A study of the policies and procedures for establishing a scenic river in Tennessee—using the Hiwassee River as a case study

Robert Preston Harrison

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To the Graduate Council:

I am submitting herewith a thesis written by Robert Preston Harrison entitled "A study of the policies and procedures for establishing a scenic river in Tennessee—using the Hiwassee River as a case study." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Forestry.

Kerry F. Schell, Major Professor

We have read this thesis and recommend its acceptance:

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
To the Graduate Council:

I am submitting herewith a thesis written by Robert Preston Harrison entitled "A Study of the Policies and Procedures for Establishing a Scenic River in Tennessee--Using the Hiwassee River As A Case Study." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Forestry.

[Signature]
Major Professor

We have read this thesis and recommend its acceptance:

[Signature]
Edward P. Budden

Accepted for the Council:

[Signature]
Vice Chancellor for Graduate Studies and Research
A STUDY OF THE POLICIES AND PROCEDURES FOR ESTABLISHING A SCENIC RIVER IN TENNESSEE—USING THE HIWASSEE RIVER AS A CASE STUDY

A Thesis Presented to the Graduate Council of The University of Tennessee

In Partial Fulfillment of the Requirements for the Degree Master of Science

by
Robert Preston Harrison
March 1971
ACKNOWLEDGEMENTS

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Ralph H. Blackburn generously furnished his technical and mechanical facilities to the author in preparation of the paper. J. Harry Lewis of TVA was most cooperative in providing information from his files.

The author wishes to thank Professor Sam A. Venable of the Department of Physical Education and Edward R. Buckner of the Department of Forestry who served on his committee.

A special appreciation is extended to his wife, Shirley.
ABSTRACT

The purpose of this investigation was to examine the problems and procedures in establishing a Tennessee Scenic River using the Hiwassee River as a case study. The relationship between state and federal governments in implementing scenic rivers was also investigated.

Conclusions were reached through interviews with government officials and affected Hiwassee landowners. Additional information was obtained through the use of a questionnaire, personal observations, and research of applicable background information.

It was found that landowners affected by scenic rivers legislation are hesitant to grant scenic easements. Political pressures play a vital role toward a river's consideration and acceptance as a scenic river. Regulations of the U. S. Forest Service, Bureau of Outdoor Recreation, Tennessee Valley Authority, and the State of Tennessee are flexible enough to permit these agencies to work cooperatively toward a joint implementation of a state scenic river area.

National publicity of a scenic rivers area prior to the management of such areas can be harmful to the river's environment; because it encourages and can result in too much use before implementing management, which can control such
use. The National Wild and Scenic Rivers Act appears to afford more environmental protection for its candidates than does the Tennessee Scenic Rivers Act. Floating, fishing, and camping are the primary recreational uses of the Hiwassee area; and developments for such uses should be planned to minimize user dissatisfaction.
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CHAPTER I

INTRODUCTION

The need in America for a scenic river act or similar legislation to preserve some of the remaining, free-flowing streams exhibiting outstanding aesthetical characteristics and providing various recreation opportunities not otherwise available is becoming critical. Conservation of the environment of the United States received little or no attention during its settlement. The 1800's were characterized by the destruction and waste of apparently abundant natural resources, and the prevailing attitude was that more virgin land lay only a few miles away.

Today, in 1970, the American people are faced with an annual population growth in excess of two million people. Growing simultaneously with the population has been an industrial complex to provide goods and services. From this human and industrial growth have evolved two new dangers to the quality of our environment—air and water pollution. One hundred and thirty million tons of carbon, soot, and grime settle over the people and shroud the nation's cities each

year. Thermal, industrial, and human waste pollutants have turned rivers into lifeless, heated sewers.

Land uses near urban areas are now being fixed permanently; and it is estimated that in the next forty years land occupied by urban users will double. Pollution, overcrowding, and the tensions of the inner city are driving city and suburban dwellers to the hinterland in search of trees, clean air and water, and open spaces. Subsequently, the 1950's were characterized by a growing public demand for outdoor recreation areas and intense competition for undeveloped areas suitable for recreation.

Vanishing along with the undeveloped lands of the United States have been many of her free-flowing rivers. Corps of Engineers reservoirs, which eliminate streams and portions of streams, now cover more than four million acres in the United States. Anticipated future Corps impoundment

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4Ibid., p. 5.  
developments are reflected by the statement by Brigadier General H. G. Woodbury, Jr., Corps Director of Civil Works, that "within the next 30 years it will be necessary to double or perhaps triple the present storage capacity of all our reservoirs in the United States." Within the Tennessee Valley Region alone since 1933, The Tennessee Valley Authority has built or acquired 27 major dams, which have resulted in the impoundment of 637,833 acres.7

Problem

Congress and state legislators have attempted to legislate the preservation of some of the more outstanding free-flowing streams in the United States. In general, to qualify under such legislation, streams must have outstanding scenic, recreational, historic, and archaeological qualities. The majority of stream preservation legislation enacted to date has been in the form of a state or national scenic rivers act or system. The importance of the scenic rivers program at the local and state level is evidenced by the fact that forty-four governors have designated personal representatives to


work directly with the Bureau of Outdoor Recreation (BOR) on scenic river legislation. The majority of stream preservation legislation to date has specified administrative policy only in the broadest terms, leaving a great deal of flexibility with the administering agency for the establishment and management of an individual scenic river.

It has been suggested that each river in the Tennessee Scenic River System be considered as a unique river and that management guidelines contain the flexibility needed to permit the most beneficial use of each river. A review of the National Wild and Scenic Rivers Act reveals a similar degree of flexibility.

Tennessee was the first state to enact legislation which provides for the establishment of a comprehensive statewide scenic river system. However, as of December 1970 a management plan is not completed for any Tennessee Scenic River. This has been primarily due to the lack of an

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appropriations clause in the Act.\textsuperscript{11} Other states have also experienced problems in the implementation of management of their streams. Eleven states presently have drafted, but not enacted, scenic rivers legislation.\textsuperscript{12} The lack of implementation of scenic rivers legislation can be attributed to this new concept. Seventy percent of scenic rivers legislation in the U. S. has been enacted since 1968; another 20 percent has been passed since 1965.\textsuperscript{13} A study of the problems and procedures for the establishment of a scenic river in any state should provide a format for states which have not enacted or implemented legislation. The study should also prove beneficial to federal agencies involved in scenic rivers work, as many of the problems encountered by the states may also thwart federal officials.

Purposes

It was the purpose of this study using the case of the Hiwassee River, one of the rivers included in the Tennessee Scenic Rivers Act, to examine the problems and procedures encountered in establishing a scenic river. It is anticipated that not only state but federal officials also will benefit from the study. The Tennessee Department of

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{11}Cox, \textit{op. cit.}, p. 2.
\item \textsuperscript{12}Hofe, \textit{loc. cit.}
\item \textsuperscript{13}Hofe, \textit{loc. cit.}
\end{itemize}
\end{footnotesize}
Conservation, in which the administration of Tennessee Scenic Rivers has been placed, should be able to use the pilot study of the Hiwassee in planning the future management of its other scenic rivers. The interrelationship between state and federal governments in establishment, development, and management of scenic rivers was also investigated.
CHAPTER II

HISTORY OF SCENIC RIVERS LEGISLATION

Before examining the Hiwassee River case, it will be useful to provide a timetable of events leading to federal and state scenic rivers legislation. This study should clarify the intent of the lawmakers in passing river preservation legislation and will trace the evolution of scenic rivers legislation to date.

Federal Scenic Rivers Legislation

The growing demand during the 1950's for outdoor recreation areas and the resulting keen competition for such areas prompted Congress in 1958 to establish the Outdoor Recreation Resources Review Commission (ORRRC). The purpose of the Commission was to survey the outdoor recreation needs of the country for the next 40 years. In 1962, the Commission submitted its report to John F. Kennedy and the Congress. One of the Commission's principal recommendations was that "certain rivers with high scientific, esthetic, and recreation values should be preserved in their free-flowing state and natural setting."¹⁴

¹⁴ *Action for Outdoor Recreation for America*, p. 13.
The ORRRC predicted by the year 2000 that our population will almost double, and the over-all demand for outdoor recreation will triple. The Commission further reported that

... water is a focal point of outdoor recreation. Wherever they live, most people seeking the outdoors look for water to swim and to fish in, to boat on, to walk, picnic and camp by, and just to look at.\(^\text{15}\)

Water-based recreation was found to be the second most popular form of outdoor leisure, next only to driving for pleasure.\(^\text{16}\)

The recommendations by the ORRRC were primarily responsible for the resulting Wild Rivers Study made by the Bureau of Outdoor Recreation (BOR) in 1964. The BOR study resulted in the identification of free-flowing rivers considered to have outstanding recreation potential and not protected by law from potential damage. The 1968 National Wild and Scenic Rivers Legislation, PL 90-542, was based upon the study by the BOR.\(^\text{17}\) Under PL 90-542, Congress declared that

\(^{15}\)Ibid., pp. 8-9.


\(^{17}\)The Nation's Water Resources, cited by Cox, op. cit., p. 12.
...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 streams thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.\textsuperscript{18}

The following trends and projections, together with the findings of the ORRRC and BOR, point up the importance of preserving a habitat suitable for recreation activities. Eighty-three billion dollars was spent in the United States during 1968 on leisure time activities as compared to eleven and four-tenths billion dollars spent in 1965.\textsuperscript{19} The average per capita disposable income in 1960 was \$1970; it is expected to increase to \$2900 by 1976 and to \$4400 by the year 2000.\textsuperscript{20} Likewise, the 39-hour work week and two weeks of paid vacation in 1960 are predicted to change to 36 hours and 2.8 weeks respectively in 1976 and to 32 hours and 3.9 weeks respectively at the turn of the century.\textsuperscript{21}

\textsuperscript{20}Action For Outdoor Recreation for America, p. 10.
\textsuperscript{21}\textsuperscript{Ibid.}
Emergence Of The Tennessee Scenic Rivers Act

Information pertaining to the events prior to and during the enactment of Tennessee Scenic Rivers Legislation was obtained almost solely from Lawrence Eugene Cox's 1969 descriptive study, "The Tennessee Scenic Rivers System." Tennessee enacted its Scenic Rivers Act six months before Congress passed the National Wild and Scenic Rivers Act, thus establishing itself as one of the early leaders in stream preservation legislation. It is significant to note that the Tennessee Act resulted from citizens' efforts. The Tennessee Scenic Rivers Association (TSRA) and the Tennessee Citizens For Wilderness Planning (TCWP) were chiefly responsible for the form and content of the bill.22

The 1968 president of TCWP, Robert Miller, proposed a state scenic rivers system for Tennessee in February of 1968. The proposal received immediate popular support from Miller's organization as well as from other conservation and preservation-minded organizations. A bill reflecting Mr. Miller's proposal was prepared by Dr. and Mrs. William Russell, members of TCWP from Oak Ridge, Tennessee, and subsequently, introduced into the Tennessee House by State Representative Pope on February 21, 1968. A group of citizens favoring a proposed dam on the Obed River, one of the rivers included in the

22Cox, op. cit., p. 22.
Russells' bill, represented the chief opposition to the bill. A joint House-Senate Conservation Committee hearing was thus scheduled on March 6, 1968, to hear the pros and cons of the bill. The proposed legislation was strongly supported by numerous Tennessee conservation and preservation clubs, the Tennessee statewide news media, and the Tennessee State Game and Fish Commission.\textsuperscript{23}

The conservation-oriented groups emerged victorious; and the Legislature overwhelmingly voted the bill into law on April 3, 1968. But political favoritism had taken its toll. The Obed, possibly Tennessee's most scenic and treacherous canoeing stream, along with its tributaries—Clear Creek and Daddys Creek—were removed from the bill. Several of the other rivers originally included in the bill were removed as courtesies to legislators who had been pressured by prominent citizens in their districts. The Buffalo, another of Tennessee's more popular canoe streams, was later removed from the Scenic Rivers Act by the Legislature in April of 1969. The Buffalo and Obed Rivers have now, however, received Congressional attention and are presently candidates for inclusion in the National Wild and Scenic Rivers System.\textsuperscript{24}

\begin{itemize}
\item \textsuperscript{23}Ibid., p. 23.
\item \textsuperscript{24}U. S., Congress, Public Law 90-542, p. 1.
\end{itemize}
National Status of State Scenic Rivers Legislation

Thirty-one states have taken some form of action toward the establishment of a state scenic river system. These 31 states have presently identified 431 rivers or sections of rivers for inclusion in some type of scenic rivers legislation. Table I shows a state-by-state status of scenic river legislation.

\[25\text{Hofe, loc. cit.}\]
## TABLE I

STATE-BY-STATE STATUS OF SCENIC RIVERS LEGISLATION

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<th>State</th>
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<tr>
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CHAPTER III

ESTABLISHING A SCENIC RIVERS SYSTEM

Since the passage of the Tennessee Scenic Rivers legislation, major associated problems have developed. The implementation of a national system encounters similar problems. A look at the relationship between the Tennessee Act and National Act will show the similarities between the two. The problems are political, social, economic, and involve some very basic philosophy.

Basic Philosophies

The enactment of the National Wild and Scenic Rivers Act (Public Law 90-542) and the Tennessee Scenic Rivers Act have resulted in a series of philosophies about scenic rivers legislation by involved individuals. It is necessary to examine these different philosophies in order that each can be clearly delineated and dealt with during the proposal of a management plan for rivers in a scenic rivers system.

Legislative Philosophy

Section 2 of the Tennessee Scenic Rivers Act, hereafter referred to as the "Tennessee Act," states:
That the General Assembly finds that certain rivers of Tennessee possess outstanding scenic, recreational, geological, fish and wildlife, botanical, historical, archaeological and other scientific and cultural values of great present and future benefit to the people. The General Assembly further finds that the policy that has resulted in dam and other construction on many of the rivers of Tennessee needs to be complemented by a policy that would preserve other valuable selected rivers or sections thereof in their free-flowing natural or scenic condition and protect their water quality and adjacent lands.

Section 1(b) of PL 90-542 similarly states:

> 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 outstanding remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition. 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.

Thus, the legislative philosophy behind the enactment of both the Tennessee Act and PL 90-542 are identical. Other similarities are evident in both acts. "River" and "free-flowing" are defined under both acts in the following manner:

'River' meaning a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, branches, and small lakes.

'Free-flowing' meaning existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.
It is interesting to note that in both acts the existence of low dams, diversion works, and other minor structures does not exempt a stream from scenic rivers consideration, providing that this shall not be interpreted as an authorization, intent, or an encouragement for future construction of such structures. Potential scenic streams, considered for inclusion into either the Tennessee or National System, are classified according to their freedom from impoundments, accessibility, water purity, and primitive nature of adjacent land. Classifications and the requirements of both systems are shown in Table II.

**Landowner Philosophy**

Many people are directly affected by scenic river legislation, especially the owners of land within a component of a scenic rivers system. Both the Tennessee Act and PL 90-542 provide for the acquisition of lands within the boundaries of any component of either scenic rivers system. The primary purposes of such acquisition are to guarantee the perpetual protection of the environment and to provide public access where deemed appropriate. Interviews with the landowners of the Hiwassee River section contained in the Tennessee Scenic Rivers Act are the basis for the following specific and implied assumptions.
<table>
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<td><strong>Tennessee Act</strong></td>
<td></td>
</tr>
<tr>
<td>Class I - Natural River Areas</td>
<td>free-flowing, shorelines and scenic vistas essentially primitive, no extensive paralleling roads closer than one mile, water unpolluted</td>
</tr>
<tr>
<td>Class II - Pastoral River Areas</td>
<td>free-flowing, adjacent lands used predominantly for agriculture, waters unpolluted</td>
</tr>
<tr>
<td>Class III - Partially Developed River Areas</td>
<td>free-flowing, possess or have potential scenic values although affected by the works of man, some buildings allowed near the shoreline, rivers may be polluted and have some impoundments</td>
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<tr>
<td><strong>National Act</strong></td>
<td></td>
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<tr>
<td>Wild River Areas</td>
<td>free of impoundments, shorelines primitive, waters unpolluted</td>
</tr>
<tr>
<td>Scenic River Areas</td>
<td>free of impoundments, shorelines still largely primitive and undeveloped</td>
</tr>
<tr>
<td>Act</td>
<td>Description</td>
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<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Recreational River Areas</td>
<td>rivers are readily accessible by road or railroad, may have shoreline developments and be impounded</td>
</tr>
</tbody>
</table>

Source: A Copy But Not A True Facsimile Of The Secretary Of State Of The State Scenic Rivers Act, Public Chapter No. 540, House Bill No. 1333 (State of Tennessee: Nashville, Tenn.) (n.d.), pp. 4-5.

The landowners are in agreement with the goal of scenic rivers legislation, the preservation of free-flowing streams. In general, however, they are hesitant to make the sacrifices necessary for the establishment of the Hiwassee in the Tennessee Scenic Rivers System. That is, they are reluctant to grant scenic easements and to sell small tracts of land at a fair market value for the purpose of providing public access to the water. Landowners' views of the Tennessee Act may be classified under the following categories:

1. Uninformed citizenry---these are the owners who have a misconception of how they will be affected through their granting of a scenic easement. They envision that the granting of such an easement means relinquishing the right to use their land and control public ingress.

2. Isolationists---these owners are opposed to any agreement with the state or any political unit, as they feel it would restrict their discretion of land use. Their desires are that the environment of the Hiwassee River area remain as is--sparsely populated and primitive.

3. Opportunists---owners within this classification are not opposed to the selling of a segment of their land, regardless of the purpose for which it is intended, if their price is met.
Legislative Problems

Any legislative act affecting private lands, whether it be federal or state proposed, is subject to political pressures once it has been tossed into the political arena. Neither the Tennessee Scenic Rivers Bill nor the National Wild and Scenic Rivers Bill were exempted from such political pressures. Sixty-seven rivers were originally included in the Wild Rivers Bill proposed by Senator Frank Church of Idaho, the bill from which PL 90-542 was primarily constructed. But only segments of eight rivers had survived the political arena when PL 90-542 was enacted into law. Similarly, the final version of the Tennessee Act eliminated 12 of 25 stream segments which were originally listed in the act.  

Local landowners, in fear of being directly affected by scenic rivers legislation through land acquisition or scenic easements, were primarily responsible for the deletion of those rivers removed from the original Tennessee and National Scenic Rivers Bills. There has been little secrecy involved in the methods used by owners to exclude a favored

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26 Public Law 90-542, p. 2.


river from scenic rivers legislation. Landowners expressed their feelings to a district representative who, in turn, exerted pressure at the state level. U. S. senators and representatives were likewise pressured to delete rivers included in the National Wild and Scenic Rivers Bill. A pro-Obed dam delegation from Harriman, Tennessee, was directly responsible for influencing the removal of the Obed River from PL 90-542. Tennessee Congressmen were likewise pressured by influential landowners, which resulted in the deletion of the Big South Fork River in Tennessee from PL 90-542. In return for such political courtesies, state and national legislators are insured of strong local support and campaign assistance at election time.

The enactment of Tennessee Scenic Rivers legislation has not guaranteed political asylum for included streams. Twelve months after the enactment of the Tennessee Scenic Rivers Act, misinformed and influential farmers, fearful of a land-grab, persuaded the legislature to remove sections of the Buffalo River from the bill.

Agency Involvement

One of the unique characteristics of the Hiwassee River is the resulting relationship among various public agencies. The Tennessee State Game and Fish Commission (SGFC)
presently manages the Hiwassee for trout fishing. The Tennessee Valley Authority (TVA) produces electricity at the Apalachia Powerhouse and owns additional land downstream from Reliance, Tennessee. The U. S. Forest Service (USFS) administers the present recreational developments in the area. The Tennessee Department of Conservation has been assigned the task of operating the Scenic Rivers System, although no inter-departmental assignment has been made. The Bureau of Outdoor Recreation (BOR) is also involved by providing technical and financial assistance to the Department of Conservation.

Previous task force meetings with the governmental units mentioned, except for BOR, have revealed a consensus with respect to the type of developments proposed by the state for the Hiwassee River area; although disagreements were voiced in regard to the number, size, and placements of developments. The question was also raised by the Forest Service about Forest Service regulations permitting the granting of a perpetual free use permit to the state for development on Forest Service lands. The Forest Service was also caught in the dilemma of having its own plans for the recreational development of the area but lacking funds for such developments. 32

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Once the administration of the Hiwassee segment of the Tennessee River comes under state jurisdiction, the problem of dual-agency administration immediately presents itself. After talking with the recreation visitors to the Hiwassee area, it is evident that they are already confused about which segments of land are private and which are USFS lands. Therefore, unintentional public trespassing frequently occurs; and landowner relations with the public are subsequently frayed. The addition of another administrative unit in the area with additional regulations can only provide additional confusion to the recreation visitor.

It is essential to note that the Hiwassee River, although constantly free-flowing, is a man-controlled river. Without the operation of at least one of the two generators at the TVA Apalachia Powerhouse, there is insufficient water flow and depth for floating the scenic rivers section of the Hiwassee. Thus, the operation of the powerhouse must be carefully taken into consideration in the planning of the types of use of the Hiwassee.

Inter-agency Relationships

The BOR serves as the focal point in the Federal effort to meet demands for outdoor recreation through planning, promoting coordination of Federal plans, and assisting Federal, State, local, and private efforts to protect and reclaim the outdoor environment and provide outdoor recreation.
opportunities. BOR cooperates with and provides technical assistance to the states and, as administrator of the Land and Water Conservation Fund Act, furnishes financial assistance grants to states for outdoor recreation planning, land acquisition, and facility development. Section 16 of the Tennessee Scenic Rivers Act permits the State of Tennessee to accept such Federal assistance from the BOR.

The TVA encourages and aids the development and conservation of natural resources in the Tennessee Valley region. As a part of its economic development program, TVA encourages the use of its resources for recreational purposes. It conducts demonstrations and studies in the use of the region's waters for recreational purposes and provides technical assistance to help use this resource. However, other than on an experimental basis, the TVA neither develops nor operates recreation facilities. It does encourage recreation development by making lands available to other Federal agencies, state and local agencies, and individuals through transfers, conveyance, leases, licenses or sales. The U. S. Forest Service has three distinct responsibilities for promoting the conservation of the nation's forest lands:


34 Ibid., p. 81.
management of land resources under the multiple use concept of the National Forest System; forestry and wildland research; and a cooperative forestry program concerned with state and private lands. The use of National Forest lands for specific purposes is authorized by special use permits if the proposed uses are in accordance with overall management objectives. Term permits, a type of special use permit, may be issued for a specified tenure up to 30 years. Forest Service Regulation 1580.2 specifically states:

TheForest Service will cooperate with and seek the cooperation of non-Federal agencies when it is in the public interest, is administratively desirable, and is currently authorized by law, directly or by implication. When engaged in cooperatively, these activities of both parties should complement each other to avoid duplication and to achieve clarification of responsibilities, the pooling of resources, improvement of program operations and greater usefulness of the combined program.

Premature Publicity

In the May, 1970, issue of Sports Afield, the Hiwassee River received nationwide publicity as a trout fisherman's paradise. The following is a section of the article:

I was awed by my first encounter with the Hiwassee. Could a trout stream of such magnificence actually exist south of Canada or east of the Mississippi? In size and ferocity, this amazing river dwarfed Colorado's Gunnison and Arkansas, New Mexico's Rio Grande and Wyoming's Snake. It looked more like the mighty Nakuek of Alaska.36

35 Ibid., p. 72.
Such publicity has unleashed a migration of trout fishermen, canoeists, campers, and sightseers into an area that is physically and administratively unready for the volume of use it is receiving. The effects have been disastrous from the aspect of environmental damage. Stream bank vegetation at numerous points has already been destroyed by bank fishermen and visitors, and erosion has been advancing. Sheet erosion is now evident at more than a dozen areas along the portion of the river included in the Tennessee Scenic Rivers Act.

This erosion has been created almost entirely by users who desire to create their own camping areas for their mobile campers rather than use Forest Service facilities located in an area removed from the river. Littering the stream bank and river is becoming very evident. It is apparent that much of the environmental damage to the Hiwassee could have been averted had the publicity been delayed until after the administration of the area had begun. The damage already done to the Hiwassee as a result of premature publicity also points out that a scenic river can be quickly overused. The Current River, designated as a National River in Missouri, is being "worn out" by overuse. 37

CHAPTER IV

THE HIWASSEE RIVER CASE

The Tennessee Department of Conservation, Division of Developmental Planning, hereafter referred to as "the State," chose to study and develop the Hiwassee River before any other Tennessee Scenic River because of: (1) the pressing need for environmental restoration along the Hiwassee, (2) the unique situation of multiple public agency land-ownership along its stream banks, (3) its representation of a Class III river in the eastern geographical section of the state, and (4) the possibility that TVA was planning to build a dam on the Hiwassee. 38

Location and Description

Location

The portion of the Hiwassee River included in the Tennessee Scenic Rivers Act extends from the North Carolina line at the Apalachia Dam to the Tennessee Highway 411 bridge near Benton, Tennessee. However, only the 11.2 mile section from the Apalachia Powerhouse to the 411 bridge is planned for development by the State (see Figure 2 in the Appendix).

38 Interview with Mr. Max J. Young, Chief Planner, Tennessee State Department of Conservation, Nov. 12, 1970.
The State reasoned that since the upper section of the river was primitive and inaccessible except by foot, it should be developed only with a foot trail from the powerhouse to the dam. There is also no expected danger to the environment of the upper section, as there is on the lower section.39

The entire 11.2 mile lower section of the Hiwassee is located in Polk County. The county is predominantly rural with a population of 12,160. The nearest incorporated town is Benton, Tennessee, with a population of 638.40

Description

The following excerpt describes the Hiwassee River between the Apalachia Powerhouse and the 411 bridge.41

The lower Hiwassee varies in depth from a few inches over rocky shoals and ledges to over 10 feet in the quiet pools and, with the power units at Apalachia powerhouse operating, provides excellent floating and canoeing. The average stream gradient between the powerhouse and the mouth of the Ocoee River is approximately 9 feet per mile. Although primarily recognized for its excellent trout fishing and canoeing waters, the area surrounding the Hiwassee abounds with wildlife, including deer, bear, and wild boar.

The crumbling ruins of Maggies Mill is the major historical attraction along the river. The first six miles of the Hiwassee below the Apalachia Powerhouse includes the stream's most scenic and rugged

39 Ibid.
41 J. Harry Lewis, draft of a description of the Hiwassee River, 1970. (Mimeographed.)
features. Most of this section of the river is confined in a deep, fast dropping gorge between high ridges. The river flows through remote forested country over a series of continuous rapids with a fall of about 17 feet per mile. It provides the canoeist with a variety of white-water rapids. Rapids and shoals on this section of the river range from class I to III in difficulty, with class III being the most difficult class of water a skilled canoeist can handle in an open canoe.

For the next 6 miles the river flows through less rugged landscapes, with farm and pasture land in the adjacent narrow flood plain surrounded by heavily forested, mountainous slopes. This portion of the river drops about 7 feet per mile and includes many beautiful rapids and broad stretches winding around islands. Rapids and shoals on this section are mostly class I water with a few class II shoals. At the end of this stretch the river drops out of the mountain range and takes its first relaxed breath.

The Tennessee Scenic Rivers Act and the Hiwassee

The Tennessee Scenic Rivers Act specifically designates the previously mentioned section of the Hiwassee as a class III river. The following excerpt describes class III Partially Developed River Areas.

Those rivers or sections of rivers in areas affected by the works of man, but which still possess actual or potential scenic values. Included would be rivers with some housing or other building developments near their shorelines, rivers with parallel roads or railroads, rivers with some impoundments, and rivers polluted, for example by strip mine run-off. These rivers would be managed to prevent further loss of scenic values, to improve the scenic aspects of their surroundings, and to restore the quality of their waters. A polluted river section in an otherwise natural area could be improved to the point where it would be upgraded to class I. Lands adjacent to any
such river, and the use thereof, should be subject to public control by zoning, tax incentives, acquisition of easements or fee title and other means sufficient to realize the purposes for which such river is designated a state scenic river.  

Section Nine of the Tennessee Act provides the limitations in the establishment of land boundaries for class III rivers:

For class II or class III rivers area, the boundary shall include the vista from the river and shall be at least fifty (50) feet but not more than four hundred and fifty (450) feet from the usual banks of the river on each side.

Sections 10 and 11 provide the Commissioner of the Department of Conservation with the authority to acquire lands within the exterior boundaries of a scenic rivers area on behalf of the State of Tennessee. The Commissioner may acquire such lands in fee title or may obtain an interest in the land in the form of a scenic easement. The Commissioner is also provided with the power of eminent domain. As stated in the Tennessee Act, land uses allowed within the exterior boundaries of a scenic river area are determined by the river classification of an area. For a class III area those allowed uses are as follows:

In class II and class III scenic river areas the continuation of present agricultural practices, such as grazing and the propagation of crops, shall be

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43 Ibid., p. 9.

44 Ibid., p. 10.
permitted. The construction of farm-use buildings shall be permitted, provided that it is found to be compatible with the maintenance of scenic vistas from the stream and its banks. There shall be no mining, commercial timber harvest, or construction of roads paralleling the river. Public access through new road construction, as well as landings and other structures related to recreational use of these scenic river areas shall be allowed, provided there is no other such access within seven (7) miles in either direction.\textsuperscript{45}

Selection of Easement Boundaries For the Hiwassee River

Before examining the State-proposed developments and their placement of the Hiwassee area, the exterior boundaries should be clearly delineated and the criteria revealed which were used in the placement of the boundaries. As previously mentioned, the exterior boundaries of a class III river must fall within 50-450 feet of the normal banks of each side of the river.

State Criteria

The State has decided that a conservation easement not to exceed 75 feet from the normal stream bank will adequately preserve the Hiwassee area as intended in the Tennessee Act.\textsuperscript{46} The criteria for using this 75 foot figure were as follows.

\textsuperscript{45}\textit{Ibid.}

\textsuperscript{46}\textit{Interview with Mr. Max J. Young.}
1. The ownership pattern of predominantly government lands (see Figure 1). These lands are already being managed in accordance with the goals of scenic rivers legislation, and the administering agencies' regulations bind them to such goals.

2. The topography of the stream bank itself. Sheer bluffs, high river banks, and stands of trees and brush along the immediate shoreline make it unnecessary to acquire a larger easement in order to guarantee an esthetic view.

3. There are no known outstanding geological, botanical, historical, archaeological, or other scientific areas of value known to exist within 450 feet of the shoreline.

4. Present land uses are totally agrarian in nature and do not conflict with the uses allowed within the boundaries of a class III river as specified in the Act.

5. The 50 to 75 foot strip would permit enough space for the restoration of the eroded stream banks.47

47Ibid.
FIGURE 1.
LAND OWNERSHIP MAP OF THE HIWASSEE RIVER

LEGEND

PRIVATE LAND TRACTS
T.V.A. LAND TRACTS
SCALE: 1 INCH = 2100 FEET
Control of Land Use

The State selected to control land uses along the Hiwassee through easements and fee titles rather than zoning. Although the State has zoning powers, it has never applied them. Subsequently, zoning powers have been left to the counties. The State felt, however, that county zoning for the Hiwassee project would be susceptible to local pressures.48

Developments

The U. S. Forest Service presently has the only recreation developments along the Hiwassee from the 411 bridge to the Apalachia Powerhouse. The Quinn Springs Recreation Area, located off State Highway 30 about 500 feet from the Hiwassee River, represents the nearest camping area to the Hiwassee. Twelve camping units and 38 picnic units make up the area. The Lost Corral Recreation Area is located across from the Quinn Springs Area on the opposite side of the river and has no camping or picnicking facilities. The only other developments are the Towee Boat Launch site located directly below the Apalachian Powerhouse and the ten-unit Hiwassee River Picnic Area located just upstream from the Quinn Springs Area.

There is another development which is influencing the use of the Hiwassee, although not located along the river. This is a private float service for visitors wishing to float.

48 Ibid.
the Hiwassee by canoe or rubber raft. In its first year of operation, from June 25 through September 1, 1970, 368 rafts and canoes were rented, reflecting the interest in floating the Hiwassee.49

Uses

Fishing, camping, and floating are the three major uses of the Hiwassee area. Picnicking, driving for pleasure, and swimming were other uses observed on the area. None of the agencies associated with the Hiwassee area possess any use data for determining the number of recreation visitors on the Hiwassee River area during the summer use season. However, through discussions with the U. S. Forest Service District Ranger administering the Hiwassee area and observations during this study, the following conclusions have been drawn about use intensity.50 Rarely are more than half of the Forest Service camping or picnic units occupied at any one time. Only twice during the 1970 summer season were the Quinn Springs camping units filled to capacity. One occasion was a meeting of the East Tennessee Society of American Foresters; the second occurred during the annual canoe race held over the Labor Day weekend.

The Labor Day weekend is, of course, unique not only because it is the last summer holiday, but also because it is the weekend of the annual Hiwassee canoe race. Two thousand and seven hundred and eighteen visitors were counted on the Hiwassee River area on this weekend. During the down river race, the author counted 153 cars on the Hiwassee area, 29 percent which were from out of state. The use intensity on the Hiwassee during the Labor Day weekend cannot be used as an index to the total use of the area. However, the use during this particular weekend does suggest that the area can receive too much use and that out-of-state visitors are using the area.

State Proposed Developments

The types and sizes of developments proposed for the land between the powerhouse and the 411 bridge by the State are based upon the present and anticipated use of the area, types of present uses, and the amount of land suitable for development and free from the threat of flooding. The State has specifically stated that mass use of scenic rivers streams

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is neither desirable nor the purpose of scenic rivers areas. Developmental proposals and locations are as found in the Appendix.

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The Tennessee Scenic Rivers Act probably will be able to serve its intended purpose of preserving those free-flowing streams included in the Act. However, the lack of an appropriation clause in the Act is a major deficiency. Without such a clause, planning and river development of scenic rivers will always be in the realm of uncertainty. The Tennessee Scenic Rivers Act also leaves the Commissioner of the Department of Conservation without the power to change the criteria for the classifications of rivers; this may prove insignificant if there is adequate flexibility with present criteria to preserve those included and potential streams. Cox has hypothesized that political pressures are the primary method of adding or rejecting streams for the Tennessee System.\(^5^4\)

A river candidate for the Tennessee System is not afforded the same environmental protection as a river candidate for the National System. Section 7 (b) of PL 90-542 states that:

\(^{54}\)Cox, *op. cit.*, p. iv.
The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works that would have an adverse and direct effect on the values for which such river might be designated.

This section should prevent a project in conflict with scenic river goals from being initiated prior to a careful examination of the river for determining its suitability as a scenic rivers member.

In regard to removing political pressures from the selection of scenic rivers, a massive state and federal publicity program should be launched. Such a program should advise involved landowners and the general public of their important role in preserving a resource that is rapidly being depleted. Such a program should also be enacted far enough in advance of scenic rivers legislation to inform comprehensively all affected parties about scenic rivers programs, especially the economic, sociological, and political relationships of the program. Public agencies must send their best public relations salesmen when contacting affected landowners. If the landowners were informed very early in the planning process and understood scenic rivers legislation clearly, they would be much more receptive to the program. Subsequently, they would be more willing to grant scenic easements and cooperate in other ways to expedite implementation of scenic rivers programs.
The State decision to control land use along its scenic river streams through easements rather than zoning and fee title is a good one. It has been repeatedly found that regulation by zoning raises constitutional questions and might not prevent the development of land in a growing metropolitan area. Also highly restrictive, low density zoning often collapses as development pressure increases. Full public ownership, on the other hand, is also not necessary, if there is reasonable certainty that land will be managed in a natural condition to prevent erosion and/or to maintain the scenic values.

**Criteria For Use Intensity And Degree of Developments**

In determining the extent of developments for any scenic river area, several guidelines must be followed. First, as previously mentioned in Chapter IV, there may be specific management guidelines within scenic rivers legislation which must be followed. Visitor use activities on a scenic river area will usually influence the type of developments to be constructed. Here the physical limitations of available land for developments must be carefully considered.

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while simultaneously preventing any further loss of present scenic values. Second, there is the question of whether to limit developments and use in an attempt to increase the satisfaction per user or whether to develop to the physical limitations of the area and permit the maximum use the area can stand without damage to the environment.

In studies of wilderness areas, Jack Knetsch and Marion Clawson have found that as the number of contacts between wilderness area users increased, the satisfaction of use decreased. Robert C. Lucas has found that canoeists specifically complained of the loss of the wilderness effect when encountering more than six to ten groups of users on a float trip.

A review of the definition of wilderness as defined in the National Wilderness Act clearly indicates that the residential developments and access roads of the Hiwassee area preclude its consideration as a Wilderness Area. However, as discovered by Lucas, people have different ideas as to what constitutes a wilderness area. Consequently, the


58 Ibid.
assumption can be made that to a visitor from Nashville, Tennessee, or Atlanta, Georgia, the Hiwassee area represents a wilderness experience. From this assumption and from interviews with the users of the Hiwassee, it seems evident that a quality experience may be obtained even on a Tennessee Class III Scenic River Area.\textsuperscript{59} Too much use, of course, can degrade the quality of such an experience.

The fact must also be weighed that the "Pastoral and Partially Developed" river areas defined in the National Wild and Scenic Rivers Act far outnumber the "Natural and Wild" river areas. These partially developed river areas are usually accessible and provide visitors with an easily obtained experience with its rushing whitewater. These areas also serve as training areas where the novice floater may more safely engage the whitewater of a free-flowing river.

On the basis of these two comments, it could be suggested that the Hiwassee River Area should be developed and managed as a heavy use area, at least in relationship to the use of other State Class III Scenic Rivers. This should not be construed to mean unlimited use. Controlled use limiting the number of users on the Hiwassee Scenic Rivers Area will undoubtedly become necessary as use increases. Thus, it will be extremely important to determine by research studies of

\textsuperscript{59} Personal observations of the author, summer, 1970.
each individual scenic rivers area the point at which intensity of use is balanced with the desired environmental protection and quality of experience.

The Apalachian Powerhouse must be considered in planning the development or estimating the future use of the Hiwassee River. The powerhouse does not obstruct the flow of the Hiwassee but is located on the stream bank of the river. Water for the operation of the powerhouse is tunneled from the Apalachia Lake through two gigantic pipes originating on the North Carolina line. The controlled streamflow from the powerhouse not only provides adequate streamflow for river-oriented recreation use throughout the summer high use season, but its operation is highly predictable. Table III depicts the expected number of operating days of the powerhouse for each month.

During the last two years, special water releases have been provided by the Tennessee Valley Authority to assure an adequate streamflow for the Annual Hiwassee Canoe Race. Such cooperation between TVA and the people of the region is evidence not only of the recognition of the significant benefits of free-flowing streams but also of an environmental heritage.

Proposed Uses

Fishing and Floating

Fishing and floating should be two of the primary uses of the river. The closure of the soon-to-be-completed Tellico
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<th>Month</th>
<th>Number of Days On</th>
<th>Number of Days Off</th>
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<td>March</td>
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<td>19</td>
</tr>
<tr>
<td>April</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>May</td>
<td>5</td>
<td>19</td>
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<tr>
<td>June</td>
<td>8</td>
<td>21</td>
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<tr>
<td>July</td>
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<td>22</td>
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<tr>
<td>August</td>
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<td>22</td>
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<tr>
<td>September</td>
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<td>21</td>
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<tr>
<td>October</td>
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<td>22</td>
</tr>
<tr>
<td>November</td>
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<td>22</td>
</tr>
<tr>
<td>December</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>245</td>
</tr>
</tbody>
</table>

Source: The data for this table was compiled by the Tennessee Valley Authority Recreation Branch and is based on the period from 1964-1969. The table was prepared by Harry Lewis of TVA.
Dam at the mouth of the Little Tennessee will leave the Hiwassee as one of the few remaining trout streams of its size in the southeast. Floating, however, could easily become the major use of the Hiwassee. The section of river from Reliance to the 411 bridge provides an optimum stretch of water for the novice canoeist. The screening effect of the wooded islands should allow for more floaters on each side of the river without significantly decreasing user satisfaction.

Fishing and floating will not conflict. The operation of the Apalachia Powerhouse generators produces too much water depth and flow for the wading trout fisherman and, subsequently, when not generating, too little depth and flow for the floater.

Camping

No camping should be allowed on government lands south of the primary road leading from the Reliance bridge to the Apalachia Powerhouse. Camping within the scenic easement on private lands should likewise be prohibited. From Reliance south to the 411 bridge, camping should be allowed only in designated areas.

Camping in unauthorized areas has resulted in much damage to the stream banks of the Hiwassee. The majority of this damage has occurred on U. S. Forest Service lands, and
the laxity of enforcement of Forest Service regulations on these areas is evident. Streamside camping along the upper section of the Hiwassee from Reliance to the powerhouse can only lower the quality of experience of the sightseer or canoeist. In addition, there are numerous campsites in the immediate area which are located directly adjacent to clear, fast-flowing mountain streams, although smaller in width than the Hiwassee.

Other Minor Uses

Swimming should not be planned as a major use of the Hiwassee. The average temperature of the Hiwassee River from June through August is only 64° F. This temperature will severely limit the number of swimmers using the Hiwassee.

More picnic areas such as the Hiwassee Picnic Area should be planned if demand warrants. This area affords an excellent view of the river while being almost entirely concealed. Picnicking could be a major use in the Hiwassee area. It is enjoyed by elderly visitors, who make up a significant proportion of recreation users.

Sightseers constantly stop along the roads paralleling the Hiwassee which offer numerous views of long stretches of rapids and shoals. Vista pull-off areas are drastically

60 Lower Hiwassee Valley, Summary of Resources (Tennessee Valley Authority: Knoxville, Tenn., Nov., 1963), Table 8.
needed to avoid congestion and possible accidents along the narrow, crooked roads paralleling the river.

Proposed uses are based on observations and interviews with Hiwassee visitors. Fifty-six parties were interviewed in regard to use activities on the Hiwassee. Twenty-seven were fishing, 14 camping, eight floating, three picnicking, and four engaged in other activities. "Other" activities included: in-transit camping; bike riding; sightseeing; and swimming. Many visitors participated in more than one activity, but the above data was based on the user's basic reason for visiting the area.

Proposed Developments

Site locations for the launching of rafts and canoes on the Hiwassee were determined primarily from the data in Table IV and personal observations of floaters entering and leaving the river. Specific developmental proposals are listed in the Appendix.

Launching Sites

Launching sites for scenic rivers should be planned according to each river's suitability for different type boats. Parking lots serving boat launching areas should be similarly planned. The shallowness of the Hiwassee River

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61 Personal observations and interviews by the author, summer, 1970.
### TABLE IV

**FREQUENCY OF LAUNCHING SITE USE ON THE HIWASSEE AREA**

<table>
<thead>
<tr>
<th>Launching Site</th>
<th>No. times previously floated</th>
<th>Total Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2-5</td>
</tr>
<tr>
<td>Powerhouse--Reliance</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Powerhouse--411</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Powerhouse--Quinn Springs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Reliance--411</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Reliance--Quinn Springs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quinn Springs--411</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>411--Downstream</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: This table is based upon responses from floaters of the Hiwassee River during Aug., 1970.
from the powerhouse to the 411 bridge renders it suitable for floating only by canoe, raft, or kayak. These boats are usually transported on top of a vehicle and are rarely towed with a trailer. Thus, parking lots designed exclusively for boat trailers (as at the Towee Boat Launch Area) result in wasted space.

Launching areas where terrain and vegetation permit should be screened from the river to increase satisfaction of floaters passing by. Ideally, launching sites should be located on navigable tributaries of scenic rivers streams. This would preserve the natural characteristics of main streams. Launching sites should also be appropriately spaced along a river to provide float trips of varying lengths.

Parking Lots

These developments, regardless of the area they serve, should be located to provide a minimum of visitor satisfaction loss. Terrain permitting, they should be screened from view of the use area and located within convenient walking distance.

Vistas and Picnic Areas

These areas should provide a view of the river. Ingenuity will be required to afford users of these areas with a picturesque view while simultaneously being screened from the view of floaters and fishermen.
Proposed Administrative Placement

The Hiwassee River area should be administered jointly by the Department of Conservation, Tennessee Valley Authority, and the U. S. Forest Service under a uniform set of regulations. The joint administration concept could be accomplished in the form of an inter-agency compact signed by the Commissioner of the Department of Conservation, the Regional or Forest Supervisor of the U. S. Forest Service, and the Chairman of the Board of TVA. Such a compact would commit all members to the preservation of the scenic rivers area as specified within a formulated set of regulations. Administering local personnel from all agencies should have the power to enforce these regulations in the form of a citation or any other means deemed desirable.

The cost of the maintenance of the area should be jointly shared by the Forest Service and the Department of Conservation. The Tennessee State Game and Fish Commission would ideally continue to enforce the fishing regulations in accordance with the laws of the State.

Applicability of LWCF Act to Scenic Rivers

The U. S. Forest Service and Tennessee Valley Authority are the only two agencies involved in the Hiwassee area with the authority to levy a fee for recreational use under the
Land and Water Conservation Fund Act (LWCF). The Forest Service presently administers the Quinn Springs Recreation Area under the LWCF program. Although states cannot administer their recreation areas under the LWCF program, they may under Section 5 (e) of the Act obtain financial assistance from the LWCF fund for development and planning. They may also obtain LWCF funds for their developments on lands leased from federal agencies, providing the lease is for at least 25 years.

An additional, separate charge system by the State and a U. S. agency at this time would result in utter chaos to the user. A special use fee is already assessed by the State Game and Fish Commission to trout fishermen of the Hiwassee River. It is, therefore, suggested that no additional fee areas be designated at this time. However, a fee system may be desired in the future to control use and provide needed revenues.

Conclusions

Scenic rivers legislation has undoubtedly provided the starting point toward the saving of some of the more scenic, free-flowing rivers from extinction. It is possible

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63 Ibid.
that without such legislation, the time would eventually have come when every potential dam site would have been utilized.

An intensive and unbiased study of priorities and a broad assessment of state, national, and regional environmental factors should be made prior to damming and altering permanently a limited resource such as a free-flowing stream. There is definite evidence that such priorities and assessments have been deliberately neglected in the past.64 Multiple purpose dams serving the needs of reclamation, flood control, the generation of power, recreation, and other public purposes may continue to be needed on some streams; but to dam all of the remaining, fast, pure, free-flowing, untamed rivers is both an inexcusable and felonious act against society.

Involved landowners, government agencies, and other involved parties, regardless of the extent to which they are affected, must be brought to realize that they play a key role in the preservation of a rapidly vanishing resource. Sacrifices must be made by these groups to insure the preservation of this resource.

There should be state and federal legislation which would force each agency having responsibilities or involved with streams into a policy position. This would tend to insure that stream preservation has high priority consideration in

64 Carter, loc. cit.
natural resource allocation and development. In the development and management of a given scenic river, all involved agencies should enter into written agreements which would insure the efficient and optimum development of that river. In the case of the Hiwassee River, the State of Tennessee and TVA should enter into a contract which would insure adequate stream flow for floating on a given schedule under normal conditions. A similar agreement between the State and the U. S. Forest Service should insure planned and optimum development of the Hiwassee area.

Allowable use intensity on scenic streams should vary according to the desired user satisfaction, physical developments to accommodate desired use, and the proximity and abundance of similar free-flowing streams. Management decisions must be made primarily in regard to preserving the aesthetical and physical qualities of a scenic river area, rather than in regard to pressures for increased use. Easements and fee titles should constitute the major means of land use control along a scenic river. Zoning is entirely too vulnerable to local pressures to insure the environmental protection needed by scenic rivers.

It is imperative and timely for public and private agencies involved in the establishment and development of scenic rivers to enter an era of sincere cooperation to guarantee existence of free-flowing streams for present and
future generations. If self esteem and identity of these organizations must be sacrificed to accomplish this, so be it. The sacrifice will be justified. A coordinated effort by all involved parties is the key to assuring a successful scenic river program.

The desires of the people for the preservation of free-flowing streams is apparent. It is time for legislators to act by appropriating funds for scenic river programs. The decision of whether to allow the extinction of a segment of our national heritage cannot be based on dollars and cents in a country of our wealth.
CHAPTER VI

SUMMARY

Scenic rivers legislation is drastically needed to preserve some of the more aesthetical, free-flowing streams of this country from various engineering projects and destructive uses. They could otherwise become extinct from the American landscape. In an effort to preserve these streams, many states and the federal government have drafted or enacted scenic rivers or similar legislation. However, there has been little implementation of such legislation.

It was determined that a case study of the implementation of plans for one of Tennessee's scenic rivers, the Hiwassee, could benefit interested state and/or federal agencies. The National Wild and Scenic River Act and the Tennessee Scenic Rivers Act were found to be very similar in content, thus emphasizing the possible likeness of Tennessee problems to federal problems.

Problems encountered during the implementation of plans for the Hiwassee area included: attitudes of affected landowners, political pressures, legislative adaptability, multiple governmental involvement, and premature publicity. The State of Tennessee selected to control land uses along the Hiwassee through easements and fee titles rather than
zoning. It was felt that zoning powers which were county controlled would be too susceptible to local pressures for the Hiwassee project. The State felt that easements, 50-75 feet in width, along the Hiwassee would provide land control as specified within the Tennessee Scenic Rivers Act.

Developments along the Hiwassee area were planned, taking into account stream bank topography, ownership patterns of lands adjacent to the stream, and historical and scientific features. It was felt that developments and their locations should be planned with regard to the quality of recreation experience desired on a scenic river area.

Fishing, floating, and camping were the primary uses of the Hiwassee; but camping, especially in undesignated areas, has done much to reduce the user satisfaction of the Hiwassee. Subsequently, camping was recommended only at designated areas on the Hiwassee.

Existing regulations of governmental units involved in the implementation of a scenic rivers management program contain enough flexibility to permit cooperation toward such implementation. Governmental units involved on the Hiwassee area were: Bureau of Outdoor Recreation, Tennessee Department of Conservation, Tennessee Valley Authority, and the U. S. Forest Service.
Every scenic stream is unique and should be managed according to its physical assets and intended uses. Intensive use and user satisfaction studies should be conducted on scenic streams, preferably prior to the development of a stream. This will aid planners and administrators in determining the type and degree of developments for individual areas. It will also provide valuable use intensity versus user satisfaction information.

State residents and, especially, landowners directly affected by scenic rivers legislation should be initially and continually informed of the purpose of scenic rivers legislation and their role in preserving a vanishing resource. As a result of this information, they should be much more cooperative and receptive in the planning of a scenic river area. National publicity of specific scenic river areas should be avoided prior to the administration of such an area to avoid overuse before adequate facilities and management are provided.

Scenic rivers legislation should contain enough flexibility to allow each administering agency to deal effectively with the unique characteristics of individual rivers. Unselfish cooperation among governmental units is essential for the success of scenic river programs. Appropriation clauses in scenic rivers legislation are essential to insure that planning, development, and area management will proceed as rapidly
as possible. For this endeavor of saving free-flowing, scenic rivers is a vital cause that cannot be delayed except at the expense of our environment and that of generations to come.
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BIBLIOGRAPHY


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APPENDIX
State Development Proposals For The Hiwassee Scenic River (see O on FIGURE 2.)

Point 1. Parking lot (15 units) and boat launching ramp already have been established by U. S. Forest Service. This parking area will serve as a starting point for fishermen, hikers, boaters, and others. Development plans call for the addition of (20) more parking units in addition to the already existing (15) units.

Point 2. Parking lot—will be developed to accommodate (10) vehicles.

Point 3. Major parking area for the upstream section of the river—will be developed to accommodate (30) vehicles. A restroom facility with running water and small picnic area is planned.

Point 4. Parking lot—will be developed to accommodate (10) vehicles.

Point 5. Parking lot—will be developed to accommodate (20) vehicles. A primitive toilet facility will also be provided, along with minimum picnic facilities.

Point 6. A (5) vehicle capacity overlook is planned, providing a breathtaking view of the Hiwassee River, both upstream and down.

Point 7. Public use area—will be developed to accommodate (30) vehicles (a combination of both car and trailer units). A boat launching ramp, picnic area and restroom facilities are planned, along with needed landscaping.

Point 8. Parking lot—will be developed to accommodate (10) vehicles.
FIGURE 2. (continued)

Point 9. Picnic and restroom facilities have already been provided by the U. S. Forest Service. Development plans call for possible restoration of some of the facilities and the addition of a parking area capable of handling (15) vehicles.

Point 10. Parking lot—will be developed to accommodate (25) vehicles.

Point 11. Parking lot—will be developed to accommodate (10) vehicles. Overflow parking in this high-use area can be handled by adequate parking facilities in the Quinn Springs Recreation Area.

Point 12. Parking lot—will be developed to accommodate (10) vehicles.

Point 13. Parking lot—will be developed to accommodate (10) vehicles.

Point 14. Major public use area—will be developed to accommodate (40) vehicles (a combination of both car and trailer units). A boat launching ramp and primitive restroom facility is planned, along with needed landscaping. Picnic facilities will not be provided, in order to discourage general highway use.*

Author's Proposals (see A on FIGURE 2.)

Point 1. The present USES parking lot located here should be redesigned to accommodate 40-60 vehicles. Parking spaces suitable for towed boat trailers should not exceed 25 percent of the total parking spaces, due to most canoes, kayaks, and rafts' being carried on vehicle tops. Toilet facilities should be installed at this location.

Point 2. A parking lot to accommodate 10-15 vehicles located north of the gravel road and west of Towee Branch should be built.

*Tennessee Department of Conservation, Nashville, Tenn., 1970. (Mimeographed.)
FIGURE 2. (continued)

Point 3. A parking lot to accommodate 20 vehicles. This area should include five to eight picnic units at this time. Such units should afford a view of the river and yet be inconspicuous to floaters.

Point 4. Vista overlook from scenic Hood Mountain. A parking lot to accommodate five to ten vehicles should be located west of the vista overlook.

Point 5. Picnic area and boat launching site. This area would serve as an egress point for users floating from the Towee Boat Launch and as a launching site for those floating to the 411 bridge. It will be necessary to purchase three acres of private land at this site. The site should accommodate parking for a minimum of 30 vehicles. Restrooms should be provided.

Point 6. Parking lot and picnic area. Additional parking should be planned here for fishermen.

Point 7. Vista and parking area for five cars.

Point 8. Parking lot to accommodate 10-15 cars.

Point 9. Parking lot to accommodate 10 vehicles.

Point 10. Parking lot with boat launching facilities. Due to its nearness to Highway 411, this area will be heavily used. It will be used as an egress point for upstream floaters and as an entrance point for fishermen and floaters going downstream. A minimum of five acres should be purchased at this point to assure adequate space for future use. Easements located on the north and south side of the river at this point should be 75-100 feet in width. This would be a public access easement extending from the 411 bridge to upstream government lands, thus allowing ample walking space for fishermen and hikers over this area.
FIGURE 2.
PROPOSED LOCATIONS FOR DEVELOPMENTS

LEGEND

- DEVELOPMENT AREA
- STATE PROPOSAL
- AUTHORS PROPOSAL
- ONE MILE INTERVAL MARKER
- RECREATION AREA

SCALE: 1 INCH = APPROX. 2100 FEET
VITA

Robert Preston Harrison was born January 28, 1941, in Knoxville, Tennessee. He was graduated from the University of Georgia in 1964 with a Bachelor of Science degree in Forestry. He was employed by the U. S. Forest Service from 1965 to 1969. In the fall of 1969, he entered The University of Tennessee Graduate School and, upon completing requirements for a Master of Science degree in Forestry with a major interest in recreation, plans to work with the Bureau of Outdoor Recreation in Atlanta, Georgia.

He is married to the former Shirley Ann Butrum of Texarkana, Arkansas.