

I. INTRODUCTION

The Wild and Scenic Rivers Act provides for certain rivers to be studied for possible inclusion in the National Wild and Scenic Rivers System. The Chattooga River that flows in North Carolina, Georgia and South Carolina is one of 27 rivers designated for study by the Act.

The study began in 1969 with the assignment of a Forest Service field team to collect and analyze data on the river and its environment.

A Task Force was appointed to review the work of the field team and drafts of the study report. The Task Force consisted of representatives of Governor McNair of South Carolina, Governor Scott of North Carolina, and Governor Maddox of Georgia; Forest Supervisors of Chattahoochee, Sumter and Nantahala National Forests; and the Bureau of Outdoor Recreation. The assistance of the Resources Advisory Board, the Federal Power Commission, the U. S. Geological Survey, and the U. S. Army Corps of Engineers is acknowledged. Other federal and state agencies, private individuals and conservation groups contributed greatly to the study effort.

Two public meetings provided an opportunity for many interested citizens to express their opinions concerning the future of the Chattooga River.

II. OBJECTIVE

The objective of the study is to determine if the Chattooga River meets the requirements for inclusion in the National Wild and Scenic River System. Major guidelines used in evaluating the river are:

- the river is in a "free-flowing" condition, without impoundment or diversion.
- the river is long enough to provide a "meaningful experience", generally 25 miles or longer.
- the river contains "sufficient volume" of water to allow full enjoyment of water-related recreation activities.
- the river and its environment be "outstandingly remarkable"
- the river be "generally inaccessible", except by trail, with "essentially primitive" shorelines.
- the waters of the river be "unpolluted", safe for human contact and capable of supporting aquatic life.

The Wild and Scenic Rivers Act specifies that the river proposal and report show--

1. The area included within the proposal;
2. The characteristics which make the river a worthy addition to the system;
3. The current status of landownership and use;
4. The reasonably foreseeable potential uses of land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national system;
5. The Federal agency proposed to administer the area;
6. The extent to which administration, including costs, would be shared by state and local agencies; and
7. The estimated cost to the United States of acquiring necessary lands and interests in lands and of administering the area as a component of the system.

1. The first step in the process of determining the potential for water quality degradation is to identify the areas that are most susceptible to degradation. This is done by comparing the current water quality conditions with the natural background conditions. Areas where the current conditions are significantly different from the background conditions are considered to be potential degradation areas.

2. The second step is to determine the causes of the degradation. This is done by identifying the sources of the pollutants and the pathways by which they are transported to the water body. This information is used to develop a management plan to address the degradation.

3. The third step is to develop a management plan to address the degradation. This plan should include measures to reduce the input of pollutants, to improve the water quality, and to monitor the water quality to ensure that the degradation is not recurring.

4. The fourth step is to implement the management plan. This involves working with the relevant agencies and stakeholders to develop and implement the plan. This may include measures such as installing treatment plants, improving land use practices, and increasing public awareness.

5. The fifth step is to monitor the water quality to ensure that the degradation is not recurring. This is done by regularly sampling the water and testing for the pollutants of concern. If the water quality is found to be deteriorating, the management plan should be revised and implemented.

6. The sixth step is to evaluate the effectiveness of the management plan. This is done by comparing the current water quality conditions with the background conditions. If the current conditions are significantly different from the background conditions, the management plan is considered to be effective.

7. The seventh step is to report the results of the water quality assessment. This report should include information on the current water quality conditions, the causes of the degradation, the management plan, and the results of the monitoring and evaluation.

8. The eighth step is to use the results of the water quality assessment to inform decision-making. This information is used by the relevant agencies and stakeholders to develop and implement policies and programs to improve water quality and protect the environment.

9. The ninth step is to continue to monitor the water quality and evaluate the effectiveness of the management plan. This is an ongoing process that should be repeated regularly to ensure that the water quality remains good and the degradation is not recurring.

10. The tenth step is to share the results of the water quality assessment with the public. This is done through public meetings, reports, and other communication channels. This helps to increase public awareness and support for water quality protection.

11. The eleventh step is to develop a long-term strategy for water quality protection. This strategy should be based on the results of the water quality assessment and should include measures to prevent degradation and to improve water quality.

12. The twelfth step is to implement the long-term strategy. This involves working with the relevant agencies and stakeholders to develop and implement the strategy. This may include measures such as installing treatment plants, improving land use practices, and increasing public awareness.

13. The thirteenth step is to monitor the water quality to ensure that the degradation is not recurring. This is done by regularly sampling the water and testing for the pollutants of concern. If the water quality is found to be deteriorating, the long-term strategy should be revised and implemented.

14. The fourteenth step is to evaluate the effectiveness of the long-term strategy. This is done by comparing the current water quality conditions with the background conditions. If the current conditions are significantly different from the background conditions, the long-term strategy is considered to be effective.

15. The fifteenth step is to report the results of the long-term strategy. This report should include information on the current water quality conditions, the causes of the degradation, the long-term strategy, and the results of the monitoring and evaluation.

16. The sixteenth step is to use the results of the long-term strategy to inform decision-making. This information is used by the relevant agencies and stakeholders to develop and implement policies and programs to improve water quality and protect the environment.

17. The seventeenth step is to continue to monitor the water quality and evaluate the effectiveness of the long-term strategy. This is an ongoing process that should be repeated regularly to ensure that the water quality remains good and the degradation is not recurring.

III THE RIVER

The Chattooga River rises on the crest of the Blue Ridge in the mountains of North Carolina between the massive eastern flank of Whitesides Mountain and the resort village of Cashiers. It flows southward through primitive mountain country for 10 miles in North Carolina, and then continues for 40 miles as the state boundary between Georgia and South Carolina. The West fork of the Chattooga River flows for 7 miles in Georgia before entering the main river. It drops through the mountainous Blue Ridge province toward the hilly Piedmont, and ends in the quiet, still waters of Tugaloo Reservoir.

Elevations range from over 4800 feet along the northern watershed boundary to less than 900 feet at the lower end of the river. In a total distance of 50 miles the waters of the Chattooga River descend 2469 feet from an elevation of 3360 feet near Cashiers, North Carolina, to 891 feet at Tugaloo Reservoir--an average descent of 49.3 feet per mile. The Chattooga drains an area of 278 square miles.

This is one of the longest and largest free-flowing mountain streams in the Southeast remaining in a relatively undeveloped condition. The river with its immediate environment possesses outstanding scenic, recreational, geological, biological, historical, and related values and assets. For most of its length it is hemmed in by forest; without fields, farms, homes or other signs of civilization. It is one of the few mountain rivers in the four-state area of North Carolina, South Carolina, Georgia and Tennessee without substantial commercial, agricultural or residential development along its shores. Although located near the great population concentrations of the Eastern United States, a visitor to this river is instantly transported into the midst of an unspoiled whitewater river environment. The Chattooga is accessible by auto at only five places, and these roadpoints break the river into approximately equal sections.

The beauty of the rapids and scenery of the Chattooga drainage is unsurpassed in the Southeastern United States. The river begins as a sparkling mountain rivulet cascading down the lush green, heavily forested sides of the Blue Ridge and continues between high ridges through the deeply entrenched Chattooga River Gorge. The first 5 1/2 miles of the Chattooga include several waterfalls and some of the most spectacular long range vistas on the whole river. The river here is small and fast, dropping through densely forested slopes, with an occasional glimpse of farms and summer homes.

The next 16 miles are through generally inaccessible country. The river follows a narrow, tortuous route over numerous rapids, cascading around boulders and through self-cut rock flumes and intermittent quiet, deep pools. Most of this section is narrowly contained in a deep, fast descending gorge between high ridges. In the whole 16 miles, only two narrow Forest Service roads break out of dense forest to span the river.

The river drops out of the Chattooga Gorge and for the next six miles flows quietly by fields, farms and homes. The West Fork joins the River here, and these two streams provide easy canoeing water through an area of pastoral development.

The next 22 miles are the most isolated and rugged on the river. This spectacular reach includes many beautiful rapids and broad stretches winding around islands, and narrow swift sections running over cascades and ledges. It affords the canoeist an unending variety of whitewater rapids, and a rare three-day run. One dirt road at Earls Ford and another dirt road at Woodall Shoals lead to the river. Six and one-half miles above Tugaloo Reservoir, U. S. Highway 76 crosses the river at approximately right angles, giving the only prominent evidence of man's presence on the river.

The West Fork, joins the Chattooga near State Highway 28. The upper 3.3 miles of the West Fork is without access, including trails. The lower four miles is a smooth, slow stretch of water flowing through an area of pastoral development and paralleling roads.

A more detailed description of the river sections can be found in Chapter IX-B.

IV GENERAL INFORMATION

A. Study Reach

The Wild and Scenic River Act directs that the entire Chattooga River be studied for potential addition to the Wild and Scenic Rivers System. As directed, the entire river was studied from river mile 00 (confluence of Tallulah and Chattooga Rivers) in Lake Tugaloo, to river mile 54 in North Carolina where the river becomes a trickle. In addition to the main stream, all seven miles of the West Fork plus the lower reaches of Overflow, Holcomb and Big Creeks at the head of the West Fork were studied. The East Fork of the river in South Carolina, and Warwoman and Stekoa Creeks in Georgia were investigated but were found not to meet established criteria.

The study of adjoining lands was most intensive within a corridor one-fourth to one-half mile wide. Landownership and development information was gathered for one mile on each side of the streams studied. Extensive water quality and other information was studied over the rest of the Chattooga Watershed. The study includes a general review of the economy, accessibility, population trends, and recreation opportunities of the counties and region around the Chattooga River.

The U.S. Geological Survey shows the official name of the river to be the Chattooga River, a tributary of the Savannah River. One difference in name usage was found in the study. The East Fork in South Carolina is sometimes referred to as the South Fork and, in this reference, the Chattooga River is then referred to as the North Fork. In this report, all streams are referred to by their official USGS names.

B. Zone of Influence

Although the Chattooga River flows in only four counties-- Jackson and Macon in North Carolina, Rabun in Georgia and Oconee in South Carolina, its significance has an immediate relation to a larger tri-State region. No one area can be designated as the exact zone of influence around the river. National Wild and Scenic River status will attract canoeists, whitewater enthusiasts, and wild river recreationists from all over the Southeast and the Nation to the Chattooga River. Use of the river will have an immediate effect on the economy and recreation use and demand patterns over an area much wider than just the four counties through which the river flows.

An appropriate regional zone of influence which affects the study reach and which could be affected by various uses of the study reach is the 27-county area delineated by the three affected States as the Southern Highlands.

This is an area of the Southern Appalachians which is becoming increasingly popular as a destination vacation region. It contains a high number of vacation attractions. The Chattooga River is a central feature of this region. The Southern Highlands region is comprised of the following counties:

Georgia

Rabun, Towns, Union, Fannin, Gilmer, Pickens
Habersham, White, Lumpkin, Dawson, Stephens

South Carolina

Oconee, Pickens, Anderson, Greenville

North Carolina

Cherokee, Clay, Macon, Jackson, Transylvania,
Henderson, Polk, Graham, Swain, Haywood,
Buncombe, Rutherford

The natural resources of this region are being developed for outdoor recreation at an accelerating rate by public agencies and private interests. Appropriate planning agencies of the three states, in cooperation with Federal and other interests, have established a Southern Highlands Council to study the region and recommend priorities for an overall program of environmental conservation and resource development. A program of work leading to a plan of coordinated development is in progress.

The population growth of this region from 1960-1970 was 7.0% which compares to 11.9% for the Southeastern United States and 9.2% for the 3 state area. The Southeastern United States had the largest population increase in the nation. Growth in the vacationing population, both seasonal residential and transient visitors, has in the same period increased at a substantially greater rate, more reflective of the national growth rates. Growth of population throughout the 27 county region has varied considerably from county to county, with some counties experiencing a loss of population.

Between 1960 and 1970 the largest rate of increase occurred in Pickens County, South Carolina, with a 24.1% increase. Although Graham County, North Carolina, experienced a 12.4% loss of population during the same period.

The population of the region is projected to increase at a slightly slower rate than either the rate for the three States or for the Nation.

Southern Highlands Regional Populations

(1,000's)

	<u>1950*</u>	<u>1960*</u>	<u>1970*</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>
Total	783	847	906	1,059	1,228	1,420
Georgia	103	104	108	130	150	174
North Carolina	342	348	361	435	506	586
South Carolina	337	394	437	494	572	660

*Source: U. S. Department of Commerce, Bureau of the Census.

The region, with the exception of several larger cities, is dependent on farming and forestry, with limited manufacturing industry. Of a total population of about 850,000 in 1963, the annual average manufacturing employment was 124,000. Seventy-seven percent of this was attributed to six counties, which had more than 67% of the region's population. Even though these counties are larger in area than the regional average, they account for barely one-third of the total land area.

The extent of land in farms in the area is gradually declining. Of the 10.7 thousand square miles of land within the region, an estimated 5.0 thousand, or about 40%, were in farms in 1954. By 1964 this figure had dropped to 3.2 thousand, or about 30%. Decline in farm acreage parallels the decline or slow growth rate of population when viewed on a county basis. A parallel can also be seen between relative decline of aggregate county income and declines in population and farm acreage. 1/

The mountain ranges that have slowed the past development of the Highlands Region are now recognized as nationally significant attractions. Protection of the outstanding features of the region can provide a stable base for the expanding recreation and tourist industries of these counties.

C. Accessibility

A well designed system of interstate highways provides excellent access from all parts of the Eastern United States to the vicinity of the Chattooga River. Interstate Highway 85 connecting Atlanta, Georgia with Greenville, South Carolina, Charlotte, North Carolina, and points to the northeast crosses Hartwell Reservoir 25 miles south of the river. Interstate Highway 26 from the coast of South Carolina joins I-85 just east of Greenville carrying traffic towards Asheville, North Carolina and points to

1/ From county and city data book - 1962 and 1967 editions, U. S. Department of Commerce, Bureau of Census.

the northwest. U. S. Highway 76 crosses the Chattooga, U.S. Highway 64 passes over the northern watershed boundary, and U.S. 441-23 passes to the west of the river.

Rail transportation is available in the small towns on the southern edge of the study area, and commercial airline facilities serve the metropolitan centers listed above.

The river itself is immediately accessible now by two paved highways, U. S. 76 and Georgia-South Carolina 28, which cross it. It may also be reached by three graded Forest Service roads which cross it, and several 4-wheel drive roads which lead to the river. Several foot trails also lead to the river and for short distances parallel it. The West Fork is crossed by one paved county road and a graded Forest Service road. Direct access to the river and West Fork is well distributed except for the extreme ends. The upper end of both the Chattooga and West Fork may be reached only by walking some distance and the lower end by walking steep mountainsides or crossing over two miles of Lake Tugaloo.

D. Climate 2/

Topography divides the river basin into two climate belts or thermal zones. In the northern part, the climate is affected by the higher elevations--winters are cold and summers are mild. Based on a 63 year record, the average temperature is 39° F for January and 70° F for July. Rainfall, which averages almost 80 inches annually, is well distributed throughout the year.

The climate of the southern part of the river is the humid continental type. Summers are relatively hot and winters cool. Rainfall averages around 59 inches at Long Creek and dry periods are common.

In summer, climatic conditions in the mild and pleasantly cool Chattooga River area differ sharply from the adjacent hot and humid Piedmont. The study area provides the closest climatic relief for the increasingly dense industrial populations of the Piedmont. Midsummer afternoon temperatures average less than 85° F. Crisp cool nights average about 60° F, but are seldom too cold for light camping equipment.

Weather conditions are suitable from May to September for extended float trips, even when frequent upsets and dunkings occur. Pleasant daytime temperatures and cool nights make this five month season enjoyable for float trips, extended hikes, fishing and overnight camping along the river. Light rainshowers occur frequently throughout the summer months.

2/ Source of climate data: U. S. Department of Commerce Weather Bureau at Clemson University, Clemson, S. C.

Daytime temperatures from March through April and from October through November are usually suitable for fishing, hiking and hunting, but cold water temperatures and cold nights limit floating activities and overnight camping during these months.

December, January and February are generally too cold for activities other than limited hiking and hunting since air temperatures frequently fall below freezing.

