
| Feasibility | N/A | \$2,250,000 | \$500,000 | \$4,250,000 |

VICKSBURG DISTRICT



MR&T

Construction





MR&T CONSTRUCTION

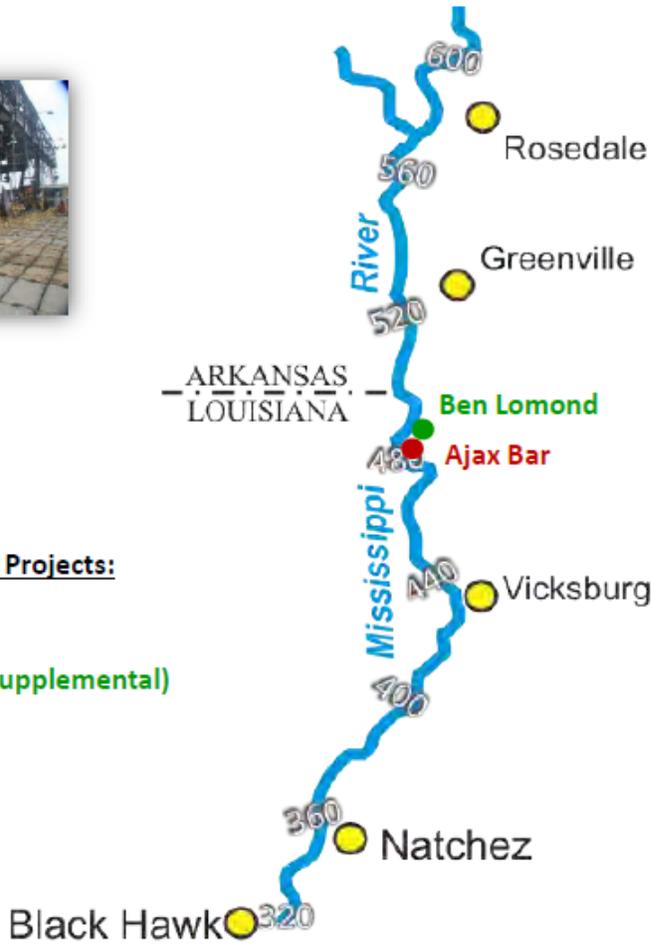
The objective of the MR&T construction program is to construct and complete authorized and appropriated MR&T projects as economically and quickly as practicable within program constraints and consistent with current national priorities.

M V K . U S A C E . A R M Y . M I L



US Army Corps
of Engineers
Vicksburg District

MISSISSIPPI RIVER CHANNEL IMPROVEMENT
Arkansas, Louisiana, and Mississippi
MISSISSIPPI RIVER AND TRIBUTARIES, Construction (FRM)



2018 Dike Construction Projects:

484.4 L, Ajax Bar

489.0 L, Ben Lomond (Supplemental)

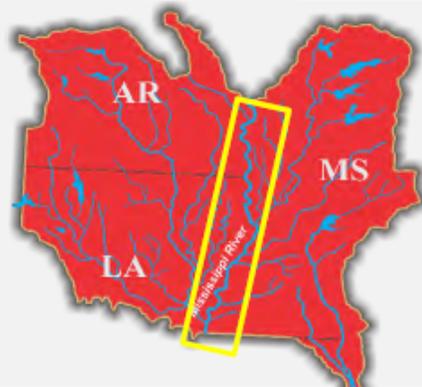
Vicinity Map



Legend

- 2018 Dike Construction
- 2018 Dike Construction (Supplemental)

Vicksburg District Location





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Channel Improvement, Revetment and Dikes, 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.

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.



Revetment Construction – Articulated Concrete Mat (ACM)

Activities for FY 20: Funds in the amount of \$21,800,000 are being used to award a construction contract for Victoria Bend Dikes, Phase I (extending and raising), plan and design of channel dikes construction, and construction of articulated concrete mattress projects.

Acquisition Strategy: NA

Amount That Could Be Used in FY 21: Budgeted funds in the amount of \$12,750,000 are being used to award a contract for Tarpley Cutoff Dikes, Plan and Design of Channel Dikes Construction at Victoria Bend, Tarpley Cutoff and Anconia, and articulated concrete mattress projects. Additional funds in the amount of \$58,790,000 could be used for awarding new contracts (\$15,610,000), design and construction of new dikes design and construction of articulated concrete mattress revetment (\$32,340,000), and Refuge Stone Bank Paving at Dikes 1A, 1B & 1C and Anconia Chute Dike 1U (\$10,840,000).

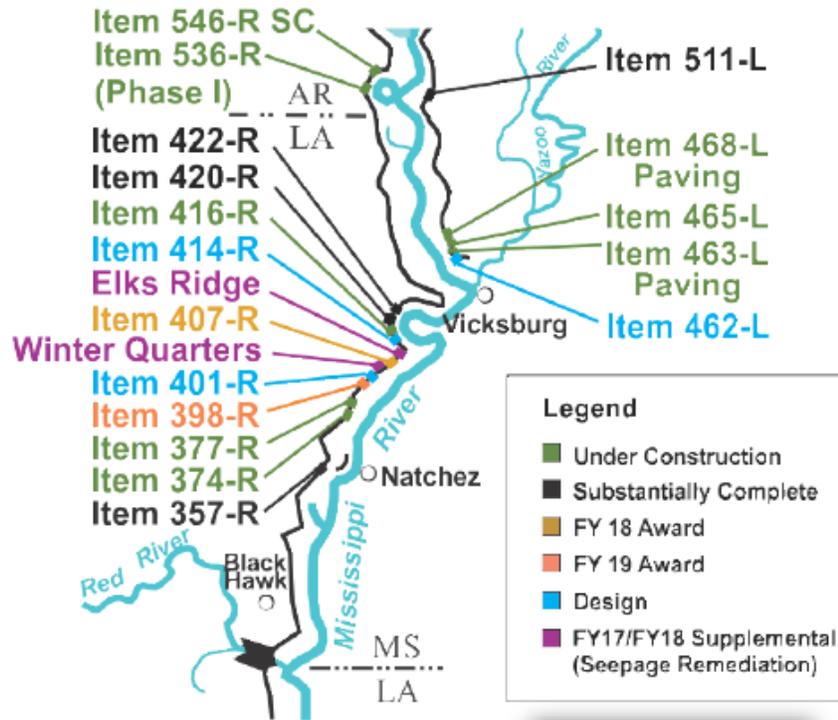
Project Sponsor/Customer: Navigation industry, environmental community, and Mississippi Levee, Fifth Louisiana Levee District, and Southeast Arkansas Levee Boards.

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



Stone Dike Construction

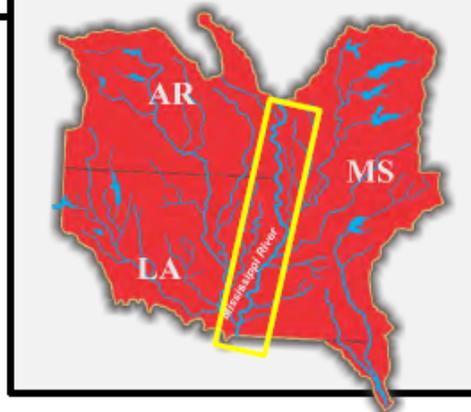
| Estimated Federal Cost of Phase | Federal Funding Thru FY 19 | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|---------------------------------|----------------------------|------------------|--------------|------------------------|
| \$1,414,000,000 | \$1,147,744,731 | \$21,800,000 | \$12,750,000 | \$71,540,000 |



Vicinity Map



Vicksburg District Location



Legend

- Under Construction
- Substantially Complete
- FY 18 Award
- FY 19 Award
- Design
- FY17/FY18 Supplemental (Seepage Remediation)



**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: The plan of improvement provides for raising, strengthening, and in some cases, extending existing levees to provide protection against the project design flood. It currently features 1,595 miles of levees and 14.8 miles of floodwall, totaling 1,609.8 miles, that provides protection to 35,000 square miles and partial protection to an additional 3,780 square mile in the alluvial valley that are subject to flooding. The system has four backwater areas and four floodways that have prevented \$1.04 Trillion in damages at a cost of \$15.5 Billion since it was authorized by FCA of 1928. The benefit cost ratio is 66.9 to 1.

Issues: Critical work is needed to ensure the integrity of the project and continued protect people and property from flooding. This critical work consists of constructing levee enlargements, floodwalls, seepage berms, relief wells and slope paving where levees are deficient.

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: Failure to address the identified areas will significantly increase risk of catastrophic flood events and compromise public safety. Maintenance of the system is a constant challenge and annual funds are required to repair levee slides, rehabilitate relief wells and place gravel on roadways on top of the levee. The system has the potential to reach flood stage every year requiring levee boards and COE to be vigilant and ensure maintenance is performed annually to preserve the integrity of the system.



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 the primary economic engine of the region. Environmental losses of terrestrial habitat and wildlife would be significant.

Activities for FY 20: Funds in the amount of \$14,750,000 are being used to complete design for Mississippi River Levee Items 414-R, 401-R and 368-R, award a contract for Item 414-R, and for a USGS Resistivity study.

Amount That Could Be Used in FY 21: Budgeted funds in the amount of \$13,650,000 will be used to award a contract for Item 401-R, Yucatan-Lake-Lake Bruin, Louisiana, complete design and S&A for multiple Items. Additional funds in the amount of \$43,666,000 could be used to award contracts (\$30,050,000) (Items 614-L, 555-R, 525-R, 520-R, 401-R, 393-R, 370-R, 368-R, 367-R, and 366-R) and continue design on future award items (\$13,600,000).

Acquisition Strategy: Construction contracts may be awarded via various mechanisms which may include Unrestricted, Restricted, Set aside, MATOC and IFB.

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

Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Kennedy (LA), Hyde-Smith and Wicker (MS); House: Crawford (AR-1), Westerman (AR-4), Scalise (LA-01), Abraham (LA-5), Kelly (MS-1), Thompson (MS-2), Guest (MS-3).

| Phase | Estimated Federal Cost of Phase | Federal Funding Thru FY19 | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|--------------|---------------------------------|---------------------------|------------------|--------------|------------------------|
| Construction | \$1,130,000,000 | \$753,585,750 | \$14,750,000 | \$13,650,000 | \$57,316,000 |

VICKSBURG DISTRICT



MR&T

Maintenance





MR&T MAINTENANCE

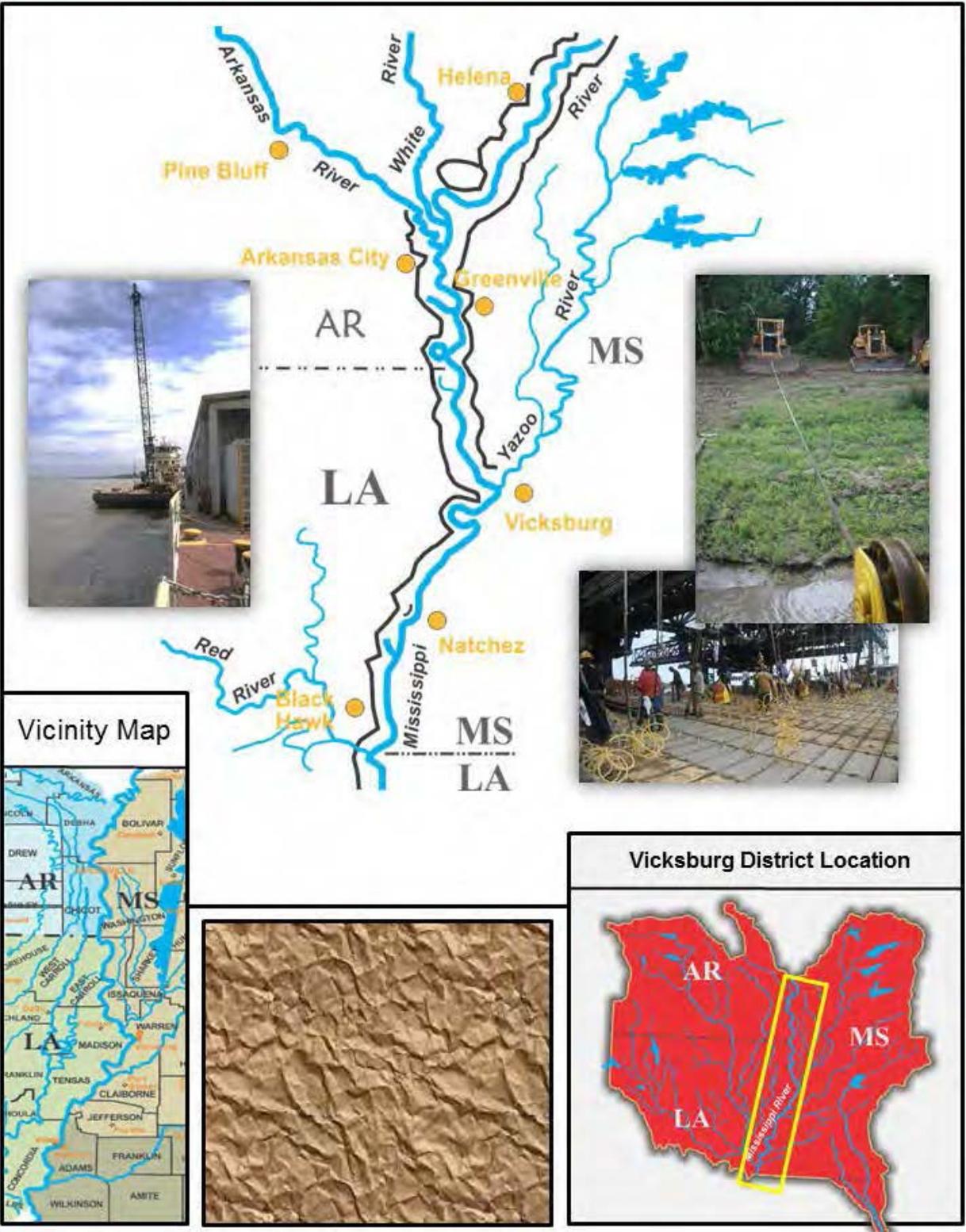
The MR&T Maintenance program focuses on the need to preserve the existing infrastructure and provide justified levels of service at the least cost.

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US Army Corps
of Engineers
Vicksburg District

MISSISSIPPI RIVER CHANNEL IMPROVEMENT
Arkansas, Louisiana, and Mississippi
MISSISSIPPI RIVER AND TRIBUTARIES, Maintenance (FRM)





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Channel Improvement, Revetment and Dikes, 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, 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 maintaining existing revetments and river training structures (dikes, chevrons, and bendway weirs). These projects prevent erosion that would threaten the integrity of the mainline levees and provide for a safe and efficient Navigation channel.

Issues: The Mississippi River revetments and river training structures have sustained damage, primarily due to age and impacts from high water events that require various levels of repair. A backlog of revetment and river training structure maintenance has developed that the current level of funding cannot adequately address.

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

Risk: Catastrophic damage to the existing revetments, river training structures, river banks, channel alignment, 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 and river training structures, adversely impacting channel alignment and safety and threatening the integrity of the mainline levee system. Delaying repairs to existing revetments and river training structures typically leads to additional damage resulting in a higher level of risk and consequences and increased repair costs.

Activities for FY 20: Funds in the amount of \$14,600,000 are being used to award stone repair contracts, planning engineering, and design of ACM revetments and repairs to existing dikes.



Revetment – Articulated Concrete Mat

Acquisition Strategy: NA

Amount That Will Be Used in FY 21: Funds in the amount of \$18,500,000 will be used for dike maintenance stone repairs and articulated concrete mattress revetments. Additional funds in the amount of \$41,203,000 could be used for articulated concrete mattress revetments (\$7,600,000), award contract for stone repairs to existing structures (\$2,000,000), dike repairs (\$4,500,000), and revetment repairs (\$27,103,000).

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

Congressional Interest: Senate: Boozman and Cotton (AR), Kennedy and Cassidy (LA), Hyde-Smith and Wicker (MS), House: Crawford (AR-1), Westerman (AR-4), Scalise (LA-01), Abraham (LA-5), Johnson (LA-04), Thompson (MS-2), and Guest (MS-3)



River Training Structures - Stone Dike Maintenance

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$14,600,000 | 18,500,000 | \$59,703,000 |



**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, Missouri, southward to Venice, Louisiana, and on the east bank from Hickman, Kentucky, to opposite Venice, Louisiana, except where interrupted by hills and tributary streams.

Description: The Mississippi River Levee System provides flood risk reduction to over 23,000 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 provide protection to urban areas and many industries. The Vicksburg District is responsible for major maintenance on approximately 445 miles of the MRL system, including 1,327 relief wells.

Issues: Levee slides occur annually 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: The levee system protects 233,122 people and 110,450 structures and other infrastructure valued at \$20,915,961,000 within the states of Arkansas and Louisiana and protects 174,762 people and 74,445 structures and other infrastructure valued at \$13,391,145,000 within the state of Mississippi.

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 20: Funds in the amount of \$7,673,000 are being used for periodic inspections, operation and maintenance for flood risk management, slide repairs, relief well rehabilitation, and data collection.

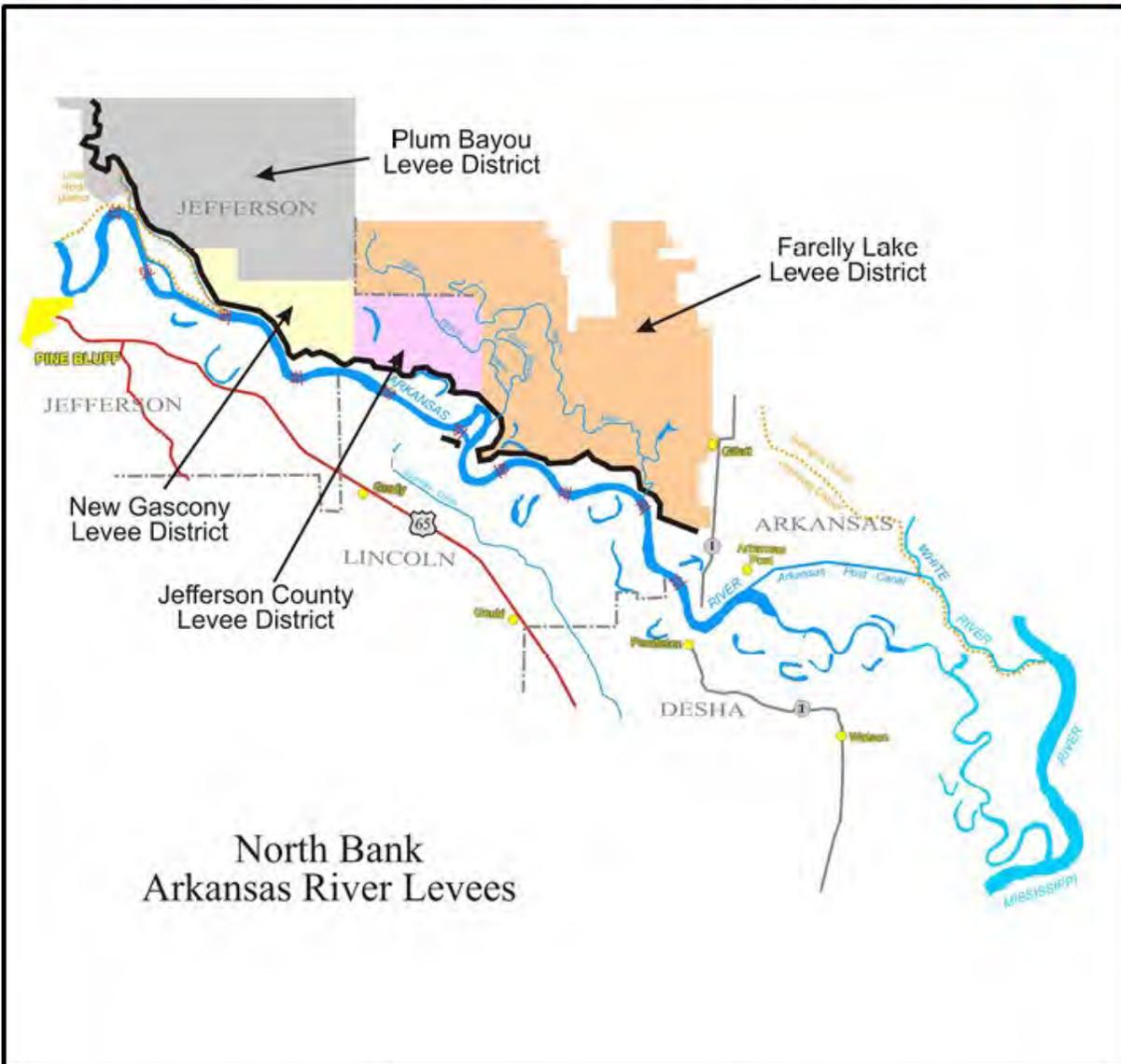
Acquisition Strategy: The levee surfacing material will be purchased through an existing IDIQ contract.

Amount That Will Be Used in FY 21 Funds in the amount of \$3,713,000 will be used for data collection, inspections, relief well rehabilitation, and major maintenance of the project. Additional funds in the amount of \$1,914,000 could be used for maintenance for flood risk management (\$872,000), levee surfacing (\$812,000) and mitigation features (\$230,000).

Project Sponsor/Customer: Fifth Louisiana Levee District, Southeast Arkansas Levee District, and the Board of Mississippi Levee Commissioners

Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Kennedy (LA), Hyde-Smith and Wicker (MS); House: Crawford (AR-1), Westerman (AR-4); Scalise (LA-1), Johnson (LA-4), Abraham (LA-5), Thompson (MS-2)

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$7,673,000 | \$3,713,000 | \$5,627,000 |





**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 North Bank Levee project is located in southeast Arkansas and prevents overflow of the Arkansas River alluvial valley north and northeast of Pine Bluff, Arkansas. This levee system contains four levee segments that total 56 miles of levee and berms and contains 26 drainage structures.

Issues: Major maintenance is required to ensure the levee project continues to provide the authorized flood damage reduction for people and property. This maintenance consists of repairing levee slides and placing additional surfacing material on the levee roadway to provide all weather access to the levee for flood fighting and inspection.

Importance: The Lower Arkansas River North Bank levee prevents overflow of the Arkansas River alluvial valley along the left descending bank (North Bank) of the Arkansas River in the vicinity of Pine Bluff, Arkansas. This levee extends from Tucker in the vicinity of Pine Bluff to the vicinity of Gillett and provides flood damage reduction to approximately 720 square miles.

Risk: The levee system protects 2,988 people and 2,069 structures and other infrastructure valued at \$297,278,000 within the state of Arkansas.

Consequence: Levee failure due to a breach prior to overtopping is anticipated to result in the death of 4 people and cause economic damage totaling \$297,278,000.



Levee Slide - Lower Arkansas River, North Bank Levee

Activities for FY 20: Funds in the amount of \$1,532,000 are being used for levee inspections, levee safety risk assessments, and risk communication, and operation and maintenance of the project.

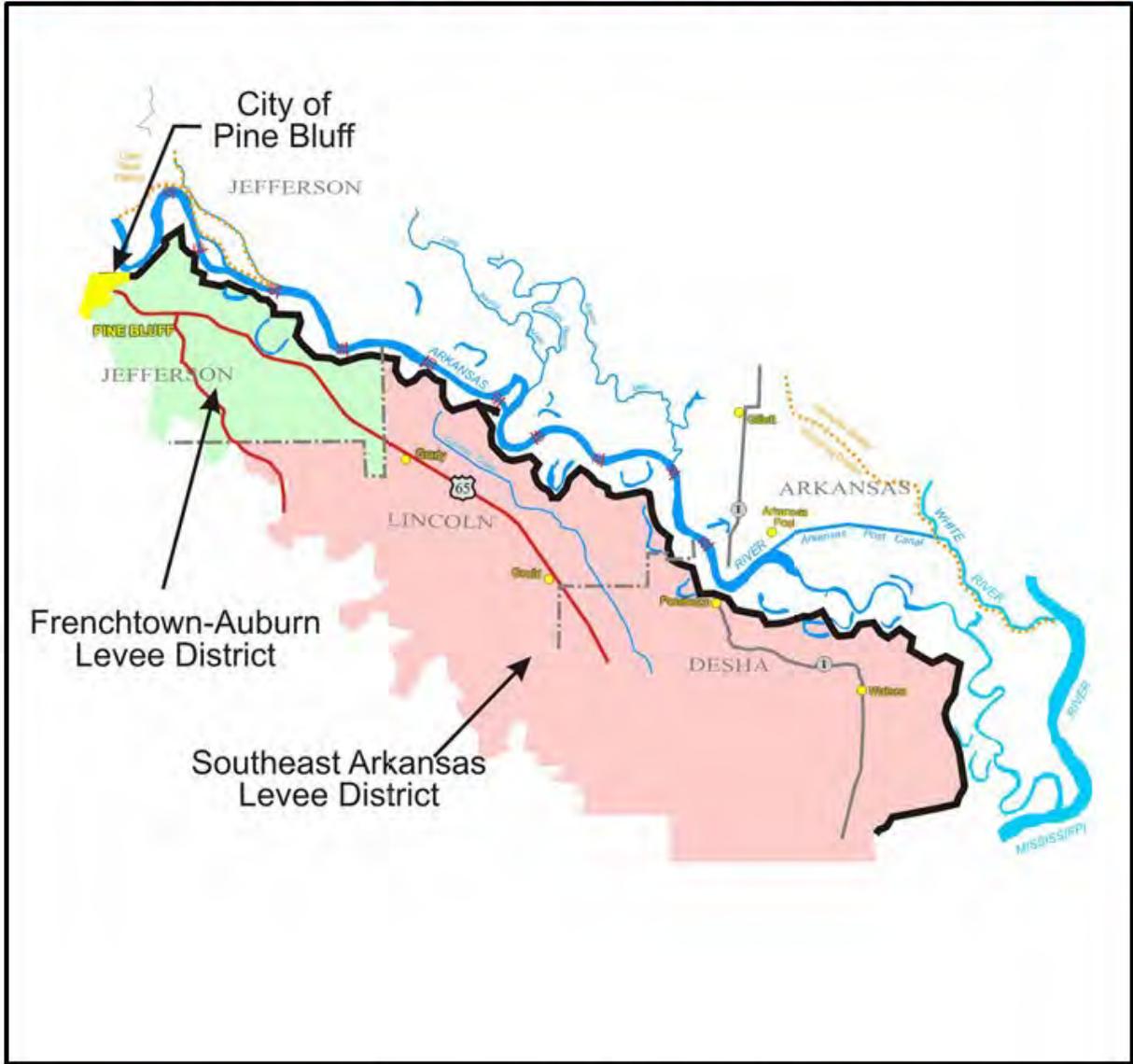
Acquisition Strategy: NA

Amount That Will Be Used in FY 21: Funds in the amount of \$225,000 will be used for maintenance for flood risk management, operation and maintenance of levees, and water management. Additional funds in the amount of \$360,000 could be used for structure continuation to provide support to the local sponsors and levee surfacing material.

Project Sponsor/Customer: Plum Bayou Levee District, New Gascony Levee District, Jefferson County Number 3 Levee District, and Farelly Lake Levee District.

Congressional Interest: Senate: Boozman, Cotton (AR); House: Crawford (AR-1)

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$1,532,000 | \$225,000 | \$585,000 |





**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 South Bank levee prevents overflow of the Arkansas River alluvial valley on the right descending bank (South Bank) below Pine Bluff, Arkansas. The South Bank levee in conjunction with the West Bank Mississippi River levee protects the Tensas Basin against flooding. This levee project consists of 3 levee segments totaling 86 miles of levee and berms and contains 15 drainage structures.

Issues: Major maintenance is required to ensure the levee project continues to provide the authorized flood damage reduction for people and property. This maintenance consists of repairing levee slides and placing additional surfacing material on the levee roadway to provide all weather access to the levee 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. The south bank levee in conjunction with the west bank MRL provides the Tensas Basin with the authorized flood damage reduction against the project flood.

Risk: The levee system protects 233,122 people and 110,450 structures and other infrastructure valued at \$20,915,961,000 within the states of Arkansas and Louisiana.

Consequence: A levee failure due to a breach prior to overtopping is anticipated to cause the death of 342 people and cause economic damage totaling \$20,915,961,000.



Lower Arkansas River, South Bank Levee

Activities for FY 20: Funds in the amount of \$148,000 are being used for levee inspections, levee safety risk assessments, and risk communication, operation and maintenance of the project, and data collection.

Acquisition Strategy: The levee surfacing material will be purchased through an existing IDIQ contract.

Amount That Will Be Used in FY 21: Funds in the amount of \$298,000 will be used for periodic levee inspections, maintenance of project, program management, and water management. Additional funds in the amount of \$125,000 could be used for levee resurfacing material.

Project Sponsor/Customer: City of Pine Bluff, Frenchtown-Auburn Levee District, Southeast Arkansas Levee District.

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

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$148,000 | \$298,000 | \$423,000 |

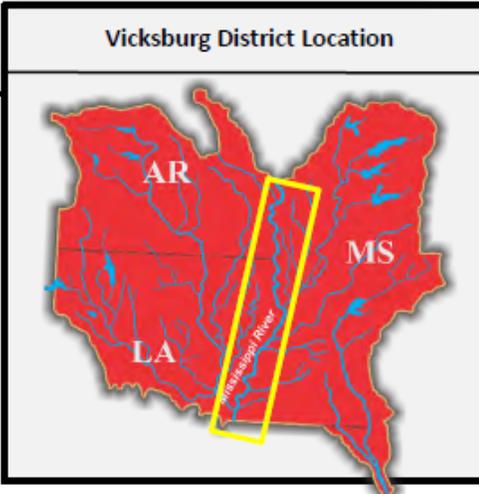
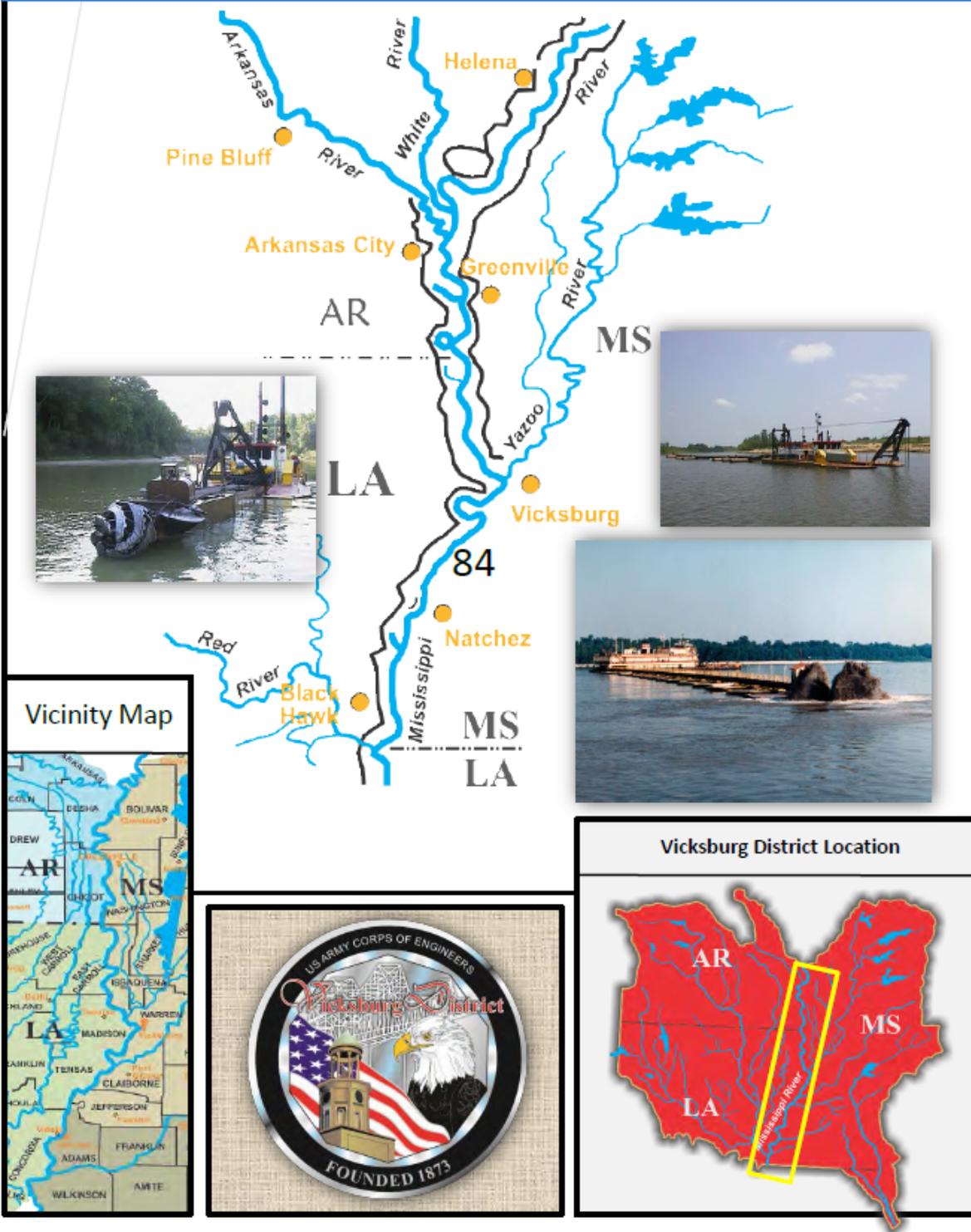


US Army Corps
of Engineers
Vicksburg District

MISSISSIPPI RIVER DREDGING

Arkansas, Louisiana and Mississippi

MISSISSIPPI RIVER AND TRIBUTARIES, Maintenance (NAV)





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Channel Improvement, Dredging, 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, Maintenance (NAV)

Location: The project is located in the Mississippi River channel 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 dredging of the Mississippi River main channel to maintain a desirable alignment for purposes of navigation by means of Government owned and commercial dredges.

Issues: The Mississippi River channel improvement construction project is not complete. Dredging is required until and after the remaining planned revetments and dikes are completed to provide a complete system capable of providing protection for the flood risk management levees and providing an efficient channel for commercial navigation.

Importance: River training structures improve navigation conditions, stabilize bends, and reduce required maintenance dredging requirements. However, river training devices do not completely remove the requirements for dredging.

Risk: Significant reduction to the navigation channel is likely to occur if the maintenance dredging is not completed.

Consequence: Failure to adequately fund will result in navigation channel deterioration which would adversely impact the navigation industry in economically and efficiently transporting commodities on the Mississippi River.



Dredge Jadwin



Dredge Jadwin

Activities for FY 20: Funds in the amount of \$3,844,000 are being used for operation for navigation and studies and surveys for navigation.

Acquisition Strategy: NA

Amount That Will Be Used in FY 21: Funds in the amount of \$5,900,000 will be used to conduct surveys, annual maintenance dredging on main line MS River navigation channel. Additional funds in the amount of \$4,550,000 could be used for annual maintenance dredging on main line Mississippi River navigation channel.

Project Sponsor/Customer: Navigation industry and the environmental community.

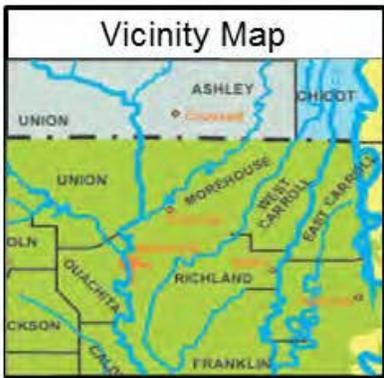
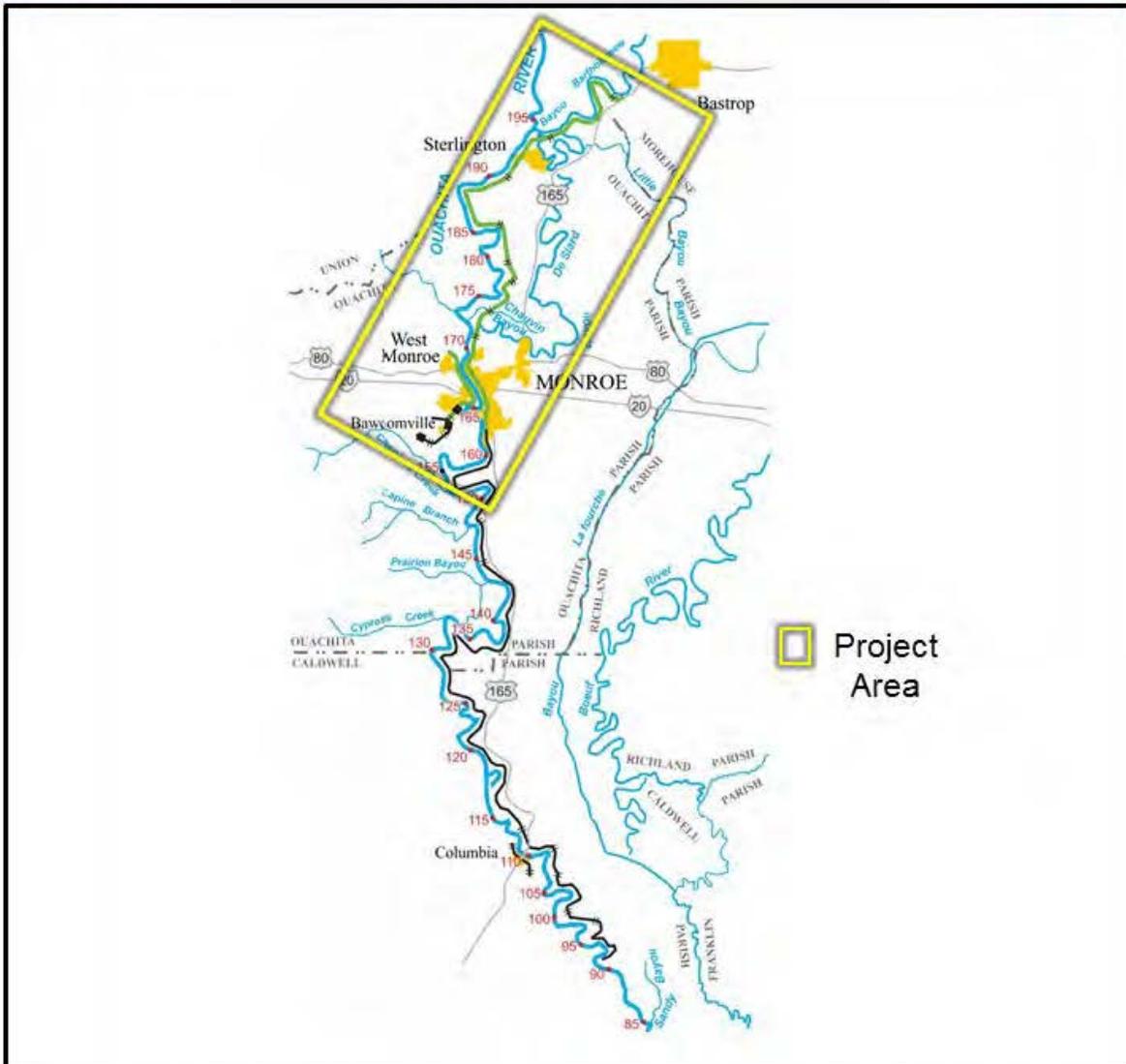
Congressional Interest: Senate: Boozman and Cotton (AR), Cassidy and Kennedy (LA), Hyde-Smith and Wicker (MS); House: Crawford (AR-1), Westerman (AR-4), Abraham (LA-5), Thompson (MS-2), and Guest (MS-3)

| FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|------------------|--------------|------------------------|
| \$3,844,000 | \$5,900,000 | \$10,450,000 |

OUACHITA RIVER LEVEES Louisiana



Mississippi River and Tributaries, Maintenance (FRM)



Legend

| | |
|---|-----------------------------------|
|  | Existing Levee |
|  | Authorized by Sec 1 - FCA of 1928 |
|  | 150 • River Mile |
|  | Drainage Structure |
|  | Pumping Plant |





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Red-Ouachita River Basin Levees, AR & LA

Flood Control Acts of 1928, 1936 & 1950
WRDA 2007, Section 3013 for Section 1

Mississippi River and Tributaries, Maintenance (FRM)

Location: The Ouachita River levee system is located in northeast Louisiana.

Description: The levee system is comprised of three separate levee segments totaling 11.5 miles on the west bank at West Monroe, Bawcomville, and Columbia and 105.8 miles of levee on the east bank from Bastrop to Sandy Bayou. The recommended plan consists of rehabilitation of existing levees and raising a portion of the levee to the 1956 project design grade.

Issues: The Ouachita River Levees are critical to the lives and property of the citizens in the Monroe-West Monroe urban area. Gravel surfacing is an integral component of a levee. Gravel is needed to ensure access daily and during high water events.

Importance: Gravel surfacing is important to maintain access for inspection and basic maintenance daily and during high water events.

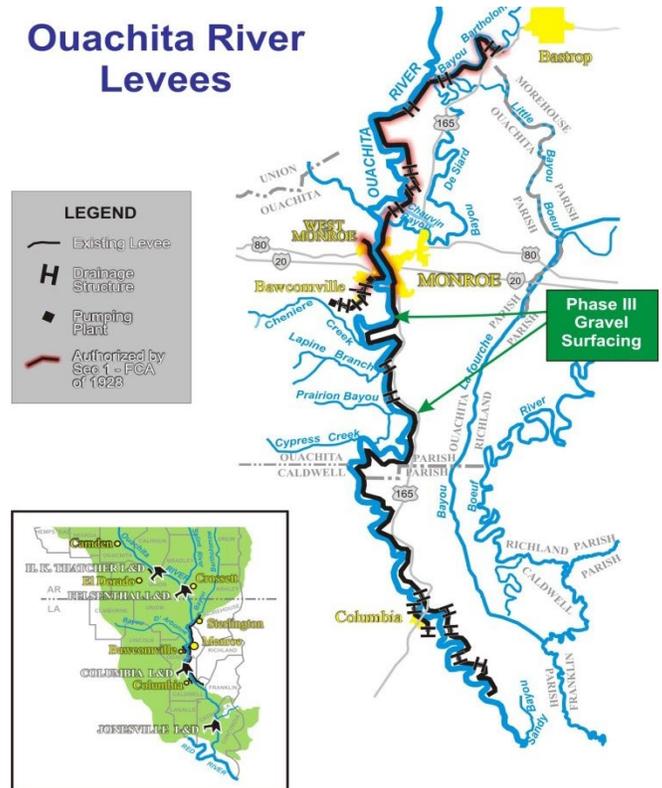
Risk: Risk of levee failure includes loss of life, isolation of cities, and months of flooding. Commercial impacts include disruption of railroad use and use of waterways.

Consequence: Millions of acres would be subject to flooding, resulting in devastation of primary economic engine of region. Environmental losses of terrestrial habitat and wildlife would be significant.

Activities for FY 20: Funds in the amount of \$185,000 are being used for levee safety program oversight, inspections, and data management and operation and maintenance of levees and levee repairs.

Acquisition Strategy: N/A

Ouachita River Levees



Amount That Will Be Used in FY 21: There are no funds in the FY 21 President’s budget for this project. Additional funds in the amount of \$293,000 could be used in the operation and maintenance of USACE-owned levees and levee repairs.

Project Sponsor/Customer: Ouachita River Valley Association, Tensas Basin Levee District

Congressional Interest: Senate: Vitter and Cassidy (LA); House: Abraham (LA-5).

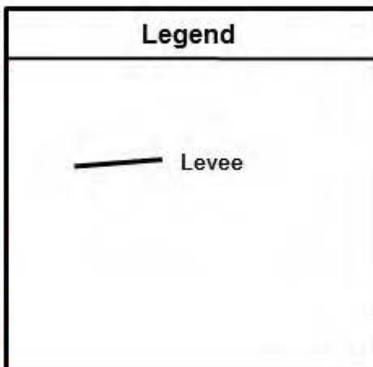
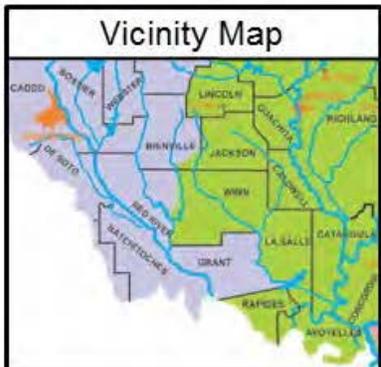
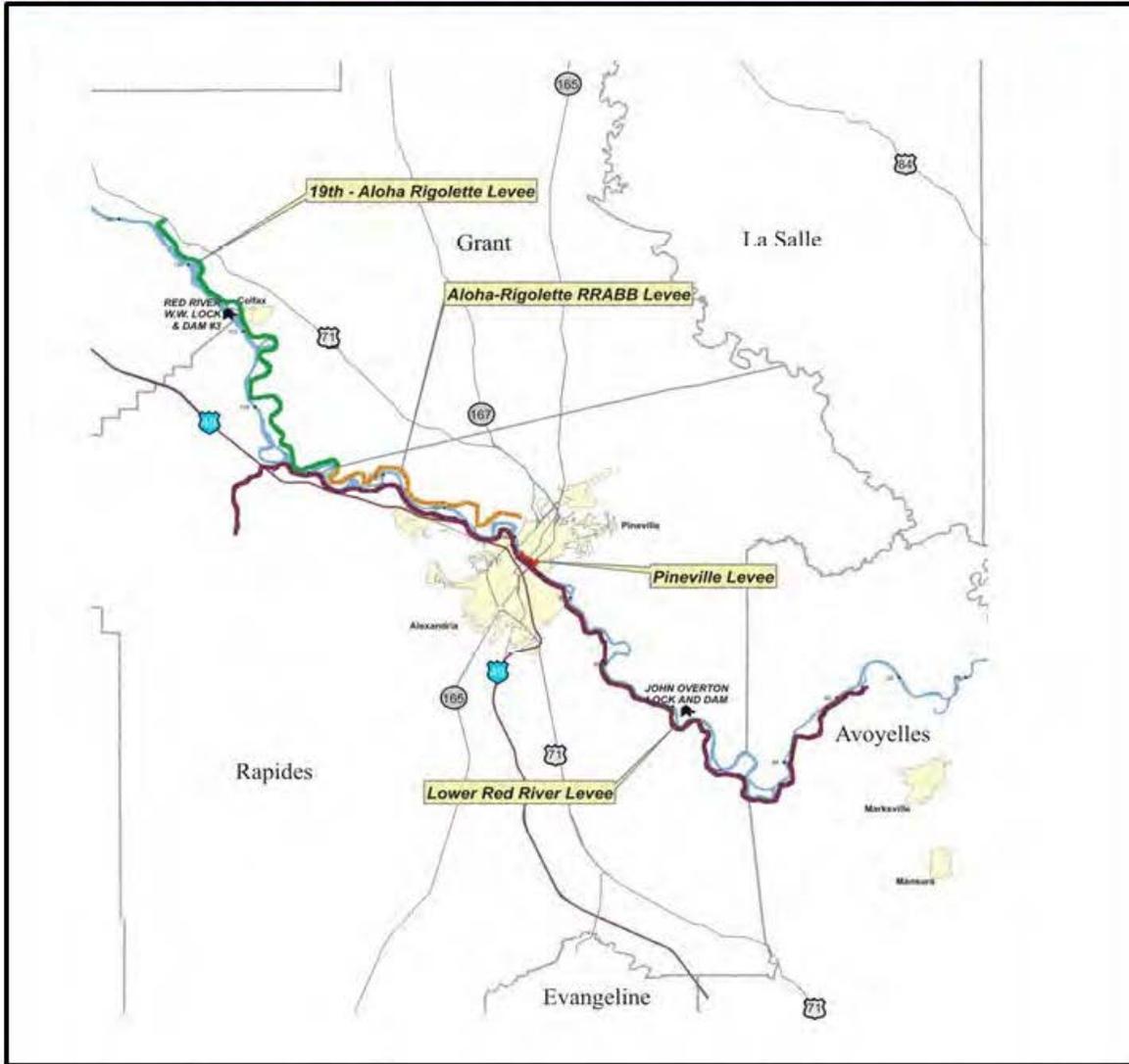
| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$185,000 | \$0 | \$293,000 |



US Army Corps
of Engineers
Vicksburg District

LOWER RED RIVER, SOUTH BANK LEVEES Louisiana

MISSISSIPPI RIVER AND TRIBUTARIES, Maintenance (FRM)





**US Army Corps
of Engineers**
Vicksburg District

Project Fact Sheet

Lower Red River, South Bank Levees, LA

Flood Control Act of 1928

Mississippi River and Tributaries, Maintenance (FRM)

Location: The levee system extends from Red River mile 67 at Moncla, Louisiana, in Avoyelles Parish to mile 126 at Hot Wells, Louisiana, in Rapides Parish.

Description: The Lower Red River Levee system within the Vicksburg District consists of 59 miles of levee, 54 relief wells, drainage structures and a pumping station.

Issues: There is currently an embankment slide that requires repair.

Importance: The Lower Red River, South Bank levee and appurtenances provides the authorized flood damage reduction to Alexandria, LA and rural areas southeast of the city.

Risk: The levee system protects 156,659 people and 71,057 structures and other infrastructure valued at \$15,704,024,000.

Consequence: Levee failure due to a breach prior to overtopping is anticipated to result in the death of 84 people and cause economic damage totaling \$15,704,024,000.

Activities for FY 20: Funds in the amount of \$486,000 are being used for levee inspections, levee safety risk assessments, and risk communication, operation and maintenance of the project, and levee surfacing material.

Acquisition Strategy: The levee surfacing material will be purchased through an existing IDIQ contract.



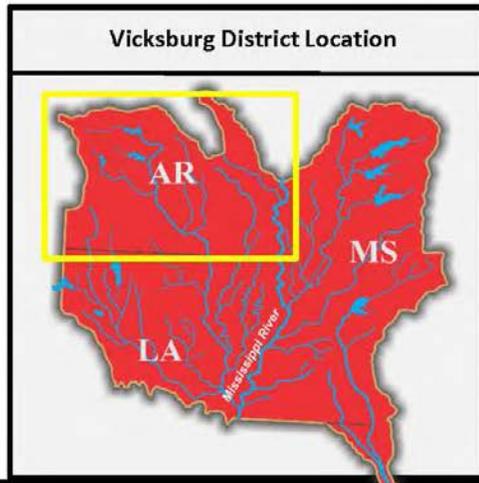
Bayou Rapides Pumping Station

Amount That Will Be Used in FY 21: Funds in the amount of \$470,000 will be used for maintenance of project infrastructure and levee surfacing material.

Project Sponsor/Customer: Red River, Atchafalaya and Bayou Boeuf Levee District.

Congressional Interest: Senate: Cassidy and Kennedy (LA); House: Abraham (LA-5)

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$486,000 | \$470,000 | \$470,000 |





**US Army Corps
of Engineers
Vicksburg District**

Project Fact Sheet

Inspection of Completed Works (ICW) AR

Rivers and Harbors Act (RHA) of 1899 (Section 408); Flood Control Act (FCA) of 1937 (Section 2); RHA of 1945 (Section 3); FCA of 1946 (Section 14); FCA of 1948 (Section 205); FCA 1970 (Section 221); 33 Code of Federal Regulations, Part 208.

Mississippi River and Tributaries, Maintenance (FRM)

Location: The project covers the portion of the Vicksburg District located within the state of Arkansas.

Description: The work consists of inspecting and reporting on 217.2 miles of levees, 212 miles of channels, 41 drainage structures, 2 pumping stations & 19 weirs in the State of Arkansas.

Issues: The labor intensive requirement to perform periodic inspections on all levee systems is consuming excessive amounts of the limited ICW funding we traditionally have received to perform annual inspections. This is deferring the annual inspection of some infrastructure items.

Importance: These inspections allow the Vicksburg District to identify deficiencies that may have life safety consequences. These inspections also verify the adequacy of Operation and Maintenance activities by the sponsors and reveal where improvements are needed to ensure the flood damage reduction features function as designed.

Risk: The public relies on the flood damage reduction systems to protect life and infrastructure from high water events.

Consequence: Population at risk is 233,122. The number of structures at risk is 110,450. The property value in Leveed Area (\$1000s) \$20,915,960.90.



Channel Inspection

Activities for FY 20: Funds in the amount of \$70,000 are being used for routine levee inspections.

Acquisition Strategy: None.

Amount That Will Be Used in FY 21: TBD. Funds in the amount of \$129,000 could be used to perform minimum level inspections and to perform inspections and documentation.

Project Sponsor/Customer: City of Pine Bluff, Frenchtown-Auburn Levee District, Southeast Arkansas Levee District, Plum Bayou Levee District, New Gascony Levee District, Jefferson County No. 3 Levee District, Farelly Lake Levee District, Chicot County Drainage District, Chicot-Desha-Drew Drainage District, Cummins Drainage District, Cypress Creek Drainage District, Dermott Drainage District, Eudora-Western Drainage District, Long Lake Drainage District.

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



Levee Inspection

| Phase | FY 20 Allocation | FY 21 Budget | FY 21 Total Capability |
|-------------|------------------|--------------|------------------------|
| Maintenance | \$70,000 | \$0 | \$129,000 |



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CONSTRUCTION

OPERATION AND
MAINTENANCE

FLOOD CONTROL AND
COASTAL EMERGENCIES

MR&T INVESTIGATIONS

MR&T CONSTRUCTION

MR&T MAINTENANCE

