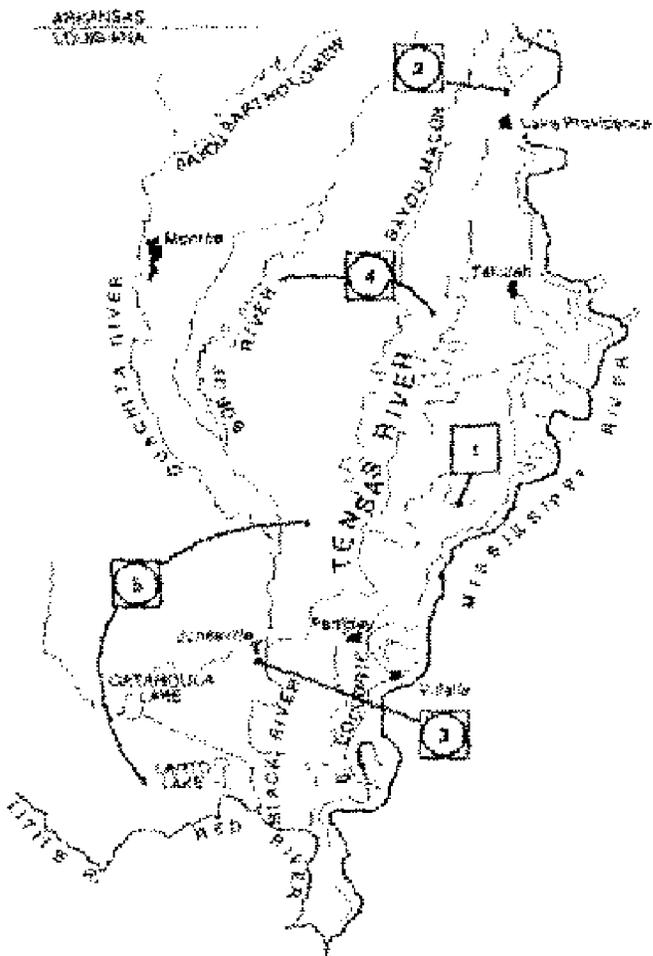


Tensas River Basin



Projects



Flood Control

- 1 Big Choctaw Bayou**



Flood Control - Mississippi River and Tributaries

- 2 Grant's Canal (Filling)**
- 3 Jonesville**
- 4 Tensas Basin, Boeuf and Tensas Rivers and Tributaries,
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Tensas River Basin

Introduction

The Tensas River Basin, located in southeast Arkansas and northeast Louisiana, is an extensive lowland area that lies to the west of the Mississippi River. That part of the basin located in Louisiana is bounded on the east by the Mississippi River main-line levee, by the Arkansas-Louisiana state line on the north, by the Ouachita River Basin on the west, and by the upper limits of the Atchafalaya River Basin on the south. The upper portion of the Louisiana sector is affected by head water flooding from the Boeuf and Tensas rivers and their tributaries. The lower section is subject to flooding from backwaters of the Mississippi and Red rivers and headwater flooding from the Tensas and Ouachita rivers. At about the latitude of Vicksburg, Mississippi, the basin widens to approximately 80 miles. Farther south near Sicily Island, Louisiana, the area constricts to about 20 miles, then widens in the lower section called the Red River backwater area near Catahoula Lake. The

major tributaries of the Tensas River include Boeuf River, Bayou Macon, and Bayou LaFourche.

Projects

Boeuf and Tensas Rivers and Tributaries, Arkansas and Louisiana (Vicksburg District)

This project is located in the states of Arkansas and Louisiana, in the large alluvial flood plain of the Mississippi River. The area is protected from Arkansas and Mississippi River floods by the south bank Arkansas River levees and the west bank Mississippi River levees.

The purpose of the project is to provide a high degree of protection against headwater floods in both Arkansas and Louisiana, improving recreational opportunities at Lake Chicot in Arkansas.



Tensas River

Water resource improvements in this project constructed to date in Louisiana include channel clearing, snagging, realignment, and enlargement. Upon completion of the project, a total of 922,000 acres (including Lake Chicot) will be substantially benefited by the flood protection provided. (Improvements constructed or authorized in the Arkansas portion of the basin are described in the Arkansas Water Resources Development Booklet.)

Improvements on the Boeuf and Tensas rivers and their major tributaries were near completion in the late 1950s, when the entire project was reviewed to determine if additional improvements were needed. Development in the basin indicated a need for additional water resource improvements.

The authorized additional improvements in the Boeuf and Tensas River Basin called for approximately 75 miles of channel improvements on Big and Colewa creeks, 38 miles of channel improvement on Bayou LaFourche, 160 miles of channel improvement on Tensas River, and about 6 miles on the lower Boeuf River. Work was completed on the Boeuf River, the lower 40 miles of Big and Colewa creeks, and the lower 61 miles of the Tensas River.

Concern expressed by citizens in the lower portion of the basin over additional flooding in their area (especially Franklin Parish), as a result of the project, resulted in halting any additional work until a re-evaluation of the authorized project could be completed.

A post-authorization study (Tensas River Basin Excluding Bayou Macon, Louisiana) was undertaken to review the authorized project to determine the best method to provide flood protection for the 1,041 square miles of drainage above mile 61 on the Tensas River. The authorized project in this area includes additional channel improvements from mile 61 to Swan Lake in East Carroll Parish and channel enlargement on the lower 15 miles of Mill Bayou-Bayou Vidal, a tributary of the Tensas River.

Environmental concerns, such as the loss of

valuable bottomland hardwood forest, have rendered several alternative channel plans, including the authorized plan, untenable. Therefore, an alternative involving a minimum work reach on the Tensas River between Interstate Highway 1-20 and the confluence of Mill Bayou has been formulated to minimize the direct losses of hardwoods through cleaning in the right-of-way. A greenbelt has been included along the channel to reduce channel sedimentation, improve the esthetics, and reduce environmental impacts of the projects.



The wily and elusive Tensas Tom is any hunter's prized trophy

This plan has been formulated to be completely compatible with the Tensas River National Wildlife Refuge (50,000 acres), which was enacted into law in 1980. The study was completed in 1980. Work was completed in 1984 on the Phase II Engineering Report. Future planning and project construction is unscheduled until the local cost-share agreements can be obtained.

The re-evaluation of the authorized work on the Boeuf River and its tributaries was begun in 1978. Preliminary studies, completed in 1979, indicated that the complexity of the flood problems in the area and the inter-relationships of various streams and other projects require a comprehensive study to determine the best solution to the overall problem. Possible solutions were being investigated in the Boeuf River and Tributaries

Interim Study of the Boeuf-Tensas Basin Study. Because of public opposition to an element of the selected solution, the local sponsor withdrew sponsorship of the project. The interim study was terminated in 1985.

The estimated total cost of this project is \$233 million, which includes \$97 million for the Lake Chicot Pumping Plant and associated work. Estimated flood damages prevented by the project through fiscal year 1996 were \$170.6 million.

Red River Backwater Area (Vicksburg District)

The Red River backwater project provides protection to large areas in east-central Louisiana from the effects of backwater flooding from the Mississippi, Red, Ouachita, and Black rivers. The project provides protection to these areas from lesser floods, but these lands must remain subject to use for storage of floodwaters during a Mississippi River Project flood. The Flood Control Act of 1928, with subsequent amendments, authorized the Corps of Engineers to construct levees and other improvements in the backwater areas.



Cypress swamp near Bayou Bartholomew

A total of 575,700 acres benefit substantially from the project. The authorizations provide for four major levee projects and several smaller projects. The four major projects affect the following areas: Tensas-Cocodrie area, Larto Lake to Jonesville area, Sicily Island area, and the area below Red River.

Tensas-Cocodrie Area. The Tensas-Cocodrie levee and associated improvements in Concordia Parish provide flood protection to 373,000 acres. A pumping plant has been built for this area to remove accumulated rainfall from the lower portion of the area when the existing gravity drainage structure is closed. A gravity structure at the pumping plant site was completed in 1981. The pumping plant was completed in early 1987. Acquisition of the Tensas River National Wildlife Refuge has mitigated the fish and wildlife losses. Several structural mitigation features are also included. Two water control structures were completed in 1988 and three boat ramps have been completed. Estimated total cost for the Tensas-Cocodrie Pumping Plant and associated works is \$56.3 million.

Flooding in 1973 made necessary a redesign of levee grades in the Red River backwater area. These new levee grades called for enlargement of the Tensas-Cocodrie levee system. This work was initiated in 1977 and the majority of the work is complete.

Larto Lake to Jonesville Area. Levees and associated improvements that protect about 104,000 acres within the Larto Lake to Jonesville area (located north of the Catahoula Lake Diversion Canal in Catahoula Parish) were completed in 1978. To mitigate fish and wildlife losses that resulted from construction of the project, the Corps of Engineers purchased 12,800 acres of land in the Red River backwater area. These lands are operated and maintained by the Louisiana Department of Wildlife and Fisheries. Planning for water resource improvements in the area just south of the diversion canal has been deferred.

Sicily Island Area. The authorized project for the Sicily Island area, located in Catahoula and Franklin parishes, consists of approximately

56 miles of levees, channel improvements, two pump stations, drainage structures, and associated work. Design studies examined various alternatives in an effort to select an acceptable plan that would meet local and national objectives. A recommended plan was submitted and final approval was granted in 1980. The first levee section was completed in 1984, followed by additional sections being completed in 1989, 1992, and 1993. Construction of two additional levee sections and one pump station are scheduled to start in 1995. Completion of all items is planned for 2010.

Below Red River Area. The below Red River area, located east of Marksville in Avoyelles Parish, was also authorized for water resource improvements, including a levee, channel improvement, drainage structures, a pumping plant, and associated works. Various alternatives were analyzed in an effort to select the plan suitable for meeting local and national objectives.

The Phase I General Design Memorandum recommended a project, and the MRC granted approval in 1981.

During the Phase II GDM studies, a reanalysis of the project levee grade requirements and economic benefits was performed. The results of this reanalysis indicated that the project was no longer economically justified. Additionally, due to financial constraints, the local sponsor was unable to make a cost-sharing commitment for the project. For these two reasons, the project was placed in the inactive category in June 1993.

Small Projects

Big Choctaw Bayou (Vicksburg District). The Big Choctaw Bayou project, completed in 1965, consists of channel improvements on the bayou between the mouth (mile 0) and mile 35. The work provides an outlet for a system of drainage improvements constructed by local interests. Local interests furnished the rights-of-way and constructed the lower 17 miles of the project.

Grant's Canal (filling) (Vicksburg District). During the Civil War, General Ulysses S. Grant had his troops excavate a short canal in the town of Lake Providence in an attempt to bypass Confederate fortifications at Vicksburg, Mississippi. Grant planned to move gunboats and transports from the Mississippi River into Lake Providence, down the Tensas River, and cross over to St. Joseph on the Mississippi River. In 1953, a remaining segment of the canal was filled, returning the area to its natural state.

Jonesville (Vicksburg District). The Jonesville project, completed in 1952, provides flood protection to the city from headwater floods on the Ouachita-Black rivers and backwater flooding from the Mississippi and Red rivers. The improvements consist of levees, floodwalls, two surface drainage structures, a storm sewer, a storm drainage pumping plant, and an outlet ditch. Estimated flood damages prevented by this project to date total \$20,700,000.

Little River Area (Vicksburg District). Initial work authorized for the Harrisonburg to Little River area northwest of Jonesville in Catahoula Parish is complete. Improvements consist of a levee on the west bank of the Ouachita River and interior drainage ditches. This work provides only partial protection from intermediate headwater floods on the Ouachita River. The Bushley Bayou project, authorized for advanced studies, will assist in the reduction of continuing flooding problems in the area, since it encompasses the Harrisonburg to Little River area.

The total estimated cost for the Red River backwater project is \$250.9 million. New project plan costs for the Sicily Island area are reflected in the overall Red River backwater cost. To date, \$73.5 million in damages have been prevented by Red River backwater project improvements.

Programs and Surveys

Flood Plain Information Reports

Concordia Parish (Vicksburg District). A special flood hazard information report was prepared for Concordia Parish in 1973.

Flood Insurance Studies

Insurance studies completed for cities and parishes in the Louisiana portion of the Tensas Basin include: Clayton, Concordia Parish, Ferriday, Ridgecrest, Tensas Parish, Vidalia, and Winnsboro.

Surveys *Boeuf-Tensas Basin, South Arkansas and*

North Louisiana (Vicksburg District), This study area includes the entire of Boeuf - Tensas Basin in southeast Arkansas and northeast Louisiana , an area of about 9,000 square miles objective was to develop a coordinated water and related land resources management plan for basin. Problems and needs investigated included flood damage reduction, bank stabilization, water supply, water quality, navigation, recreation, fish and wildlife, and other measures for the protection and enhancement of the environment. The Boeuf River and Tributaries interim study within the Boeuf-Tensas Basin was terminated due to local opposition to the selected plan. The final Boeuf-Tensas Basin report is unscheduled.



Cypress swamp near Bayou Bartholomew