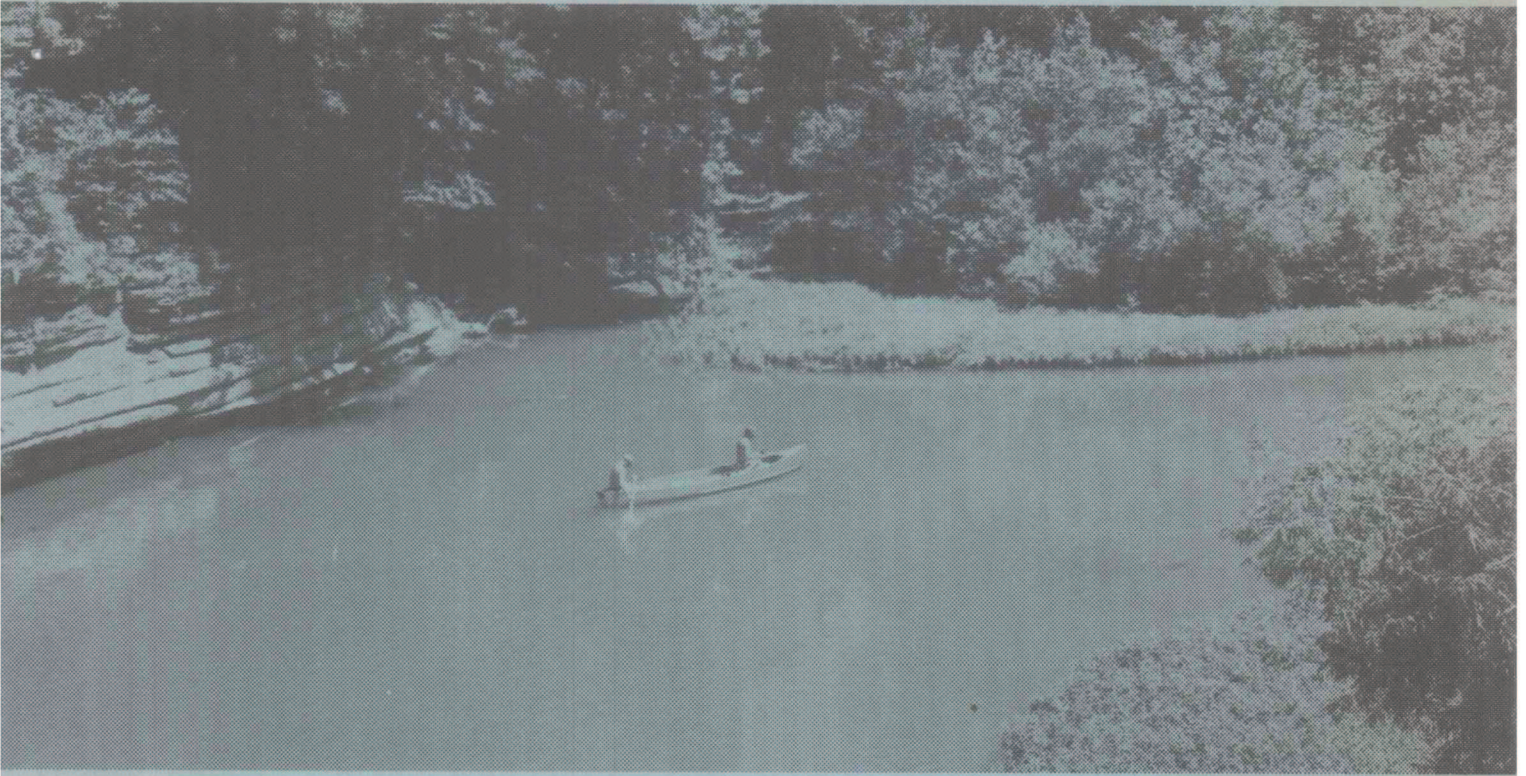


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BUFFALO RIVER, TENNESSEE

WILD AND SCENIC RIVER STUDY



A SUMMARY OF THE FEDERAL-STATE FIELD TASK FORCE STUDY FINDINGS

prepared by:

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Southeast Region, Atlanta, Georgia

August 1974

THIS REPORT WAS PREPARED PURSUANT TO PUBLIC LAW 90-542. PUBLICATION OF THE FINDINGS HEREIN SHOULD NOT BE CONSTRUED AS REPRESENTING EITHER THE APPROVAL OR DISAPPROVAL OF THE SECRETARY OF THE INTERIOR. THE PURPOSE OF THIS REPORT IS TO PROVIDE INFORMATION AND ALTERNATIVES FOR FURTHER CONSIDERATION BY THE BUREAU OF OUTDOOR RECREATION, THE SECRETARY OF THE INTERIOR, OTHER FEDERAL AND STATE AGENCIES, AND THE PUBLIC.

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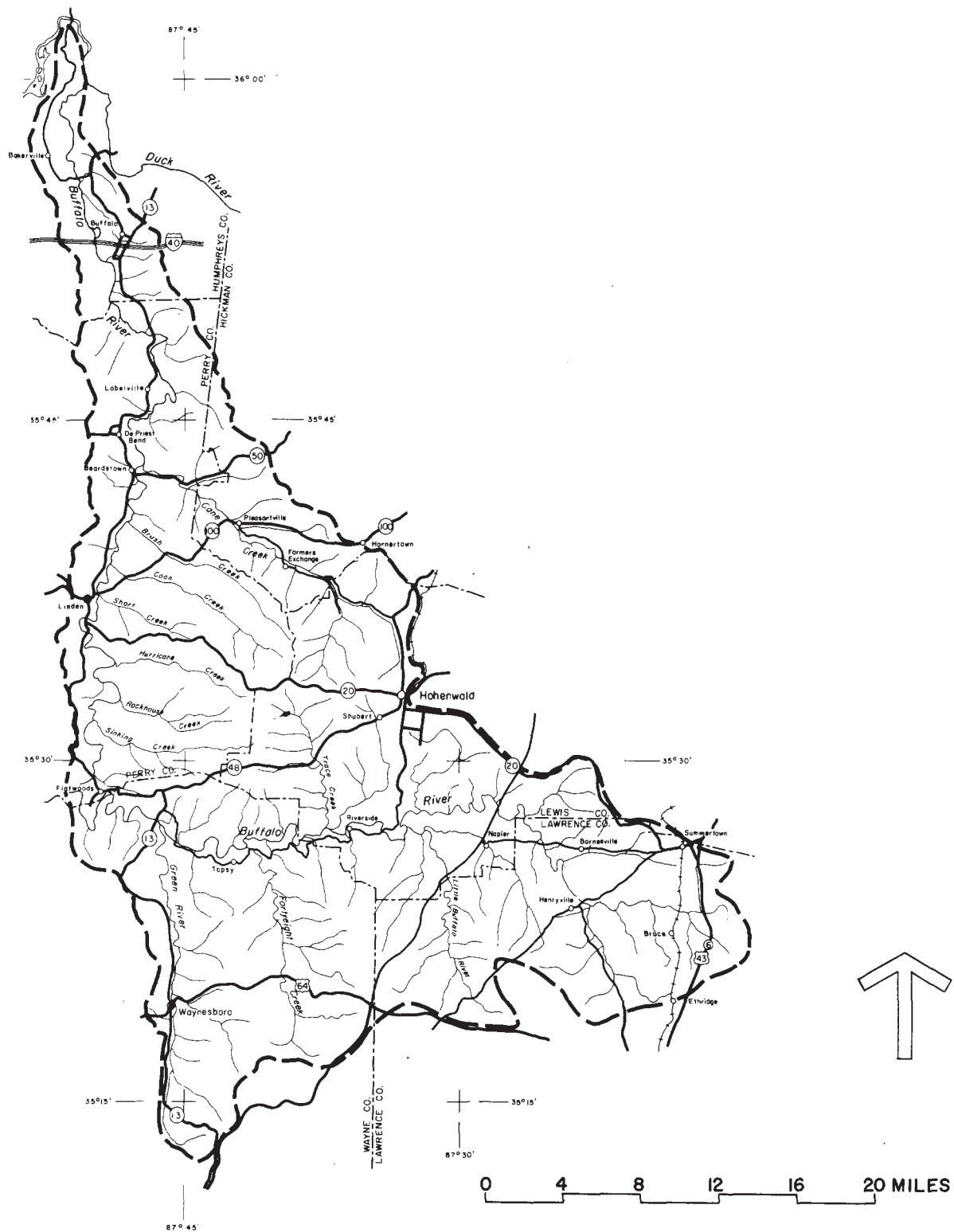
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BUFFALO RIVER, TENNESSEE

JULY 1974

BUFFALO RIVER BASIN

WHY A NATIONAL WILD AND SCENIC RIVER SYSTEM?

Several years ago, it became apparent to many citizens, the public, and private organizations throughout the country that the scenic and free-flowing qualities of many of the Nation's most outstanding rivers were being jeopardized by an increasing number and variety of river uses and developments. It was also recognized that if an effort was not made to protect the unique qualities of these rivers, the amount of enjoyment and benefit they could provide future generations would be reduced or even eliminated. Due to these concerns, numerous public hearings were held by Congress to determine an appropriate course of action. After much discussion and debate, the Wild and Scenic Rivers Act, Public Law 90-542, was approved on October 2, 1968. As stated by the Congress of the United States in that Act:

"It is hereby declared to be the policy of the United States that certain selected rivers of the Nation, which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes."

The Act established the National Wild and Scenic Rivers System, designated eight rivers as the initial components of the system, and prescribed methods and standards by which additional rivers could be added to the system from time to time. Twenty-seven rivers were also designated by the Act for study as potential additions to the National System, including the Buffalo River in Tennessee.

PURPOSE OF THIS BROCHURE

This brochure provides a description of the Buffalo River study as authorized by the Wild and Scenic Rivers Act and presents the findings of the Buffalo River field task force with regard to: (1) the suitability of the Buffalo River for inclusion into the National Wild and Scenic Rivers System; (2) river classification; (3) a plan to protect the scenic, recreation, and other values of the river and to provide for recreation use of the area; and (4) alternatives for administration and management of the river. It is intended that public information meetings provide a basis from which to formulate recommendations concerning the future of the Buffalo River.

BACKGROUND

Federal interest in a special designation of the Buffalo River and its adjacent land dates from 1964 when field representatives of the Departments of the Interior and Agriculture and the State of Tennessee prepared a study report on the possibility of designating the Buffalo River as a wild and scenic river. This study report was given official recognition by the State of Tennessee in 1965 when the 84th General Assembly passed Senate Joint Resolution No. 24 urging the Department of the Interior and the Congress to give favorable consideration to establishing the Buffalo as a National Wild and Scenic River and offered State assistance in carrying out such a program.

In the fall of 1966, the Tennessee Valley Authority proposed to undertake a study which would contain concrete proposals for planning, developing, and administering the Buffalo River as a scenic riverway under Tennessee Valley Authority auspices in cooperation with the State of Tennessee.

It was the Tennessee Valley Authority's conviction that the Buffalo River and its adjacent land constituted a resource not frequently found in close association: water of exceptionally high quality and relatively even flow and aquatic and terrestrial plant and animal life. The concept, embodied in the subsequent September 1968 Buffalo Scenic River Riverway Report, called for the identification of specific reaches of the river and necessary adjoining land providing for the perpetuation of those resources which would contribute to the scope and quality of human experience.

On April 3, 1968, the General Assembly of the State of Tennessee passed the Tennessee State Scenic Rivers Act. This bill was significant in that Tennessee preceded all other States and the Federal Government in the establishment of a scenic rivers program. The original Act designated a system of 10 rivers, including the Buffalo River in its entirety.

In April 1969, legislative action excluded all but a small portion of the Buffalo River in Lawrence County from the provisions of the Tennessee Scenic Rivers Act of 1968. This deletion by the Tennessee General Assembly was attributable to opposition by riparian landowners.

When the Wild and Scenic Rivers Act, Public Law 90-542, was approved on October 2, 1968, it required the Federal Government to conduct a study of the Buffalo River to determine its eligibility for inclusion into the national system.

CONDUCT OF THE FEDERAL-STATE STUDY

The Department of the Interior's responsibility for studying rivers named in the Wild and Scenic Rivers Act was delegated by the Secretary

of the Interior to the Bureau of Outdoor Recreation. A study team was formed under the coleadership of the Bureau of Outdoor Recreation, Southeast Region, and the Tennessee Department of Conservation. It is comprised of representatives of the U.S. Forest Service (representing U.S. Department of Agriculture agencies), National Park Service, Fish and Wildlife Service, Environmental Protection Agency, and the Tennessee Valley Authority.

Three public information meetings were held locally in the Buffalo River basin at Waverly, Linden, and Waynesboro during the early stages of the study in March and April 1974. The purposes of these initial meetings were to explain the Wild and Scenic Rivers Act, inform the public of the Buffalo River study effort, and to obtain public assistance in developing report data. Since that time, the study team has conducted field trips along the river and its surrounding area, gathered necessary background material, and has prepared a draft evaluation field report which includes findings and proposals for alternative choices of action.

DESCRIPTION OF THE RESOURCE

Location

The Buffalo River drainage area is located entirely within the south-central portion of the State of Tennessee. The river rises from several small tributaries in Lawrence County on the Highland Rim of the Western Cumberland Plateau flowing together near the community of Henryville in Lawrence County. The course of the river lies in the shape of an "L" gently meandering westward about 56 miles through southern Lewis County and northern Wayne County to Flatwoods. From Flatwoods, the Buffalo River turns north, flowing 61 miles parallel to the Tennessee River and through Perry and Humphreys Counties to its confluence with the Duck River and the backwaters of Kentucky Lake.

General Landscape

The surface of the Highland Rim in which the Buffalo River lies has been intricately dissected by stream erosion. As a result, the area is hilly with high irregular flat-topped ridges with steep slopes and narrow rather flat bottom land along the creek and river bottoms.

The crests of ridges vary from 900 to 1,000 feet above sea level in the upper watershed to over 700 feet in the lower watershed. They average about 350 feet in height above stream bottoms. In general, the larger streams have gentle gradients and wide valleys; the smaller streams in dissected areas have relatively steep-sided valleys and steep gradients.

Landscape patterns in the Buffalo River basin are typically rural, dominated by agriculture in the valley bottoms and conversely, upland

hardwoods on valley slopes and ridges. Except for urban development around the communities of Lawrenceburg, Waynesboro, Linden, Lobelville, Waverly, and several isolated quasi-public and private home developments, the basin is largely undeveloped.

Historical Economy and Population

In terms of population density, the Buffalo River drains one of the least populated sections of the State with the population peak passing some decades ago. Population in the six-county area declined from 83,042 in 1940 to 78,872 in 1960, and then gradually increased to 79,117 in 1970. The 2020 population is expected to reach 145,600. In 1970, population outward from the six-county area varied between 1.8 to 2 million within a 100-mile radius and between 14 to 16 million within a 250-mile radius. Major population centers affecting the study area are Nashville, 60 miles to the east; Memphis, 110 miles to the west; and Huntsville, Alabama, 80 miles to the south.

Manufacturing is dominant in middle Tennessee with apparel, chemicals, electrical machinery, transportation equipment, food and printed matter being the largest industries. As a large part of the region is located in the relatively level Nashville Basin with rich alluvial soils, some of the more productive agricultural land occurs in this area. Good agricultural land also occurs in limited amounts within the counties of Hickman, Lewis, Perry, Wayne and Humphreys and is located almost exclusively along the Buffalo and Duck River valleys. A large number of farms in the area are engaged in dairy and livestock farming. Tobacco, soybeans, and corn are the principal cash crops.

In recent years, personal and family income in middle Tennessee has risen sharply, although considerably lower than the State average.

The Buffalo River

The Buffalo River is one of the few "largely primitive" free-flowing rivers of substantial length remaining in Tennessee. It remains today as one of the most outstanding examples in Tennessee of an essentially unaltered pastoral stream. For much of its 117 miles, the river meanders alternately among forest, farm, and small community with a notable absence of manmade intrusions such as cottage development, road crossings, or other disturbances within the river corridor.

The gradient of the Buffalo River is quite uniform throughout most of its length with the exception of the reach above the community of Riverside, at river mile 91. The river in this section has a fall of almost 5 feet per mile compared to less than 3 feet per mile in the lower reaches.

The Buffalo varies in depth from a few inches over rocky shoals to more than 12 feet in pools. Shoal areas are spaced rather uniformly along the river and may vary from 50 to 300 feet in length. Pools

vary in length from about 100 feet to as much as 3,000 feet. During heavy or prolonged rains, flow in the upper reaches of the river is frequently swift and turbulent through the numerous shoals and riffles which separate the pools. Except during periods of heavy runoff, the water is clear.

Flooding of the Buffalo River and its tributaries may occur any time during the winter and early spring months between December and March when frequent migratory storms bring general rains of high intensity. During this period, the river may rise causing temporary widespread flooding in the wider valley bottoms of the Buffalo and local flash flooding elsewhere. Although most of the annual precipitation of 55 inches occurs during the winter and early spring, a secondary maximum of precipitation occurs in midsummer due to shower and thunderstorm activity. The months of September and October have the least rainfall.

The scenery along the river as seen from the water is a changing panorama of forested rolling hills, steep bluffs, pasture and cropland. Agricultural land is frequently partially or fully screened from the river by a fringe of bottom land hardwoods containing such species as sweetgum, sycamore, willow, yellow poplar, pin oak, and cottonwood. A variety of flowering shrubs, wild flowers, and wildlife enhance the river experience.

Limestone rocks of the Mississippian period consisting of cherty material underlies most of the watershed. Acting as an excellent aquifer, this formation releases water from many springs into the Buffalo and its tributaries, maintaining a uniform and adequate flow for summertime and early fall water-oriented recreation activities.

Water Quality

The portion of the Buffalo River involved in this study meets the Federal-State water quality standards adopted for rivers in the National Wild and Scenic Rivers System. These standards require high quality water which is suitable for recreation, fish and aquatic life, domestic and industrial water supply, irrigation and livestock watering, and wildlife.

Existing Recreation Use

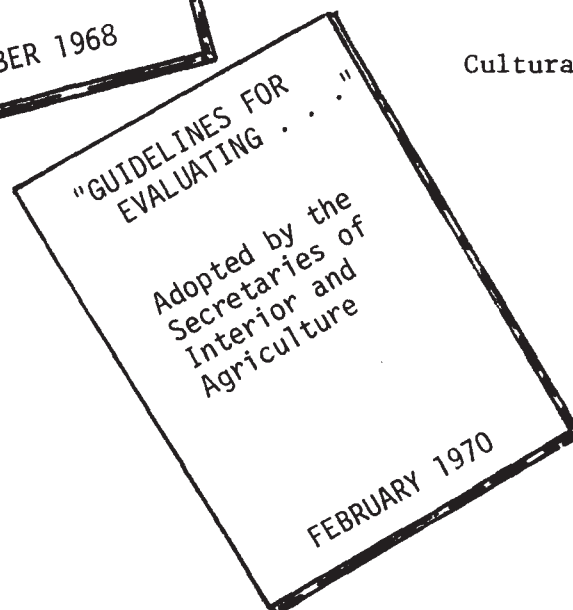
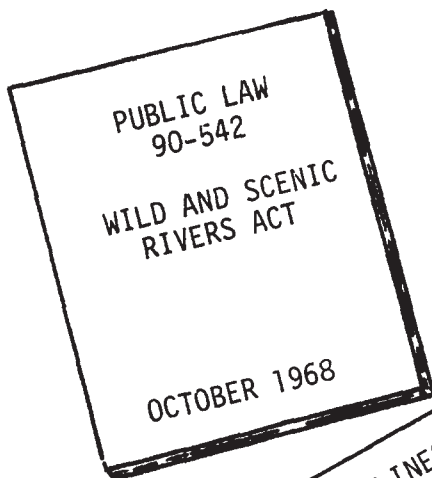
Although the Buffalo River has been primarily a fisherman's river, it is becoming better known throughout western Tennessee and the surrounding region as an excellent float stream. Limited access development on the stream and lack of publicity and facilities to draw and accommodate visitors are the primary factors which limit existing use.

Current recreation use of the Buffalo River is an estimated 30,000 annual visitor or recreation days. Approximately 40 percent or 12,000 visitor days of this use is attributable to fishing. Other major uses include floating, swimming, picnicking, sightseeing and hunting.

A number of Federal, State, and privately operated recreation areas and facilities are available to the general public within 100 miles of the Buffalo River and are generally associated with federally constructed reservoirs on the Cumberland and Tennessee Rivers' system. A major recreation attraction near the Buffalo is the Natchez Trace Parkway, a modern recreational roadway which preserves a good part of the history associated with the original frontier road.

CRITERIA FOR QUALIFICATION IN THE NATIONAL WILD AND SCENIC RIVERS SYSTEM

The first basic task outlined for the Buffalo River study in the Wild and Scenic Rivers Act was to determine whether or not the river or its tributaries met the eligibility criteria for either wild, scenic, or recreational river areas as set forth in the Wild and Scenic Rivers Act and in the "Guidelines for Evaluating Wild, Scenic, and Recreational Rivers Area Proposed for Inclusion in the National Wild and Scenic Rivers System as Adopted by the Secretaries of the Interior and Agriculture." In other words . . . does the Buffalo River qualify for inclusion into the national wild and scenic rivers system?



Free Flowing?
Accessible?
Shoreline Development?
Water Quality?
Scenic Quality?
Fish and Wildlife Values?
Recreation Potential?
Geologic Features?
Cultural and Historic Values?

In addition to these general requirements, every wild, scenic, or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the National Wild and Scenic Rivers System and, if included, shall be classified, designated, and administered as one of the following:

1. Wild river areas--Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
2. Scenic river areas--Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible.
3. Recreational river areas--Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

In arriving at a finding of eligibility and stream classification, the study team had to exercise its judgment, not only for each of the eligibility criteria as they applied to a particular segment of a river but on the river as a whole and to evaluate the combined effort of all criteria. It should be understood that the criteria are not absolutes. There is no way the criteria can be written so as to automatically indicate which rivers are eligible and what class they must be. Accordingly, the entire stream system and its immediate land area were considered as a unit, with primary emphasis upon the quality of the experience and overall impressions the public would receive while using the stream.

This study has revealed that the Buffalo River possesses the values which qualify it for inclusion in the National Wild and Scenic Rivers System. The Buffalo River meets the requirements of the Wild and Scenic Rivers Act and the criteria established jointly by the Secretary of the Interior and the Secretary of Agriculture as published in "Guidelines for Evaluating Wild, Scenic, and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System Under Section 2, Public Law 90-542, February 1970."

THE STUDY TEAM FINDS THAT THE BUFFALO RIVER FROM ITS MOUTH TO RIVER MILE 117 MEETS THE CRITERIA FOR INCLUSION INTO THE NATIONAL WILD AND SCENIC RIVERS SYSTEM. THE BUFFALO RIVER:

. . . is in a free-flowing natural condition without impoundments, low dams, diversions or other works. Considered construction of such developments has been deemed economically infeasible for the foreseeable future.

. . . possesses a combination of outstandingly remarkable scenic, recreational, fish and wildlife, historic, and geologic values in a pastoral setting.

. . . contains water of high quality and meets both water criteria in the "General Water Criteria for the Definition and Control of Pollution in the Waters of Tennessee," 1971, as amended, and the "Aesthetics--General Criteria," as defined by the National Technical Advisory Committee on Water Quality in the Federal Water Pollution Control Administrator's "Water Quality Criteria," April 1, 1968.

. . . contains sufficient volume of water during normal years to permit full utilization of the river's resources during summer months, which is the main recreation season.

. . . has shorelines and a watershed remarkably undeveloped except for agricultural purposes and timber harvesting, with a minimum of discernible adverse manmade intrusions.

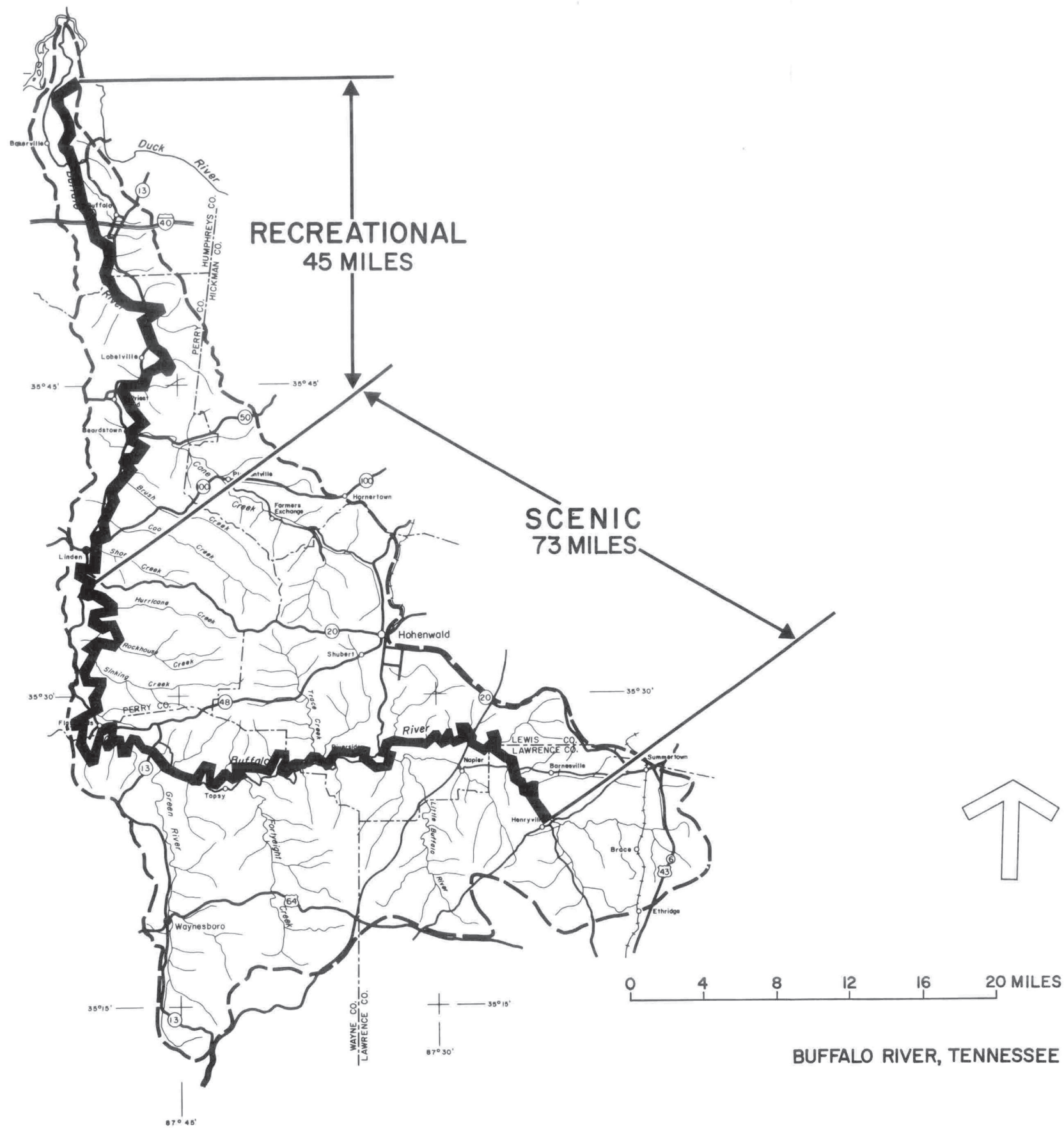
. . . is a valuable and superlative resource for its type which should be managed in a manner that will protect and enhance those special features which make the river worthy of this distinction.

THE STUDY TEAM FINDS TRIBUTARY STREAMS OF THE BUFFALO RIVER DO NOT MEET THE CRITERIA FOR INCLUSION IN THE NATIONAL WILD AND SCENIC RIVERS SYSTEM. THE LACK OF OUTSTANDING NATURAL, HISTORICAL, OR SCENIC QUALITIES AND SMALL STREAM SIZE ARE THE PRIMARY LIMITING FACTORS.

THE STUDY TEAM FINDS THAT THE BUFFALO RIVER SHOULD BE CLASSIFIED AND MANAGED AS A "SCENIC" AND "RECREATIONAL" RIVER AREA AS DEFINED IN THE WILD AND SCENIC RIVERS ACT AND IN CRITERIA DEVELOPED BY THE SECRETARIES OF THE INTERIOR AND AGRICULTURE.

. . . Scenic River Area - From the Henryville Bridge crossing on County (73 miles) Road 6230 (river mile 117) to Bethel Bridge crossing on County Road 6174 (river mile 44).

. . . Recreational River Area - From Bethel Bridge crossing on County (44 miles) Road 6174 (river mile 44) to mouth.



A PLAN TO PROTECT THE BUFFALO

The development and protection of the Buffalo River as a scenic and recreational river area serves as a method for maintaining its existing natural and scenic character. Each river component, if named as part of the National Wild and Scenic Rivers System, would be administered in such a manner that would:

1. Maintain its free-flowing condition and pastoral setting.
2. Protect and enhance the scenic, recreational, geologic, fish and wildlife, historic, cultural, archeological, scientific, and other similar values.
3. Prevent degradation of existing water quality.
4. Provide for public access, use, and interpretation of important scenic, recreational, geologic, fish and wildlife, and similar resources, consistent with the protection and enhancement of the river's quality and its immediate environment for now and the future.
5. Provide high-quality recreational opportunities associated with a free-flowing river at a level of use that does not result in resource deterioration or cause an adverse impact on riparian landowners.
6. Provide for the use of fish and wildlife resources within the framework of appropriate Federal and State laws.

The amount of lands needed for the purposes of establishing the proposed river corridor, whether for protection, access, or recreation facility development, will have to be identified in accordance with an approved river master plan yet to be developed. This will require detailed investigation before the advisability and extent of control can be accurately determined. For this reason, the estimates of lands to be acquired in fee title or by scenic easement should not be viewed as absolute but rather a guide to more intensive planning.

The River Boundary

The "visual corridor," as illustrated on pages 12 and 13, serves as the basis for the determination of appropriate boundaries for the river corridor.

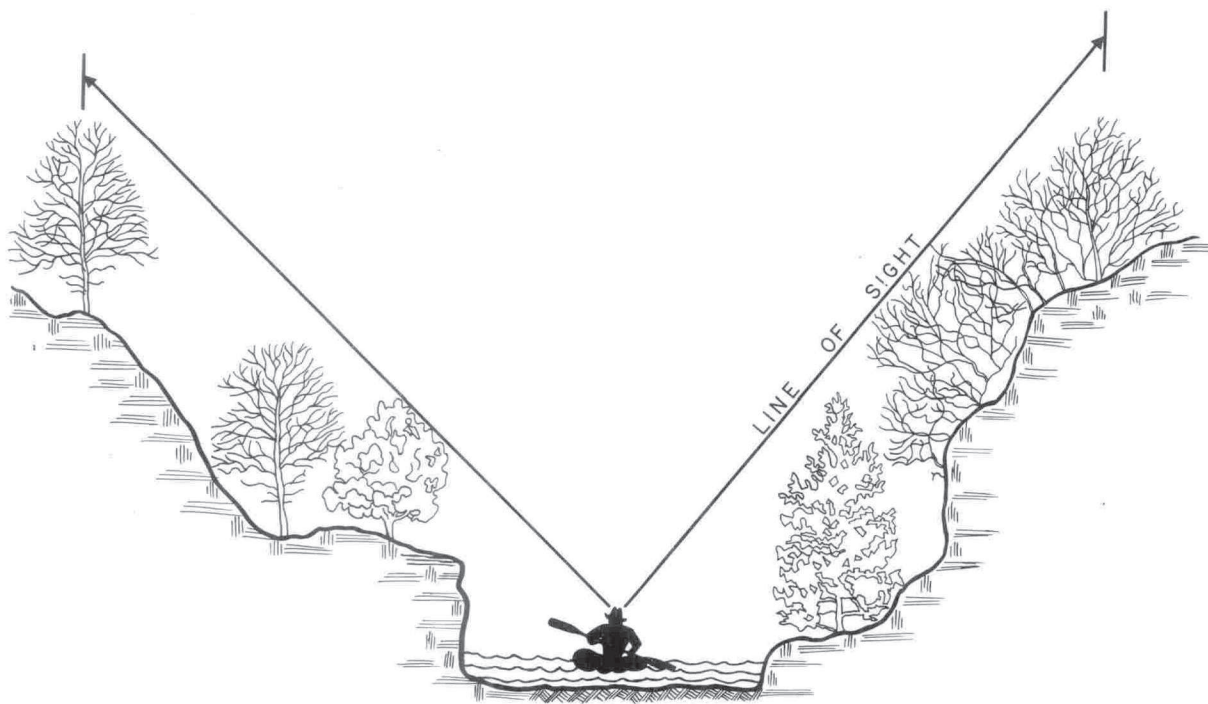
The visual corridor is essentially that zone of adjacent land which has a visual impact on the river user and which, therefore, should be protected from adverse use and development if the natural and scenic appeal of the riverway is to be maintained. The width of the visual corridor varies depending on the height and angle of slope of adjacent riverbanks and bluffs and on the amount of vegetative cover near the river's edge. Where the rock bluffs border the river, the land area subject to control would usually be to the canyon rim. Where the river valley is broader

and streamside vegetation determines the river user's perception of the corridor, a strip of land adjacent to the river would be included in the visual corridor.

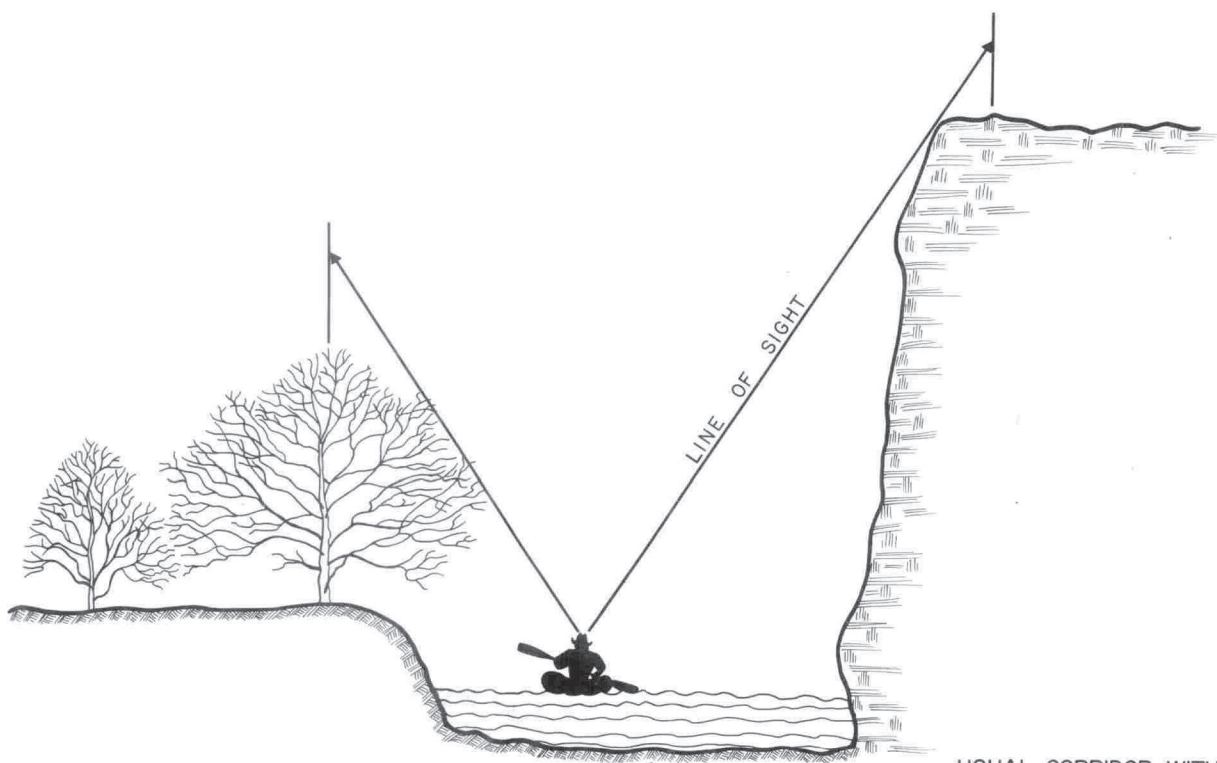
In many instances, lands within the visual corridor are adequate for accommodation of recreation facilities. However, there are instances where expansion may be necessary to provide adequate room to locate facilities back from the river or to include some outstanding scenic, natural, historical, or other nearby features.

The varying degree of screening provided by shoreline vegetation is one of the primary factors in determining the width of a scenic easement required to maintain the visual integrity of the river corridor. When the line-of-sight view from the river is limited by dense vegetation, a minimal scenic easement width would be required.

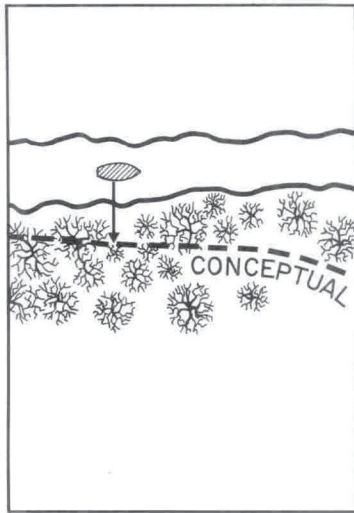
The line-of-sight view from the river partially limited by dense vegetation would require a somewhat wider scenic easement. And, finally, when the view from the river is not limited, a scenic easement substantially wider--perhaps as much as several hundred feet--would be required. There are instances, however, where the administering agency may wish to reestablish vegetative cover thereby reducing the width of the scenic easement for open areas. In this manner, the boundary of a river area may vary in width according to the topography, vegetative cover, and land use along its length.



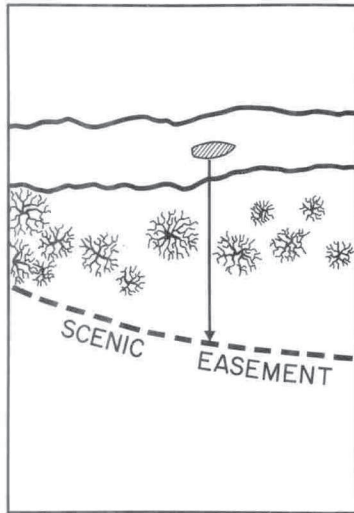
USUAL CORRIDOR WITH
UNIFORM SLOPES



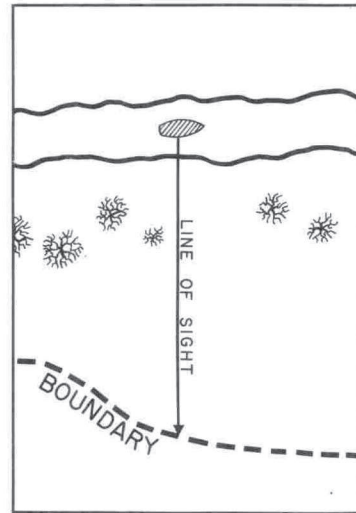
USUAL CORRIDOR WITH
BLUFFED SLOPES



BOATER'S VIEW
LIMITED BY
DENSE VEGETATION



BOATER'S VIEW
PARTIALLY LIMITED
BY VEGETATION



BOATER'S VIEW
NOT LIMITED
BY VEGETATION

VERTICAL VIEW OF
VISUAL CORRIDOR

Fee Title Acquisition

The acquisition of all property rights (fee title acquisition) provides the most effective means of protecting the natural scene and accommodating recreation use within a designated river corridor. Maximum assurances are provided against incompatible land and visitor use, thereby reducing the complexity of management inherent of less-than-fee (easement) control.

Scenic Easements

Scenic easements are essentially agreements between the administering agency and the landowner in which the administrator buys certain uses on selected portions of the owner's land. A scenic easement does not permit public access unless specifically provided for in the easement. Rather, its purpose is to protect the scenic view as seen from the river. Such easements would pertain to a linear corridor including lands on both sides of the river and would contain restrictions against changing any features of the natural landscape or allowing any activity inconsistent with the river concept. Such easements would permit all present compatible uses to be carried on by the landowner, his heirs, successors or assigns. Since land under easement is still in the possession of the owner, it would remain on the tax rolls and would be assessed according to those rights retained. Such easements would require a detailed investigation before the advisability and form of control contained in the easement could be determined.

Public Use Easements

A public use easement would guarantee public access, or in instances of streambank repair, the right of ingress and egress over private lands. Such an easement would be required on streams declared "navigable in the ordinary sense" since under Tennessee law the title to the bed of such streams is held by adjoining landowners. The public use easement would permit landowners to continue existing compatible land uses. For example, the present amount of agricultural use along the Buffalo River is considered as an enhancement to the riverscape and would be treated as a continuing compatible use. A public use easement could, in some instances, provide for the development of hiking trails along portions of private lands in lieu of fee acquisition of such lands.

Zoning

Counties and municipalities have authority under State law to enact land-use controls and zoning measures. If properly formulated and implemented, zoning can be used effectively and economically to protect the river's environment. If improperly utilized, however, zoning can be damaging to those areas that are environmentally sensitive and easily degraded. This would be particularly true if individual counties were not coordinated under a single plan. In this instance, inconsistent and ineffective river protection and use control could result. Local initiative

in establishing a coordinated county regional plan could result in the physical preservation of the river as it exists today.

Although zoning as a sole means of administering an area can be legally and politically fragile, in certain instances local zoning can be an effective and economical means of protection to reduce the need for fee acquisition and easement. In addition, areas beyond the boundary of the river corridor, which are visible from the river, may be protected from encroachments that would directly or indirectly affect river quality.

No Acquisition

The Buffalo River could remain essentially as it is now, in private ownership with no land-use controls. With "no action," current land uses and development within the river corridor would be allowed to continue. Presently there is strong local feeling of stewardship towards the river and in maintaining its existing values. This strong desire of local landowners to maintain a "status quo" condition can only be temporarily effective subject to the gradual and subtle encroachment of adverse use and development. Ultimately, this will cause a degradation of the resource as competition for land for all uses becomes more intense.

It is expected that permanent housing and seasonal cottage development could very likely increase along privately owned portions of the river corridor, particularly near growing communities and along easily accessible river stretches. The construction of additional major highway and railroad corridors is not anticipated, but some highway improvement within the region is foreseen and existing river crossings will probably be improved. Riverside development is often related to highway development and improvement. Such development could adversely affect the scenic and natural values of the area.

Recreation use is increasing in the Buffalo River basin. Fishing, canoeing, hiking and camping are expected to increase, resulting in heavier use pressures on the Buffalo River. Without adequate controls on increasing recreation use, the scenic and recreational qualities could be impaired.

It is reasonable to assume that through "no action" a gradual preemption or conversion of shorelines to other uses will occur closing options to enhance and support quality recreation experiences. To recover this resource as it exists now could become increasingly difficult and economically prohibitive as time passes.

ACQUISITION

The proposed boundary for the Buffalo River incorporates a total of 117 river miles from the Henryville Bridge to its confluence with the Duck River encompassing approximately 3,250 acres. Of this total it is

estimated that about 400 acres should be acquired for public access, recreation facility development and one overlook site. The remaining 2,850 acres could be acquired by scenic easement. Acquisition costs for the 400 acres of land in fee title and 2,850 acres in scenic easement would be approximately \$280,000 and \$1,596,000, respectively. The figures shown below are only approximations subject to refinements by administering agencies during the development of the river master plan.

| | <u>Acres Fee Title</u> | <u>Acres Easement</u> | <u>Total Acres</u> | <u>Acquisition Cost</u> |
|---|----------------------------|---------------------------|------------------------|-----------------------------|
| River Access and Recreation Facility Development | 400 | -- | 400 | \$ 280,000 |
| River Corridor Protection (scenic easement) | -- | 2,850 | <u>2,850</u> | <u>1,596,000</u> |
| | | | 3,250 | \$1,876,000 |

The foregoing acreages represent on an average:

Acquisition in fee plus easement:

$$\frac{3,250 \text{ acres}}{117 \text{ miles}} = 27.8 \text{ acres per mile}$$

Acquisition in fee:

$$\frac{400 \text{ acres}}{117 \text{ miles}} = 3.4 \text{ acres per mile}$$

Acquisition in easement:

$$\frac{2,850 \text{ acres}}{117 \text{ miles}} = 24.4 \text{ acres per mile}$$

Any realistic estimate would require a field inspection of proposed acquisition and a study of local sales by a competent appraiser to confirm fair market values.

DEVELOPMENT

Each component of the National Wild and Scenic Rivers System must be administered to protect and enhance those values which caused it to be included into the system. This means of "preservation" is not, however, intended to be an absolute prohibition of development but rather one of limited development and use compatible to and in harmony with the resource, lest people by their behavior and numbers destroy the very values they seek.

The conceptual development plan as proposed herein and illustrated on page 20 is purposely conservative and based on the concept of maintaining the river environment in as natural a state as possible while providing only those recreation facilities needed for full visitor use and enjoyment of the river. The objective under this proposal is to be achieved with minimum disturbance of the existing pastoral setting of the Buffalo River.

Under this development concept, three major public use and river access areas are proposed, located to disperse visitor impact and to provide for overnight camping and day-use recreational facilities. These major areas or river focal points would be supplemented by providing river access with day-use recreation facilities at six intermediate locations. In addition, six sites would be developed for river access only. One overlook near State Highway 13 at river mile 67 is proposed to enhance the visitor's experience.

Private and quasi-public service facilities which are compatible with the management objectives established for the river would continue.

The foregoing development proposal includes:

Major public use and river access areas--Three areas are proposed:

(1) Metal Ford (river mile 104) to be developed by the managing agency in cooperation with the National Park Service and the Natchez Trace Parkway; (2) Slink Shoals (river mile 63) in the vicinity of Flatwoods; and (3) Blue Hole Bridge (river mile 13) near I-40. It is proposed that about 50 acres in fee title at each site be acquired for facility development and river access.

Each site would serve as a visitor contact center, in addition to providing recreation development for picnicking, overnight camping, hiking, nature study, and river access. One area, the Slink Shoals site, would serve both "recreational river area" and "scenic river area" users while the Metal Ford and Blue Hole Bridge sites would be oriented "scenic" and "recreational," respectively.

Minor public use and river access areas--Six sites are proposed which would accommodate day-use visitors and serve as beginning or termination points for river trips lasting about 1 day. Overnight camping would not be permitted being restricted to one of the above three major public-use areas. It is proposed that about 10 acres be acquired at each site in fee title for facility development and river access. It is proposed that each site have, as a minimum, sanitation facilities, water, picnic facilities, parking area, and boat access.

Minor public use and river access areas are:

| | <u>(river mile)</u> |
|-----------------------|---------------------|
| 1. Barnesville Bridge | 111 |
| 2. North Riverside | 90 1/2 |
| 3. Bell Bridge | 73 |
| 4. Linden | 41 1/2 |
| 5. Lobelville | 26 |
| 6. Link Bridge | Duck River |

River access areas--Six sites are proposed which would provide river access only. These points of access would allow ingress and egress to users desiring less than a normal day on the river. It is proposed that about 5 acres be acquired at each site. Facility development would be minimal including parking, launch ramp, and refuse receptacles.

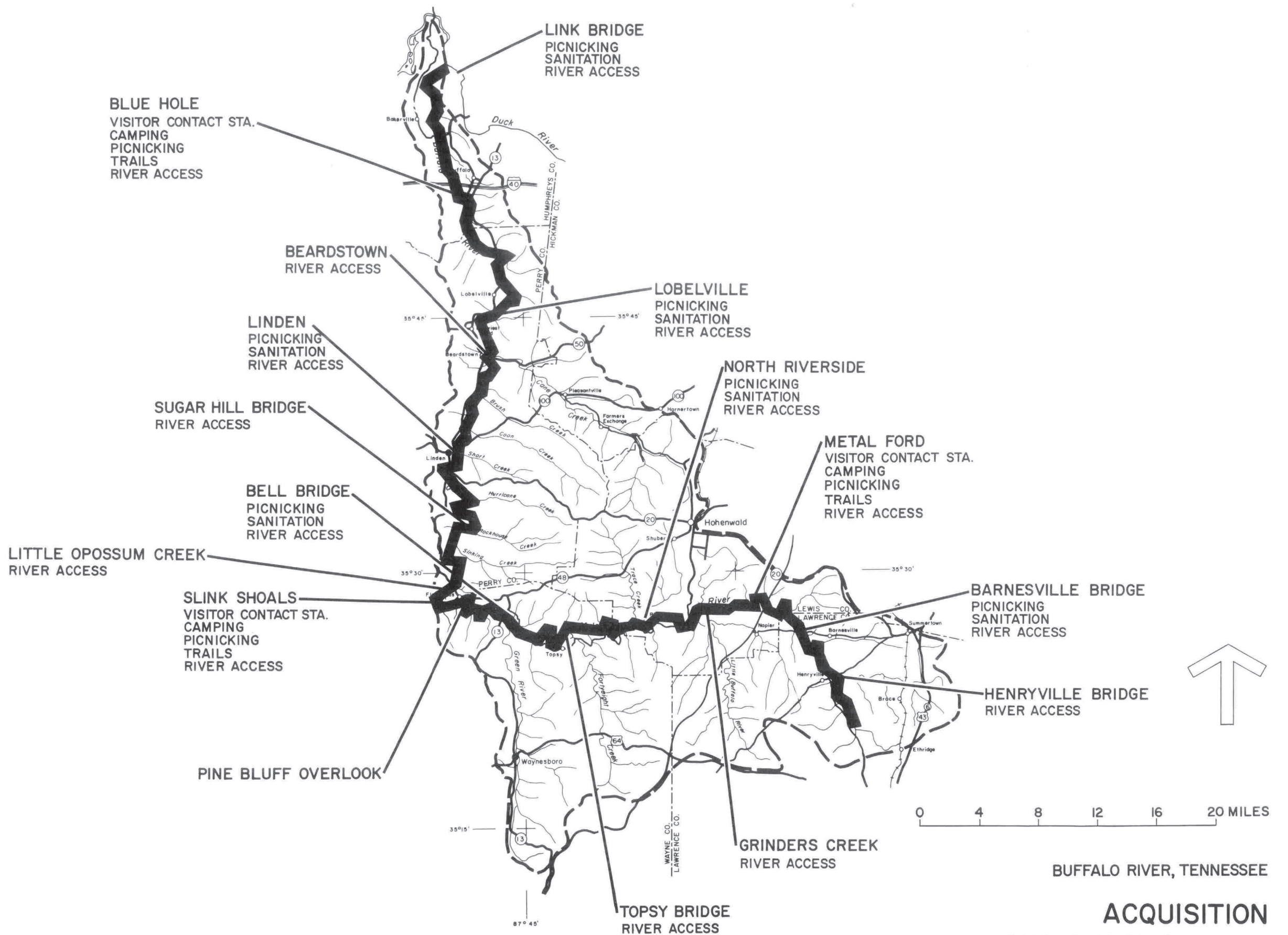
River access areas are:

| | <u>(river mile)</u> |
|-------------------------|---------------------|
| 1. Henryville Bridge | 117 |
| 2. Grinders Creek | 98 |
| 3. Topsy Bridge | 80 1/2 |
| 4. Little Opossum Creek | 59 |
| 5. Sugar Hill Bridge | 52 |
| 6. Beardstown | 31 1/2 |

Overlook--One scenic overlook is proposed at Pine Ridge adjacent to State Highway 13. This bluffed area rises to an elevation of about 230 feet above the Buffalo River (river mile 67) and its flood plain providing a spectacular view. Approximately 150 acres in fee title would be needed to protect this area from encroachments and to permit a minimal level of development. Development would include parking, interpretive facilities, and associated hiking and nature trails. This site could accommodate a large number of visitors without degrading the river experience.

Standing Rock--It is proposed to include this outstanding geologic feature (river mile 17) within the river corridor by scenic easement.

It is estimated that approximately \$918,000 would be needed for facility development that would support minimum allowable levels of recreation uses on the Buffalo River. This estimate is based on the use of standards and facilities needed to provide a high quality recreation experience.



JULY 1974

**ACQUISITION
AND DEVELOPMENT**

POTENTIAL ADMINISTRATIVE ARRANGEMENTS

Several alternatives including State-local, joint State-Federal, exclusive Federal control, and allowing present trends in land use and development to continue, were considered. For each alternative explored, except for "no action," it is assumed that the administering agency or agencies would favorably and promptly act to implement and carry out proposals which would protect and enhance present river values. For all alternatives, including "no action," the National Park Service would continue to administer those portions of the Natchez Trace affecting the Buffalo River in cooperation with the designated administering agency for the river.

Protection Through State-Local Action

Within the framework of existing legislation the State of Tennessee, in consonance with local units of government, organizations and individuals could implement and achieve effective protection and management of the Buffalo River and adjoining lands outside the designated river corridor. Management objectives including the maintenance of the Buffalo River in a free-flowing condition without alteration can be accomplished by creating a river basin authority under Tennessee law. In addition, flood plain and other protective zoning executed by the county courts could provide additional control throughout the river areas by extending the buffer zone beyond designated river boundaries.

The State of Tennessee through the State Planning Commission has the power to create regional planning commissions and to define the boundaries of such regions. These commissions by law are merely advisory. Each county is empowered to establish zones for the uses of lands within the county which lie outside of municipal corporations. Any regional zoning plan executed by counties must be approved by a regional planning commission.

Examples of how a basin authority might be created under Tennessee State law to join local-State interests together in solving problems of mutual concern and benefit is exemplified by the creation of the Upper Duck River Area Development Agency, the Beech River Watershed Development Authority, and the Chickasaw Basin Authority.

Under this alternative the State of Tennessee could provide for the added protection of the Buffalo by requesting the Secretary of the Interior to designate the river as a part of the National System. Section 2(a)(ii) of the Wild and Scenic Rivers Act provides that State rivers which are designated as wild, scenic, or recreational river areas by or pursuant to an Act of the State legislature and which are permanently administered as such by an agency or political subdivision of the State at no cost to the United States and which meet the criteria in the Act and the guidelines may, upon application by the Governor, be included as State administered components in the National System by the Secretary of the Interior.

Protection Through Cooperative Federal-State Action

Under this alternative, two options are possible. The first option would cause the immediate implementation of a program by the Tennessee Valley Authority to protect and utilize the potential of the Buffalo as a scenic and recreational stream; the second would necessitate delayed program implementation pending the rivers inclusion in the National Wild and Scenic Rivers System by Act of Congress.

1. The Tennessee Valley Authority could implement, within the framework of its existing authority, a wild and scenic river demonstration project that conforms to the river concept within this report. Cooperative agreements would specify the extent and willingness of the State or its political subdivisions to participate in the formulation of the master plan, its implementation, and related project costs.

This alternative could, for example, provide the immediate acquisition of the river corridor by the Tennessee Valley Authority with all development, operation, maintenance, and replacement carried out by the State or its political subdivisions.

Eventual designation of the scenic river demonstration project as a wild and scenic river by an Act of Congress would provide the added protection a river receives as a result of being included into the National System. The designation would remove any conflicting options open to the Tennessee Valley Authority, such as impounding the Buffalo should this kind of development prove to be feasible in later years.

2. The Buffalo River could be jointly administered by the State of Tennessee and a Federal agency. Written cooperative agreements between the State and Federal Government could be entered into outlining the responsibilities of each party for acquisition, development, and management. Under this option, the river would be included in the National Wild and Scenic Rivers System by an Act of Congress and would be administered by the State of Tennessee and the designated Federal agency.

Protection Through Federal Action

Under this alternative the Buffalo River could be administered as a Federal component of the National Wild and Scenic Rivers System by a Federal agency upon its designation in the National System by an Act of Congress. Acquisition, development, and annual operation costs would be the responsibility of the designated Federal agency with options open to the State and local agencies who may also share in management administration and related project costs if they so desire. The master plan for the Buffalo River Wild and Scenic River would be prepared by the administering agency in cooperation with the State and affected counties.

"No Action"

One option is to do nothing. It is generally agreed that because of inevitable change in the Buffalo River basin, some form of concerted, uniform, and enforceable land-use standards must be created which would give appropriate recognition and treatment to those resources which comprise a quality environment, including the Buffalo River. The problems are encountered, however, when moving from general approval of an idea to quantitative specifics for implementation.

Without controls such as zoning or other regulatory measures, land along the river may be converted from its present use of cropland, pasture and woodland into summer homes or permanent residences. In addition, the exploitation of the river resources by private interests could pose a serious threat to the river's scenic beauty and water quality.

ENVIRONMENTAL AND ECONOMIC IMPACTS OF DESIGNATING THE BUFFALO RIVER AS A COMPONENT OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM

Environmental Impacts

Enactment of appropriate legislation designating the Buffalo River as a component of the National System and also setting forth specific guidelines for its establishment would ensure protection of the river's resources. The impact on the environment of the river reaches would be minimal, with no significant adverse effects on ecological systems foreseen. Some minor changes in the vegetation and soil conditions will occur at the public use and/or access sites.

Inclusion of the Buffalo River in the National System would have an overall beneficial effect of assisting to preserve and improve the quality of the river and adjoining lands. The river reaches would be preserved in their free-flowing condition and specific land areas would be set aside for the public use and enjoyment of the scenic, recreational, fish and wildlife, and other similar values.

By establishing the Buffalo River as a component of the National Wild and Scenic Rivers System, levels of visitor use would be regulated not to exceed the limits or capacity imposed by its biological, aesthetic, or physical characteristics. Proposed recreation facility development is, therefore, conservative and based on the concept of maintaining the river environment in a natural state while providing only those facilities needed to enjoy the river to its fullest.

Economic Impacts

The Buffalo River basin, with its many "natural" characteristics, is particularly well adapted for public recreation use and development

(including fish and wildlife). It is foreseeable that because of the proximity of the Buffalo River to other more urbanized and industrialized areas in middle Tennessee, it could fill a vital gap in providing needed recreation opportunity not commonly found elsewhere in the State.

The development of the Buffalo River as a scenic and recreational river as proposed herein would necessarily preclude the development of river shorelines for residential or commercial purposes. However, the mere presence of a National Wild and Scenic River would tend to enhance the value of private property adjacent to and in the vicinity of the river corridor. No significant amount of agricultural or timber lands would be taken out of production; however, some tax loss would result to local units of government from purchases of land in fee. There are currently no existing proposals for the development of the Buffalo River for power, flood control or navigation that would be affected by implementing this proposal.

The primary and greatest benefit to be derived from the inclusion of the Buffalo River into the National Wild and Scenic Rivers System is the protection of a natural river environment for the use and enjoyment of present and future generations. Recreational values inherent of the river would be utilized and not lost to riverside development. In all probability local economy would be stimulated by expenditures from those visiting the area as a result of implementing this proposal.

WHAT HAPPENS NEXT?

When the field report is complete, it must undergo interagency review by participating agencies before its submittal to the Secretary of the Interior for his review and distribution to the heads of Federal departments and agencies and the Governor of Tennessee. Following these reviews, the report will be finalized and transmitted from the Secretary of the Interior to the President and the Congress.