

Tennessee-Tombigbee Waterway: Project Operation, Cultural and Recreation Resources Development

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GENERAL

The Corps of Engineers is authorized and required, under several Federal acts and public laws, to assess and develop the cultural and recreational resources of Federal water resource projects such as the Tennessee-Tombigbee.

A major cultural resources program has been developed for the Tennessee-Tombigbee Waterway as an integral part of the overall environmental studies. It represents one of the most comprehensive programs of its type in the nation. The investigations are being designed and implemented in cooperation with the states of Alabama and Mississippi, as well as several other Federal agencies.

Likewise, studies to evaluate the recreation potential and determine the land and facility requirements needed to accommodate the projected recreation visitors on the waterway have been completed. The studies have been coordinated with local, state and Federal agencies in Alabama and Mississippi to insure compliance with the Statewide Comprehensive Outdoor Recreation Plans.

CULTURAL RESOURCES

Cultural resource investigations have been ongoing since 1970 when the National Park Service, Southeast Archeological Center, initiated surveys on the Waterway by contracting with the University of Alabama for a survey of the proposed Gainesville L&D. In May 1974 Congress authorized the National Park Service to administer a program of archeological studies at Federal reservoir projects prior to construction and further authorized Federal agencies to expend funds for archeological studies of up to one percent of the total construction cost of a project. Shortly thereafter, the Mobile District, in anticipation of a major program of cultural resources studies, employed an archeologist to assume management of Corps funded investigations. Subsequently, two additional archeologists and one historian were employed to insure professional and timely management of the archeological studies.

It was soon recognized that the previous archeological surveys were biased towards only prehistoric Indian sites and had not fully examined the entire project area of the Tennessee-Tombigbee Waterway. Thus, in October 1976 a clean-up survey was begun to examine all project areas which had not been earlier examined. At this same time it became evident that changing guidelines and awareness of the value of the resources had created conflicts in evaluations of sites found in the earlier

surveys and re-evaluated in recent studies. In essence, although there had been ongoing archeological surveys on the Waterway from 1970 to the present time, the findings of these studies were basically insufficient for compliance with the now required review and coordination processes.

By February 1977, discussions had begun with representatives of the officers of the Alabama and Mississippi State Historic Preservation Offices, the National Register of Historic Places and the Advisory Council on Historic Preservation to the effect that construction of the Tennessee-Tombigbee Waterway was progressing at such a rate that a mechanism must be found to allow usage of the findings of the previous surveys in a manner acceptable to all, and workable within the established construction schedules. This mechanism would have to be of a type and caliber to insure proper compliance with Federal laws and regulations, yet also be such that no massive costs would be incurred through construction delays.

Within the compliance process there are two basic steps, which have to be taken. The first is determining which resources are significant. Significance is interpreted as to whether the resources are eligible to be listed in the National Register of Historic Places. According to the provisions of the National Historic Preservation Act, the National Register includes not only properties of national significance, but also districts, sites, buildings, structures and objects of significance on the local and state level. Further, the Register serves as the authoritative guide to identify the Nation's cultural resources and to indicate what properties should be protected from destruction or impairment.

If endangered resources are determined eligible for the National Register, then the resources are eligible for expenditure of Federal funds for their preservation or mitigation. Subsequent to this determination, the second step of the compliance process involves the compilation of a plan of mitigation or study for the endangered resources. This plan must be reviewed and accepted by the appropriate State Historic Preservation Officer and the Advisory Council on Historic Preservation. That approval is formalized in a Memorandum of Agreement, signed by all parties including the Federal agency. The Memorandum is a binding agreement that such investigations will be performed prior to destruction of the resources.

The main hurdle to overcome on the Tennessee-Tombigbee Waterway in terms of complying with the cultural resources laws and regulations was the first step, determining which resources were eligible for the National Register. The obstacles to this determination were the inadequacies of the earlier surveys. The

mechanism agreed upon in February 1977, as the only feasible approach was the formulation of a potential National Register district for those portions of the Waterway which were not covered by previous memorandums. Such a concept would include all the previously located sites, and be submitted to the two State Historic Preservation Officers involved and the National Register as an artificially defined area in which numerous, almost 700, archeological sites had been discovered and which, taken collectively, represent a National Register eligible district. Individually, the sites themselves would also be eligible by being part of the whole.

There are several types of National Register districts: architectural, historic, industrial, archeological, thematic, and the recently established multiple resource type. The initial district concept selected for usage on the Tennessee-Tombigbee was the archeological district concept. Once compilation of the information and documentation was begun, however, it became apparent that the cultural resources along the Waterway were much more complex than originally thought. Historic structures such as log cabins, railroad stations, country stores, bridges, sunken steamboats and the remains of abandoned river towns had either been entirely overlooked or severely slighted in the rush to locate prehistoric Indian sites. The archeological district concept was too limited for the vast array of cultural resources on the Waterway. At about this same time the multiple resource district concept was approved for use by the National Register with allowances for the addition of new sites and properties previously not included because of oversights, additional research, new judgements, and/or the increasing age of more recent structures as time passes. This concept appeared to meet our requirements and allow some latitude to both initiate our mitigation program on recognized sites and continue to feed in new findings without significantly affecting established construction schedules.

What we did was complete one National Register form for the district as we proposed it and generally documented the sites within that form, supplemented with copies of previous survey reports and whatever field recording forms we had obtained from the archeologists.

Thus, we compiled one package for the Waterway, rather than an estimated 250 separate documents. We made one coordination with the states and the National Register, rather than, minimally, one for each project area. Acceptance of the Tombigbee River Multi-Resource District does imply that all of the almost 700 archeological sites are eligible for the National Register. It does not, however, mean that investigations will have to be implemented at all of the sites of that total number which will be impacted by construction. What it does is free our hands from the previous recommendations, sometimes conflicting and erroneous under current values, and allow us to draw from the total number of sites being impacted any sites felt to be necessary for fulfillment of the mitigation plan as being proposed to the states and the Advisory Council.

The Tombigbee River Multi-Resource District was formally approved by the National Register on 27 September 1977, and, through our coordination activities the Memorandum of Agreement for this program was completed on 19 December 1977, allowing the awarding of contracts for the investigations to begin immediately.

Throughout the Tombigbee Valley there are indications of a long period of human occupation. Potentially, it dates as far back as 12,000 years ago, when elephants and giant buffalo roamed the area. Preliminary studies of this early period have indicated a high probability that sites exist in the valley where remains of early man and extinct vegetation may be found. One aspect of the Tenn-Tom cultural resource program to be initiated this Spring (1979) is aimed at determining the physical nature of the valley at this early prehistoric time to allow for predictions of likely locations. Excavations will then be made at these sites in an

attempt to demonstrate man's presence during this early time.

From man's early entrance into the area the Tombigbee Valley experienced continuous occupation throughout prehistoric times. Archeologists have identified some 700 archeological sites along the Mobile District portion of the Waterway, and it is estimated that the actual number of sites, both prehistoric and historic, along the entire Waterway length may number into the thousands. Construction activities will necessarily destroy a number of these sites. Adjustments have been made, however, to preserve as many as possible through redesign and avoidance procedures.

A major purpose of the cultural resources program is to mitigate the destruction of the archeological sites and other cultural resources which cannot be avoided. Archeological sites are carefully excavated, and the materials and information collected are studied and incorporated into reports for both the professional community and the public. In some cases, historically significant buildings, such as log cabins, early farm complexes and bridges, are preserved through detailed architectural drawings and photographs. Cultural resources are found not only along the river, but in the river too. Historic records indicate that during the 1800's steamboats often sank in the Tombigbee when boilers exploded, or when boats caught fire or ran into snags. Investigations are now underway to identify the wrecks and discover their ages, types and present condition.

Several particularly interesting archeological sites have already been investigated or are now being studied. In the Gainesville project area, a massive prehistoric Indian village has recently been identified. At this site there is at least one and possibly two earthen mounds. Dating to approximately 1200-1400 A.D., the village is representative of the time when Indian culture reached its peak in the southeastern United States. When the site was first considered, it was thought to be small and earlier in age. Preliminary excavations, however, revealed evidence that this is the only site of its type on the Waterway, as well as the largest. The site is essentially an Indian city, and can be related to the nearby massive site of Moundville, some 35 miles away, near Tuscaloosa, Alabama. Comparatively speaking, Moundville could be said to be the state capitol of the time, and this site a county seat. Unfortunately, this site is situated in the path of a critical navigation cutoff and so must be excavated. It was possible to alter construction schedules to allow for extended investigation. Archeologists feel the site may have been surrounded by a log stockade, much like the old western forts, and perhaps even a dry moat. A fortified town may reflect an uneasy mood in the Tombigbee Valley at this time due to competition for the limited amounts of good farmland available to support the large permanent populations.

Archeologists have completed excavations at a brick manufacturing site near Pickensville, Alabama, in the Aliceville Lock and Dam project area. These excavations uncovered the remains of four brick kilns and a lime/mortar kiln dating to the mid-1800's. The role of this industry in the development of the region has long been ignored, and this study represents the first of its type in the Southeastern United States. Subsequently, other brick kilns have been discovered along the Waterway, and at least one of them can be incorporated into the Columbus project as an outside exhibit. This will provide an interesting historic highlight for the public.

Plans are being considered to preserve for public use and viewing a large steel truss railroad bridge over the Tombigbee near Waverly Ferry. This bridge, dating to the late 1800's, is a swing type, designed to permit steamboats to pass.

Thus, the Tenn-Tom Cultural Resource Program is not simply a bunch of archeologists with shovels, but a wide range of professional investigators implementing studies designed to record and document the full spectrum of human occupation of the Tombigbee Valley. The study extends from man's first

footsteps into the valley in search of a place to settle to the present-day fishermen setting trotlines in the river.

RECREATION RESOURCES

Approximately 13,000 acres of land will be acquired along the Waterway for development of water-related recreation facilities at 49 recreation sites. The Waterway will create over 42,000 water surface acres. Each lake will have one major camping area, several day use areas and smaller access areas for boat launching. Limited public use facilities will be provided on the mounds adjacent to the lock and dam at each lake such as overlooks for viewing the locking operations, picnicking facilities and fishing decks.

The projected recreation attendance on the Waterway extending from Demopolis, Alabama, to Pickwick Lake will be almost four million visits per year soon after completion and will increase to almost ten million visits annually within fifty years.

The cost of the initial recreation facilities, exclusive of lands and administrative facilities, is estimated to be 33 million, out of the total waterway construction cost of 1.5 billion or about 2.2%.

Water oriented recreation facilities proposed for construction will include boat launching ramps; picnic areas with individual tables and shelters for group use; tent and trailer campgrounds; visitor centers; natural and nature study areas and hiking and biking trails. Additional development of these facilities will be provided in the future along with swimming beaches and organized group camps.

In addition to the normal water-oriented recreation facilities, several marinas are planned for the Waterway. A market analysis for marina services and facilities was accomplished by Midwest Research Institute under contract with the Corps to propose a concession development plan to meet initial and long-range public needs. Two marinas with 100 to 150 slips each are recommended for initial development. These marinas will be leased to private concessionaires by the Corps. One marina will be constructed initially on Columbus Lake and one on Aberdeen Lake. There is long range development potential for the addition of two more marinas by 1990 to 1995, assuming some expansion of the two initial marinas. These future marinas are proposed for sites on Aliceville Lake and Bay Springs Lake.

A number of factors influence the selection of recreation sites as well as the type of proposed facilities. These include access from major highways, availability of suitable land above a reasonable flood stage (5-year flood) and quality of the land including soils, slope and vegetative cover. The consolidation of activities into larger more manageable sites to reduce operational and maintenance costs and improve control and security is also an important factor.

The Corps of Engineers will operate and maintain the initial recreation facilities. All future recreation development on the Waterway must be accomplished on a 50-50 cost sharing basis with a state or local governmental agency. Responsibility for operation, maintenance and replacement of cost shared facilities must be borne by the local entities as part of the cost sharing agreement. In March of 1975, the Tombigbee River Valley Water Management District in Tupelo, Mississippi, adopted a resolution accepting the role as local sponsor for recreation on the Waterway located in Mississippi. The Tombigbee River Valley Development Authority in Tuscaloosa, Alabama, has likewise adopted a resolution to cost share recreation development along the Waterway in Alabama.

PROJECT OPERATION

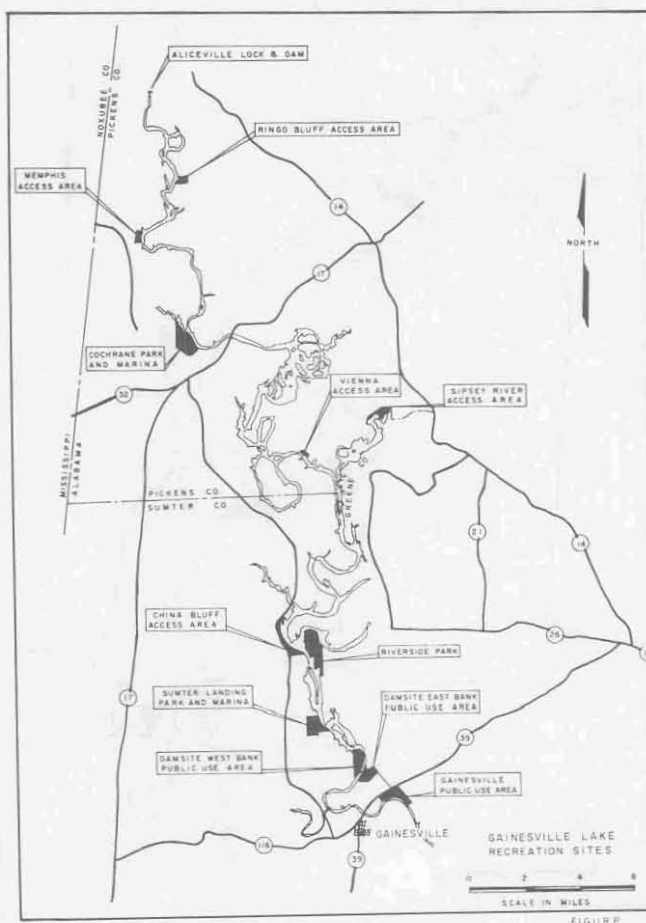
The recreation resource management portion of the Waterway will be managed from an area office in Columbus, Mississippi, and three sub-offices. These are located at Aliceville Lock and Dam to operate Gainesville and Aliceville Lakes; Aberdeen Lock

and Dam to operate Aberdeen and Columbus Lakes and Locks A & B and Bay Springs Lock and Dam to operate Locks C, D, E, Bay Springs Lake and the Divide Section. The staffing will consist of a Park Manager in Columbus, seven management personnel in Aliceville, eleven at the sub-office at Aberdeen and seven at the sub-office at Bay Springs for a total of twenty-five Corps personnel. The operation and maintenance of the recreation facilities will be carried out by three umbrella contracts to private enterprise, one of each sub-office because of the limited Corps personnel.

The navigation portion of the Waterway will also be managed from the area office at Columbus, Mississippi. At this time, it is still uncertain whether the locks will be operated by contract or Corps employees. Either way, each of the ten locks will require a staff of eight men for operations. The channel maintenance and the dredging will be done by contract dredging periodically, as required. It is expected that each lock will be operated on a 24-hour-a-day, 7 day-a-week basis. This will allow for a continuous locking schedule as well as for close-stream regulations, which will also be carried out by lock personnel. Weather conditions permitting, it is planned to hold each pool level within a range of (\pm) six inches. It should be noted here that each of the ten structures has a fixed crest spillway, besides the gated spillway, making it clear that the flood storage is not one of the features of the project.

DESCRIPTION OF LAKES AND RECREATION FACILITIES

The Gainesville Lock and Dam (See Figure 1) is located at the upper end of the Demopolis Lake in Sumter and Greene Counties, Alabama. At normal pool elevation 109 msl the lake will have a



water surface of 6,400 acres. Approximately 1,800 acres of land are being acquired for recreation development at 10 recreation sites to meet the initial recreation attendance of 332,000 visitors. Ultimately, some 694,000 visitors will visit the project. Initially, seven recreation sites will be constructed at a cost of \$7,435,000.

Cochrane Park is the major recreation area on Gainesville Lake. This site is located on the west side of the lake near Aliceville, Alabama, with access from Highway 17. All the overnight camping facilities will be located at this site along with boat launching facilities. Development at the 372 acre site will include 85 tent and trailer campsites with water, electrical and sanitary hookups.

The remaining six sites to be developed initially, Gainesville Public Use Area, Sumter Landing, Riverside Park, China Bluff, Vienna and Ringo Bluff, will provide primarily day use and boat launching facilities. No initial facilities will be provided at Barnes Bend, Sipsey River or Memphis. These three sites will be developed as needed to accommodate future recreational needs of the public.

The Aliceville Lock and Dam (See Figure 2) is located near Pickensville, Alabama, in Pickens County. At normal full pool elevation, 136 msl, the lake will contain a surface area of 8,300 acres. The annual attendance is estimated to be 700,000 visitors by the third year of project operation with an ultimate attendance of 1,688,000 visitors. A total of 1,900 acres of land is being acquired for recreation development at eight recreation sites. Construction of these facilities is proposed to begin in October 1979 and be completed by August 1982 at a cost of \$5,300,000.

The major recreation area on Aliceville Lake is James Creek located on the west side of the river with access from Highway 45.

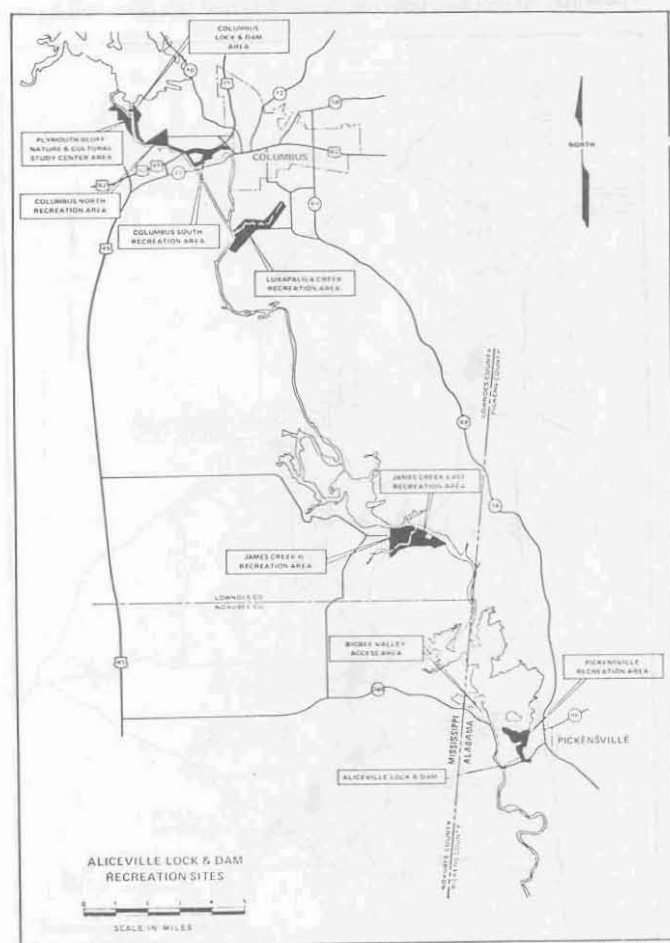


FIGURE 2

The 600 acre site is divided almost equally by the creek. A total of 113 tent and trailer campsites will be developed initially. Most of them will provide water and electrical hookups. A boat launching ramp for use by the campers will also be constructed.

An interesting recreation project presently in the plans and specifications stage is the proposed Nature and Cultural Study Center near Plymouth Bluff just north of Columbus, Mississippi. The Mississippi University for Women will operate and maintain the Center, which is the first of its kind in the nation, after construction by the Corps. The Center, which is planned to operate on a user fee basis and provide dining and overnight accommodations, will support a program for continuing education and training for the public, including elementary and secondary school students, teachers and administrators, public and private resource professionals and forestry, wildlife management, agriculture, the life sciences and the humanities. Students at nearby colleges and universities would also benefit.

The Luxapalila Creek and Columbus recreation areas providing hiking and biking trails, day use facilities and boat launching ramps will be operated and maintained by the Columbus-Lowndes Recreation Commission in Columbus, Mississippi.

The remaining sites on Aliceville Lake will be developed as day use and boat launching access area.

The Columbus Lock and Dam (See Figure 3) is located four miles northwest of Columbus, Mississippi, in Lowndes County. At normal pool elevation, 163 msl, the lake will have a water surface of 8,900 acres. The initial annual attendance is estimated to be 1,531,000 visitors increasing to 3,720,000 visitors ultimately. A total of 2,100 acres of land is being acquired for recreation development at 11 recreation sites. Eight sites will be developed

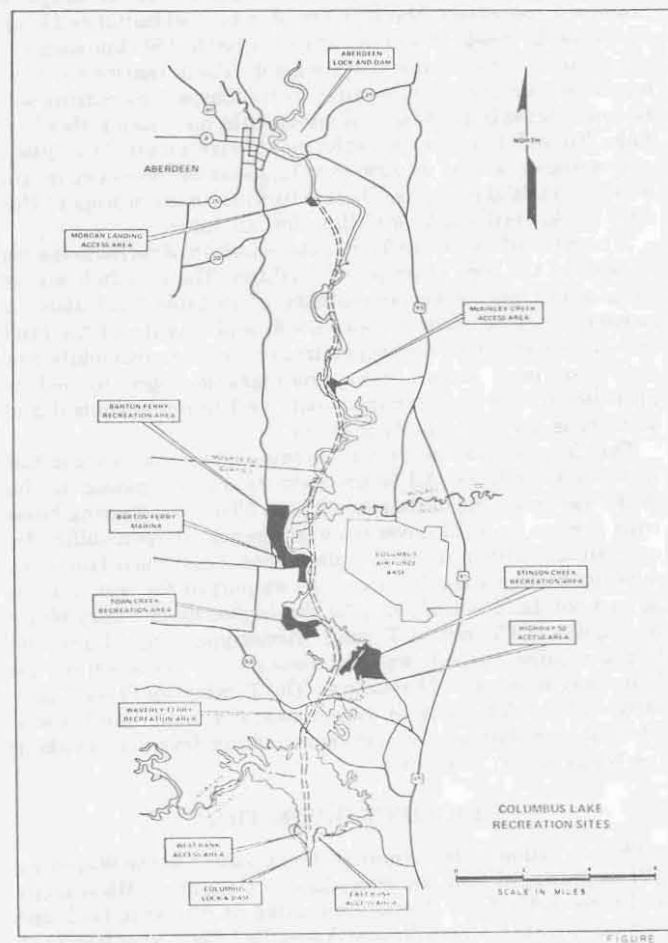


FIGURE 3

initially at a cost of \$4,200,000. Construction of these facilities is proposed to begin in October 1979 and be completed by July 1982.

The Barton Ferry Recreation area will be the most intensively developed site in the initial construction phase. The site will provide 200 tent and trailer campsites with water, sanitary and electrical hookups, a campstore, a trail network and launching facilities at the adjacent Barton Ferry Marina.

The Waverly Ferry, Stinson Creek and Morgan Landing sites will also be developed initially to primarily provide for day use and boat launching facilities. Fifty tent and trailer campsites will also be constructed at Stinson Creek.

The remaining three recreation sites, Town Creek, Highway 50 Access and McKinley Creek, will be developed in the future as demand for outdoor recreation use by the public increases.

The Aberdeen Lock and Dam (See Figure 4) is located about one mile east of Aberdeen, Mississippi. The lake will have a water surface area of 4,100 acres at normal pool elevation, 190 msl. The initial annual attendance is estimated to be 470,000 with an ultimate annual attendance of 1,000,000 visitors. A total of 1,000 acres of land is being acquired for recreation development at five recreation sites. Four sites will be developed initially at a cost of \$3,115,000. They are the Blue Bluff Recreation Area, Acker Lake, Halfway Creek and Becker Bottoms. The Coontail road site is scheduled for future development. Construction of these facilities is proposed to begin in March 1981 and be completed by October 1982.

The Acker Lake Recreation Area located on the west side of the lake north of Aberdeen will provide for overnight tent and trailer camping. The sites will have water, sanitary and electrical hookups. Boat launching facilities will also be constructed at this site.

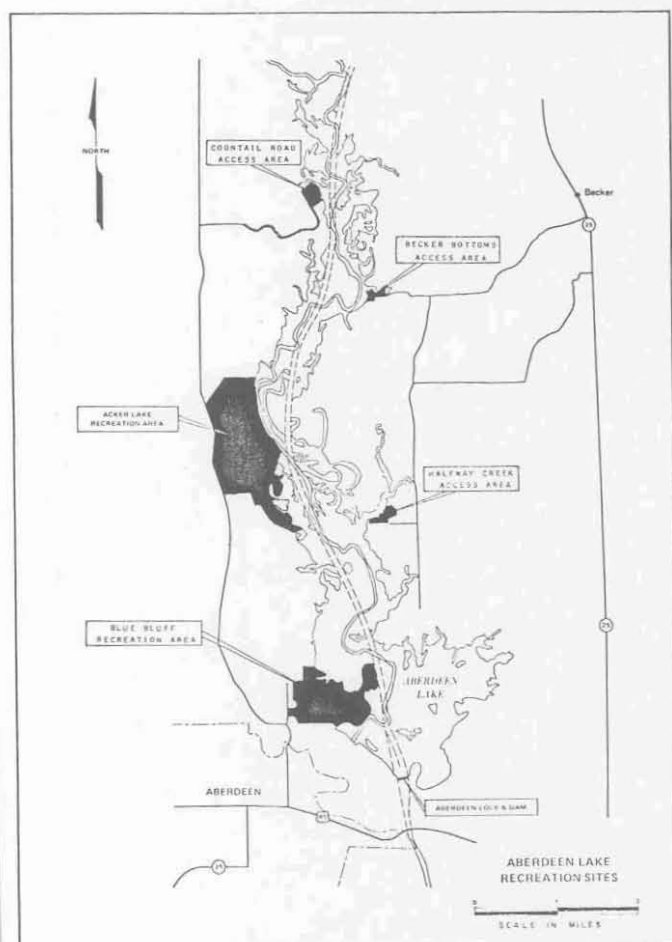


FIGURE 4

The three remaining initial sites will provide for day use and boating access to the lake.

The Canal Section (See Figure 5) consisting of five locks (A-E) parallels the Tombigbee River northward from Aberdeen Lake to Bay Springs Lake in northeastern Mississippi. The combined water surface area of the five pools created by the Canal Section project will be 8,130 acres. The estimated attendance for recreation is 378,000 visitors initially with an ultimate annual attendance of 822,000. A total of 573 acres of land is being acquired for recreation development at five recreation sites.

Each pool will have one recreation site. They are the Amory Recreation Area on Pool A, Smithville Recreation Area on Pool B, Fulton Recreation Area on Pool C, Beaver Lake Recreation Area on Pool D and Saucer Creek Access Area on Pool E.

The Fulton Recreation Area will contain tent and trailer campsites with electrical and water hookups, picnicking and a boat launching ramp. Primitive camping, picnic facilities and a boat launching ramp will be constructed at the Beaver Lake site. The remaining sites will be primarily day use with boat launching facilities.

Construction of these facilities is proposed to begin in April 1981 and be completed by November 1982 at a cost of \$2,495,000.

The remainder of the Waterway from Bay Springs Lock and Dam through the Divide Cut to Pickwick Lake on the Tennessee River is being planned, designed and constructed by the Nashville District Corps of Engineers. Recreation facilities similar to those planned by the Mobile District will be provided at these two projects.

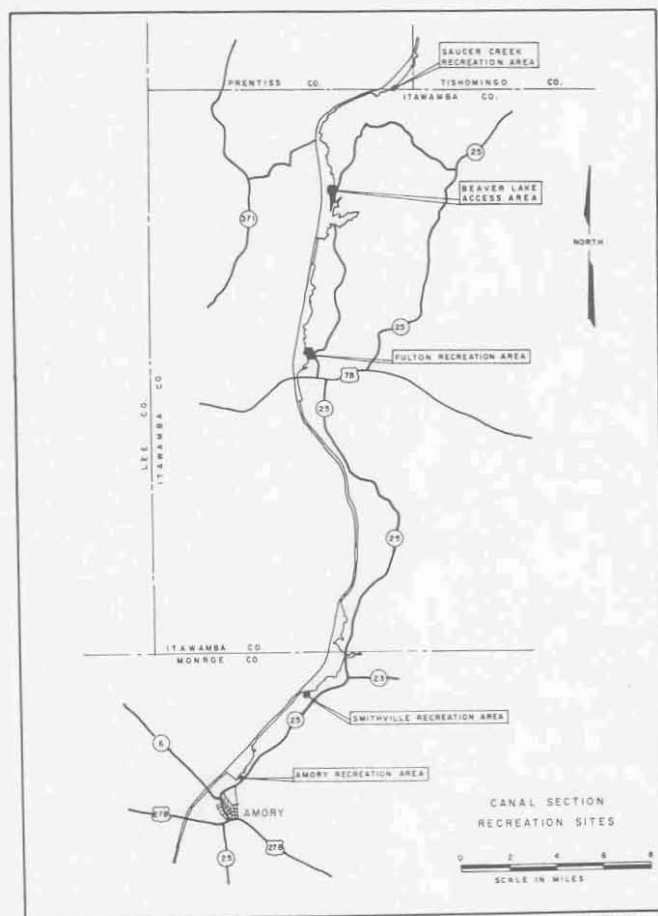


FIGURE 5