

REVISED
MANAGEMENT PLAN
SOUTH FORK NEW RIVER AND
MAIN STEM NEW RIVER
NORTH CAROLINA

June 1975

Prepared by
North Carolina Department of
Natural and Economic Resources



State of North Carolina
Department of
Natural and Economic Resources
Raleigh 27611

JAMES E. HOLSHOUSER, JR.
GOVERNOR

JAMES E. HARRINGTON
SECRETARY
TELEPHONE
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October 13, 1975

Honorable Nathaniel Reed
Assistant Secretary for
Fish and Wildlife and Parks
U.S. Department of the Interior
Washington, D. C. 20240

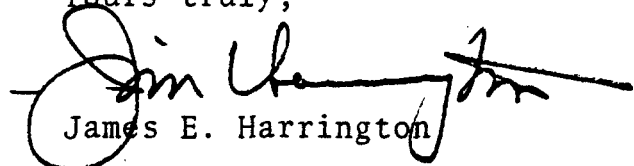
Dear Nat:

This will acknowledge your letter of October 3 to Governor Holshouser informing him that the Department of Interior will be preparing an environmental impact assessment statement for the portion of the New River in North Carolina that I have asked be designated a unit of the National Wild and Scenic Rivers System. We are most gratified by this decision as we fully anticipate that the study will clearly demonstrate the superlative values of the river and the wisdom of the decision we have asked the Department of Interior to make.

We will be most happy to assist the Bureau of Outdoor Recreation staff in its effort to put together this impact assessment statement. In information discussions of the matter with your Atlanta office, we have indicated our willingness to help with the study and I am happy to confirm these oral commitments in writing. Please suggest to Bob Baker that he contact Dr. Art Cooper of my staff to arrange appropriate staff contacts.

By this time I presume you have received my letter providing answers to the questions raised earlier by the Bureau of Outdoor Recreation in its preliminary review of our proposal. I trust that our answers provide the reassurance you need in order to move ahead with this important decision.

Yours truly,


James E. Harrington

JEH/mr1

cc Governor Holshouser
Art Cooper

OCT 20 1975

1. Uses or structures accessory to open space or conditional uses.
2. Circuses, carnivals and similar transient amusement enterprises.
3. Signs and billboards
4. Extraction of sand, gravel, and other materials.
5. Marinas, boat rentals, docks, piers, wharves.
6. Streets, bridges, utility lines, and pipelines
7. Storage yards for equipment, machinery, or materials
8. Kennels and stables

All Uses. No structure (temporary or permanent), fill (including fill for roads and levees) deposit, obstruction, storage of materials or equipment, or other use may be allowed as a conditional use which, acting alone or in combination with existing or future uses, unduly affects the capacity of the flood heights. In addition, all floodway conditional uses shall be subject to the standards contained in the following paragraphs:

Fill.

1. Any fill proposed to be deposited in the floodway must be shown to have some beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose, as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions of the proposed fill or other materials.
2. Such fill or other materials shall be protected against erosion by riprap, vegetation cover, or bulkheading.

Structures (temporary or permanent)

1. Structures shall not be designed for human habitation.
2. Structures shall have a low flood-damage potential
3. The structure or structures, if permitted, shall be constructed and placed on the building site so as to offer the minimum obstruction to the flow of flood waters.
 - (a) Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow, and
 - (b) So far as practicable, structures shall be placed approximately on the same flood-flow lines as those adjoining structures.
 - (c) Structures shall be firmly anchored to prevent flotation which may result in damage to other structures, restriction of bridge openings and other narrow sections of the stream or river; and

(d) Service facilities such as electrical and heating equipment shall be constructed at or above the regulatory flood-protection elevation for the particular area or flood-proofed.

Storage of materials and Equipment

1. The storage or processing of materials that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal, or plant life is prohibited.
2. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.

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Appendix I Chapter 404, 1975 Session Laws

Appendix II Proposed Ashe County Floodway District Ordinance

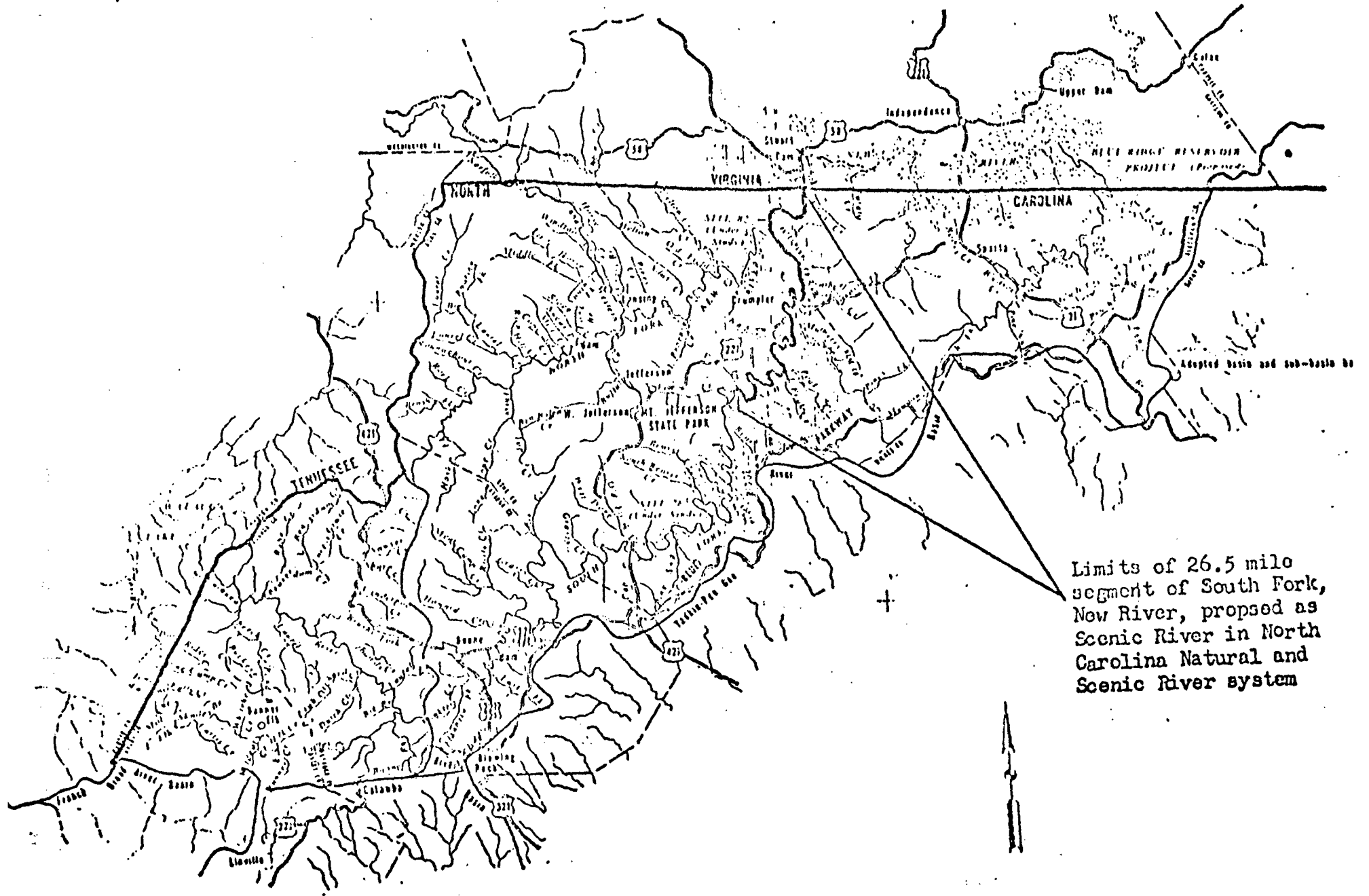
I. INTRODUCTION

The 4.5 mile main stem of the New River, Ashe and Alleghany Counties, North Carolina, was placed in the North Carolina Natural and Scenic Rivers System as a scenic river by act of the legislature on February 21, 1974. The South Fork of the New River was placed under study for inclusion in the State System by resolution of the legislature on April 12, 1974. The total mileage of both reaches is 89 miles (Figure 1).

The required study was completed in early January, 1975, and three public hearings regarding the findings were held in Alleghany and Ashe Counties in late January, 1975. As a result of these hearings, a final proposal was prepared that recommended inclusion of the original 4.5 mile segment of the main stem of the river and 22 miles of the South Fork immediately upstream from the main stem in the State Natural and Scenic Rivers System as a scenic river (Figures 1 and 2). This proposal was introduced in the General Assembly on April 22, 1975, was passed by both houses in May and ratified on May 26, 1975, as Chapter 404 of the 1975 Session Laws (Appendix 1).

The North Carolina Natural and Scenic Rivers Act and the act placing the New River in the State System designate the Secretary of Natural and Economic Resources as the state official responsible for management of the river and for development of a specific plan for such management. The Secretary has designated the Division of Parks and Recreation in his department as the lead agency to execute such management. The following text describes, in detail, how the Division of Parks and Recreation proposes to manage and protect this valuable natural resource for the benefit of citizens of North Carolina and the nation in this generation and those to come.

87°00'
36°45'+



Limits of 26.5 mile
segment of South Fork,
New River, proposed as
Scenic River in North
Carolina Natural and
Scenic River system

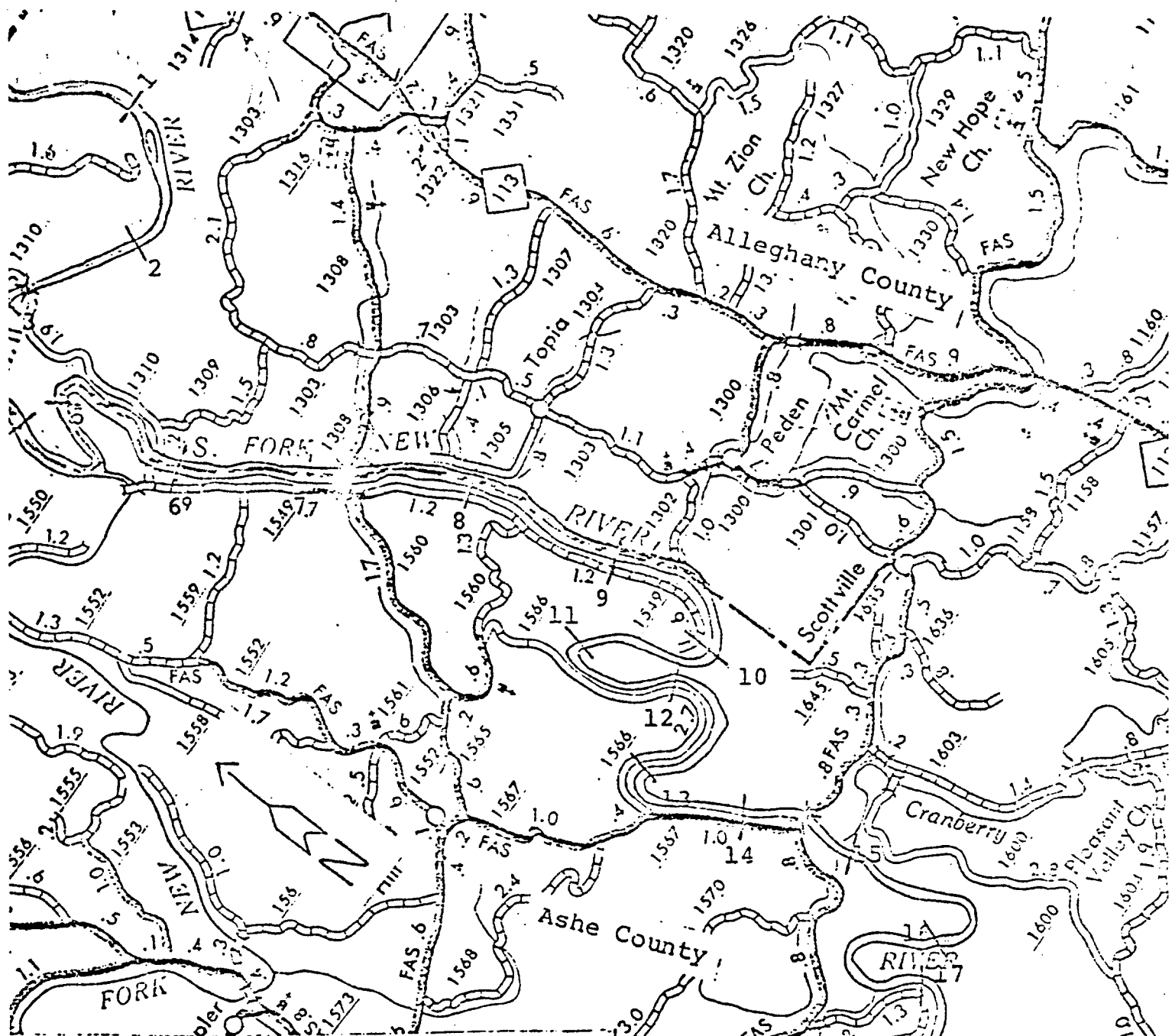
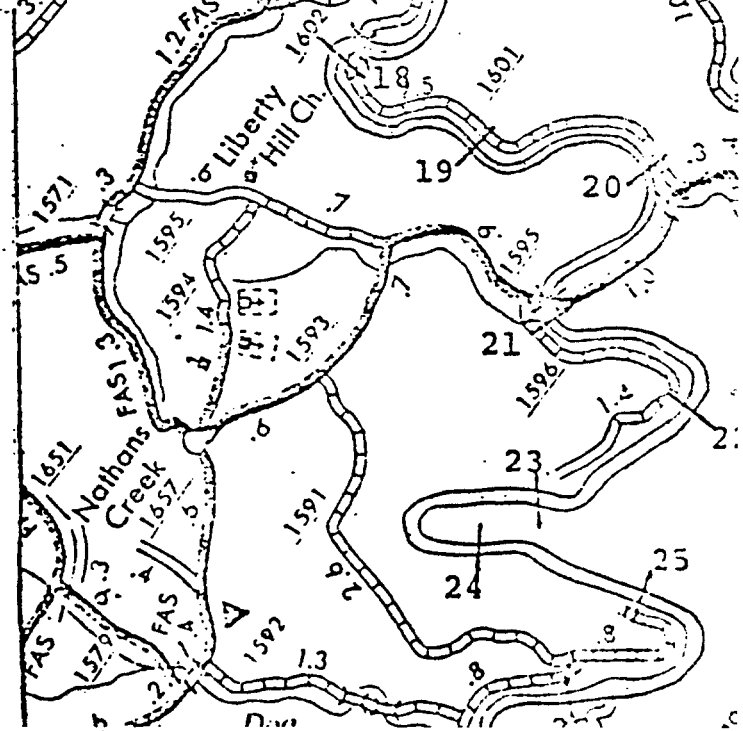


Figure 2.

South Fork New River Segment
 Proposed for Designation and
 Management as a Scenic River
 in the North Carolina Natural
 and Scenic Rivers System.



II. SUMMARY OF MANAGEMENT PLAN

This Management Plan calls for the designation and management as a State Scenic River that segment of the New River from Dog Creek downstream to the Virginia line (approximately 26.5 miles). The predominant land use in this segment consists of active pasture and cultivated lands. In addition, there is a wildlife management area in the vicinity of Cranberry Creek. There are five bridge crossings, numerous rapids and approximately ten outstanding rock outcrops, two of which constitute spectacular scenic attractions.

The recreation activity potential for the segment covered by this plan includes:

- two days of canoeing
- three days of backpacking
- approximately one day of bicycling
- one day of horseback riding
- sport fishery for smallmouth bass
- limited wood duck hunting

Recreation facility development proposed for this segment consists of:

- two primary activity areas at either end of the river segment (75-150 acres each)
- one secondary activity area (25 to 75 acres)
- one minor activity area (about 25 acres)

Total acreage for these activity areas thus ranges from 200 to 400 acres.

"The Peak" will be linked to the river by a trail utilizing an existing dirt track about halfway to the top, then following a small valley. Since no public facilities presently exist, the trail is expected to serve pleasure hikers coming from a primary activity area to be located near the Dog Creek mill site.

The whole corridor will be protected against such land uses or development as would be contrary to the natural/scenic river system criteria. Flood-prone areas and areas of particular natural beauty have the highest priority for preservation.

III. APPROACH TO DEVELOPMENT OF PLAN

As a result of a study of the New River and of the criteria of the North Carolina Natural and Scenic Rivers System, a method for evaluating rivers for inclusion into the system and a method for developing management guidelines was developed. From these guidelines and studies, it has been determined that a contiguous 26.5 mile segment of the South Fork and the main stem of the New River qualify for classification as a scenic river in the North Carolina Natural/Scenic Rivers System. They also qualify as a scenic river under the National Wild, Scenic and Recreational River Act.

The present Management Plan has been developed to apply to a 26.5 mile segment consisting of the South Fork New River from Dog Creek down to and including the main stem of the New River to the Virginia line. The management plan described herein was formulated after six months of staff study and four public hearings in the affected area. It reflects the desires of the political leadership of Ashe and Alleghany Counties and of the majority of citizens living on the affected segment of river. The enabling legislation includes several directives to the Secretary relating to development of the management plan. These are designed to reflect a desire to protect agriculture along the river and to provide for minimum interference with current life styles in the area. These are also reflected in the plan.

In developing the plan, staff of the Department of Natural and Economic Resources carried out a number of specific studies, including:

A. River Classification

The application of criteria descriptive of the river's basic physical characteristics including channel gradient, section type, channel pattern, flow and river bed material was carried out in order that the various reaches of the river can be classified according to a general system.

Based on natural geo-hydraulic characteristics, river segments can be divided into four major environmental types:

Zone 1 - Flat-gradient "Estuarine zone" (tidal and hydraulic gradient)

Zone 2 - Low-gradient "Pastoral zone" (less than 5 ft/mile slope)

Zone 3 - Intermediate-gradient "Floodway zone" (5 to 25 ft/mile)

Zone 4 - Steep-gradient "Boulder zone" (more than 25 ft/mile)

The results of applying these descriptive criteria to the subject segment of the New River are found in Section IV of this plan.

B. Application of Natural/Scenic River Criteria

An application of criteria (Section V) has been carried out in order to determine the appropriateness of various segments of the New River for inclusion in the North Carolina Natural and Scenic Rivers System. These criteria include boundaries, length, water quality, flow, access and environmental quality. These studies are summarized in Section V below.

C. Program Development

This task had two components: the development of a recreation program and the preparation of site specific criteria for development of facilities, including physical limitations for development based on soils, slopes, vegetation and other natural features related to existing cultural patterns (see Section VI).

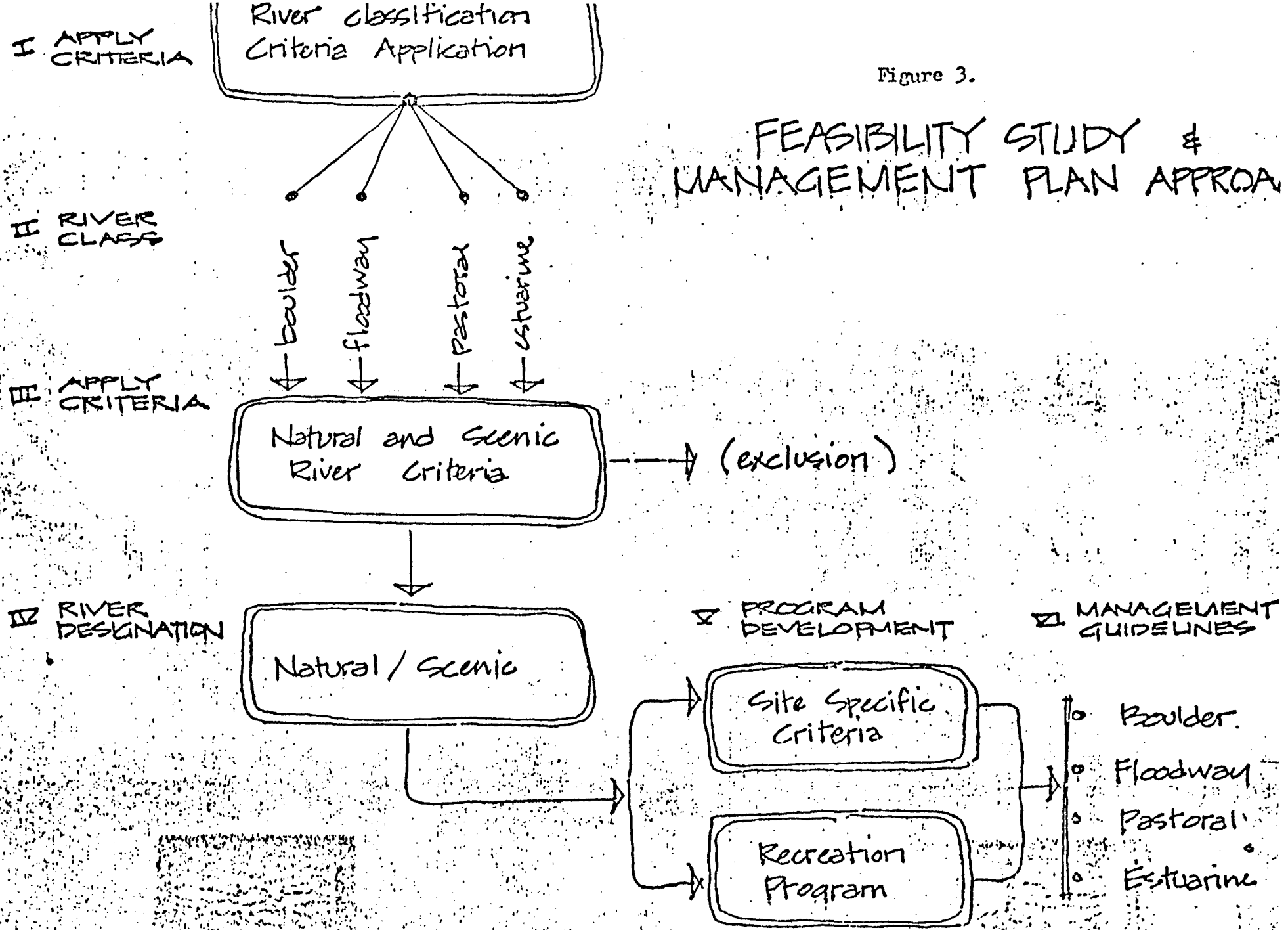
D. Management Plan

Site specific criteria and the recreation program are combined (Sections VII and VIII) to develop overall management guidelines for recreation use (Section VI) including a conceptual plan showing general site locations for recreation facilities and outlining measures for protection of the landscape in general.

The general process followed during the study is illustrated in Figure 3.

Figure 3.

FEASIBILITY STUDY & MANAGEMENT PLAN APPROACH



IV. RIVER CLASSIFICATION

The South Fork New River and the New River exhibit features characteristic of both the floodway and pastoral river zones (Figure 4). The stream turns back on itself in "U"-shaped bends and "S"-turns. The irregularity of the meanders becomes more pronounced as the river size increases downstream. However, portions of the project also exhibit the frequently flooded multi-channel streamway of the floodway zone. This zone contains sand and gravel spits, bars, islands and beaches at various points. These are produced by a constant rechanneling action brought about by current-diversions by uprooted trees, snags, stumps and log jams.

Various valley sections resemble either the pastoral or the floodway zones. The wide valley floodplain of the meanders is typical of the pastoral zone. The land has been cleared for agricultural uses, primarily grazing and cultivation of forage crops. In these sections, the waterway is readily visible as it meanders through the cleared land. However, where the valley narrows and slopes increase, the river meets the criteria of the floodway zone classification. Here the waterway often is screened by overhanging tree cover. As the river erodes one or both sides of the valley, large rock outcrops are exposed.

The channel gradient of the New River averages 7.5 ft/mile over the entire river section. However, sections in the pastoral zone have gradients of 5 ft/mile or less and gradients in floodway zones average just over 7.5 ft/mile. Such gradients are suitable for amateur canoe use. As is to be expected, the bed material of the river varies from gravel to silt depending on current speed. The stream banks in the pastoral zones are generally low and nearly verticle, and due to erosion by the river, are the source of sand and silt. The coarser grade material is usually added by steeper gradient tributaries

TYPICAL STREAM PATTERN				
TYPICAL VALLEY SECTION				
CHANNEL GRADIENT	+25' / M	-25' / M + 5' / M	-5' / M	- +
CHANNEL TYPE	Fixed	Braided	Sinuuous	Branch
REDOMINANT BED MATERIAL	Boulder to Cobbles	Gravel to Sand	Sand to Silt	Silt to Mu

"STREAMWAY" DEFINITION: The Streamway is that stream-dependent corridor of single or multiple, wet or dry channel or channels within which the usual seasonal or stormwater runoff peaks are contained and within which environment the flora, fauna, soil, and topography is dependent on or influenced by the fluctuating river currents. The Streamway boundaries are thus iso-gradient lines or fringes more or less parallel to the river course, and which are wetted by high water currents having essentially the direction and velocity of the river itself. Under this definition, it is possible to divorce the floodplain overflow fringe from the streamway proper in the Pastoral Zone II.

NEO-HYDRAULIC RIVER ZONES: The action and natural function of rivers varies considerably with the valley-channel gradient and resulting current energy potential, and these river reaches in different gradients display characteristic physical and ecologic streamway environments that will dictate constraints and opportunities in streamway planning and management, whether concerned with flood control and diking, recreation, fisheries, wildlife, pollution, or zoning.

V. APPLICATION OF NATURAL/SCENIC RIVER CRITERIA TO NEW RIVER

The criteria for inclusion of rivers or river segments in the State Natural and Scenic Rivers System are based upon those criteria stated in the "North Carolina Natural and Scenic Rivers Act of 1971." Some criteria, however, required further refinement. The following criteria incorporate those contained in the Act with others and are those used in evaluating the river and in development of the management plan.

A. Boundaries

The Act provides that the boundaries of a river shall be the visual horizon or such distance from each shoreline as is determined to be necessary by the Secretary of Natural and Economic Resources, but shall not be less than twenty (20) feet. This shall not be construed to authorize the Secretary to acquire, except by donation or gift, more than 320 acres of land per mile for inclusion within the boundaries. The legislative act authorizing placement of 26.5 miles of the river in the state system as a scenic river further restricts the Secretary to acquisition of no more than 400 acres in fee simple and no more than 1500 acres by easement. These restrictions are not judged to unreasonably constrain protection of the river, and, considered together with the criteria discussed above, provide satisfactory latitude for selection of an appropriate boundary.

B. River Segment Length

In order to be designated in the state system, a river segment must be not less than one (1) mile in length.

C. Water Flow

Water flow shall be sufficient to assure a continuous flow and shall not be subjected to withdrawal or regulation to the extent of substantially altering the natural ecology of the stream. Substantially altering the natural ecology is to be interpreted as follows for the two river classifications:

1. Natural Rivers

- a. Maintenance of an infiltration capacity which would approximate that of an undisturbed natural watershed (infiltration capacity is defined as the rate at which water can infiltrate the soil surface). Such a restriction is required in order to maintain the natural base flow (or ground water flow) which is essential for assuring continuous stream flow. Changes in land use, particularly those involving substantial soil exposure and compaction, can be expected to have a critical impact on

- b. No artificial constriction of the river bed including rock riprap, concrete blocks, retaining walls, rock-filled gabions and pilings.
 - c. No dredging, sand and gravel operations, etc.
 - d. Maintenance of the stream in its free-flowing state; no impoundments.
2. Scenic Rivers
- a. Largely free of impoundments.
 - b. Minimum erosion control devices as specified by the State Land Quality Section. Indigenous construction materials are preferred.

D. Water Quality

Water quality shall generally be not less than the minimum required for Class "C" waters as established by the North Carolina Environmental Management Commission. Such water is suitable for fish and wildlife propagation, boating, wading and other uses requiring waters of lower quality, but not for such uses as bathing, and as a source of water supply for drinking, culinary or food processing purposes. Specifically, the water quality standards for both natural and scenic rivers are as follows:

1. Floating Solids, Settleable Solids and Sludge Deposits

Only such amounts attributable to sewage, industrial wastes or other wastes as will not, after reasonable opportunity for dilution and mixture of same with the receiving waters, make the waters unsafe or unsuitable for fish and wildlife, or impair the waters for any other best usage established for this class.

2. Nonfilterable (suspended) Residue

For the protection of trout spawning grounds, a water quality standard of 25 mg/l. organic and inorganic particulate matter should be maintained for trout water. For free-flowing streams not designated as "trout waters," the maximum allowable limit is 80 mg/l. of non-filterable residue. Impounded and saline waters should have a maximum concentration not exceeding 80 mg/l., but lower concentrations than those of free-flowing streams within the same region are preferred.

3. pH

Shall be normal for the waters in the area, which generally shall range between 6.0 and 8.5, except that swamp waters may have a low of 4.3.

4. Dissolved Oxygen

Not less than 6.0 mg/l for natural trout waters; 5.0 mg/l for put-and-take trout waters; not less than a daily average of 5.0 mg/l with a minimum of not less than 4.0 mg/l for non-trout waters, except that swamp waters may have lower values if caused by natural conditions.

5. Toxic Wastes, Oils, Deleterious Substances, Colored or Other Wastes

Only such amounts, whether alone or in combination with other substances or wastes as will not render the waters injurious to fish and wildlife or adversely affect the palatability of same, or impair the waters for any other best usage established for this class.

6. Organisms of Coliform Group

Fecal coliforms not to exceed a log mean of 1,000/100 ml (MPN or MF count) based upon at least five consecutive samples examined during any 30-day period; nor exceed 2,000/100 ml in more than 20% of the samples examined during such period. (Not applicable during or immediately following periods of rainfall.)

7. Temperature

Not to exceed 5°F. above the natural water temperature, and in no case to exceed 84°F. for mountain and upper piedmont waters and 90°F. for lower piedmont and coastal plain waters. The temperature of natural trout waters shall not be significantly increased due to the discharge of heated liquids and shall not exceed 68°F.; however, the temperature of put-and-take trout waters may be increased by as much as 3°F. but the maximum may not exceed 70°F.

E. Public Access

1. Natural Rivers

- a. Access shall be limited to trails; motorized vehicles shall not be visible.
- b. Ambient noise levels generated by automobiles or other ground level activity shall not exceed forty dbA on the river.

2. Scenic Rivers

Parallel roads and water crossings shall be allowable for motorized vehicles, but should be well screened where possible.

F. Environmental Quality

1. Natural Rivers

- a. Natural rivers should have essentially primitive landscapes, preferably old growth timber.
- b. Abandoned pasture, old field succession areas (including early stages), old burns and relatively unobtrusive forest management activity areas are acceptable.

2. Scenic Rivers

- a. Scenic rivers should be largely undeveloped pastoral and/or forested landscapes characterized by dispersed agricultural uses and rural dwellings or settlements, including low density vacation homes.
- b. Occasional utility easements, perpendicular to the river course, can be accepted.
- c. Elements such as dense vegetation, cliffs, bluffs, rock outcrops, springs, waterfalls, peaks and attractive vistas contribute to the importance of a scenic river segment.

VI. PROGRAM DEVELOPMENT

A. Recreation Program

The overall concept for a recreational program generally applicable to the New River system distinguishes between movement-oriented activities and site-oriented activities with the assumption that the natural and scenic features of the river can best be appreciated or interpreted by moving through them. Furthermore, the preservation oriented goals of the state enabling legislation dictate that activities focus on use of the river and protection of the adjacent shorelands from development.

It follows that activities involving movement such as canoeing, boating, fishing and limited hiking will be primary objectives of the development of the recreation program while activities such as camping or picnicking are clearly secondary objectives.

Implementation of the concept in its relation to a physical plan is the establishment of services and facilities in activity areas of varying size and scope along the river corridor based on the varying time/distance requirements for movement activities.

For a pastoral scenic river such as the New River, the following time/distance factors for primary activities are applicable:

	½ day	1 day	1½ days	2 days	2½ days
Canoe 12-20 mi./dy.	6-10 mi.	12 - 20 mi.	18 - 30 mi.	24 - 40 mi.	30 - 50 mi.
Backpack 8-12 mi./dy.	4-6 mi.	8 - 12 mi.	12 - 18 mi.	16 - 24 mi.	20 - 30 mi.
Bicycle 25-35 mi./dy.	12½ - 17½ mi.	25 - 35 mi.	37½- 52½ mi.		
Horseback 20-30 mi./dy.	10 - 15 mi.	20 - 30 mi.	30 - 45 mi.	40 - 60 mi.	

In addition, primary activities not having an overnight requirement² include pleasure hiking and interpretive hiking.

By arranging this information in a linear form, it is possible to determine the locational requirements for intermediate or overnight destinations for any length of the river and to pinpoint where an overlap of requirements among activities will occur.

A hierarchy of facility needs--primary, secondary and minor activity areas--results. This information was used as a basis for locating points of public access and site-oriented activities and facilities of varying size and scope, as follows:

Primary Activity Area (Scenic)

- administration and public information
- vehicular access/parking
- interpretive facilities
- undeveloped camping and related facilities for people taking part in--
 - canoeing
 - backpacking
 - horseback riding
 - bicycling
- swimming
- picnicking
- fishing
- launch ramps

Secondary Activity Area (Scenic)

- minor vehicular access/parking
- canoe and backpack camping
- self-contained interpretive trail
- bicycle trail rest stop
- picnicking
- launch ramps

Minor Activity Area (Natural or Scenic)

backpack camping
rest stop for canoeing and hiking
picnicking

B. Site-Specific Criteria (Figures 5, 6 and 7)

Natural determinants must be evaluated in order to establish the practicality of developing the facilities required by this type of program on the South Fork New River. Using soils, slopes and vegetation as the major indicators for describing development limitation, the river was delineated into typical topographic units. Each of these units had certain soil, slope and land use characteristics. These were described and evaluated according to their potential for different recreational activities.

1. Broad Flood Plain

The first of these topographic units, Section #1, consisted of a broad flood plain with moderate slopes ranging from 2-10 percent. This situation occurs at the confluence of the two major forks of the river and along meanders where major streams feed into the river directly opposite a projecting ridge. The principal present land use of the flood plain is for grazing and cultivation of forage crops. The immediate ridges adjacent to the river are usually in pasture as well, with slopes ranging from 6-45%. Major road crossings for federal and state highways have also been developed where the valley is wide or where major tributaries enter. Several small communities have also been established in such locations. Secondary roads originate from the primary roads and follow the river valley and the small ravines which lead to the upland ridges. Second or vacation home developments have followed this established road pattern and are located on sites in the flood plain and along the upland ridges over the river.

Development in this topographic section is relatively simple because of the relatively moderate slopes of 6-10 percent and soils with few limitations for development. SCS soil studies of Ashe and Alleghany Counties show that Congaree, Buncombe, Codorous and Tate soil series are located in the floodplain area. These series generally have few

limitations for development, however, their susceptibility to periodic flooding makes them unsuited to development of structures. Otherwise, these flood plain soils have no limitations for hiking, trails, primitive campsites and picnic areas. However, the flooding hazard will discourage extensive primary road development and prohibit the location of an interpretive center, tent and trailer camping and extensive parking facilities. In addition, a minimum of flood plain land should be used for recreational development because of the land's great agricultural value and the importance of retaining an agricultural base for the region. This principle is clearly stated in the enabling legislation.

The moderately sloped valley walls and ravines, where slopes are from 6-25 percent and the soils are of the Tate or Ashe series, will make suitable locations for interpretive and parking facilities. The soil series have the proper drainage qualities, bearing capacity and depth to bed rock to allow the construction of buildings and other hard surfaces. The one major limitation concerns provision for septic tanks as the depth to bed rock for the Ashe series is often unacceptable. A determination will have to be made by site inspection.

The ridges will also make acceptable sites for activities assigned to the primary and secondary activity areas. Upland soil series (Chester, Clifton and Watauga) with slopes in the 6-10 and 10-25 percent ranges, provide suitable development sites provided that access to the river does not become a problem. Often steep valley walls with slopes from 45 to 65 percent separate the ridge from the river, thus making access by foot difficult or by vehicle impossible.

2. Broad Flood Plain with Steep Walls

This situation is also encountered in the next topographic unit, Section #2, characterized by a relatively wide flood plain with steep valley walls separating the river from the ridge. This unit usually occurs downstream from the wide floodplain. In this unit the river straightens, the valley becomes progressively narrower and water flow increases in speed. The flood plain slopes and soils are the same as those found in Section #1. Land uses are the same, primarily grazing and forage crops, with scattered vacation homes in the flood plain.

The valley walls exhibit the most change, as slopes increase to 25-45 percent or more. The majority of these slopes are wooded, having a canopy consisting of oak, hickory, poplar and maple along with pine and hemlock. The understory consists primarily of rhododendron, mountain laurel, dogwood, holly and various fern species. These sites are generally considered undevelopable because of the severe slopes and soils encountered. Steep and hilly phases of the Ashe and Chandler soil series are the major soils found in these situations. The depth to bedrock and angle of slope usually will prevent development in this area. Even hiking trail development will encounter problems due to susceptibility of the soil to erosion. The only potential areas for developing recreation activities occur in the small coves which drain into the river. Here small areas with moderate slopes and usable soils of the Tate, Ashe and Clifton series can be found. These are usually above the 100-year flood plain of the river and would be acceptable sites for primitive camps and picnic areas. The flood plain proper will still be an acceptable corridor for hiking and horseback riding trails.

3. Narrow Flood Plain with Steep Walls

As the river continues on a straight, swift course, the valley narrows on both sides and the valley wall slopes increase to 60 percent in Section #3. The flood plain dwindles to a narrow band, usually disappearing on one side. The narrow river bank may be used for pasture and, where access is difficult, is wooded in bottomland hardwoods, such as maple, oak, poplar, birch and sycamore. In terms of the recreation program, the only suitable use for the flood plain will be for trails, which take the traveler through a very scenic portion of the river. Dramatic rock outcrops can be seen on the valley wall as the canoeist, hiker or rider travels downstream. Also, rapids are usually found in these sections of the river.

Severe slopes of 45-60 percent will prevent development of almost all kinds. Along with slope, depth to bedrock prohibits development of dwellings, campsites and other activities requiring flat surfaces. Trails will be developed, but erosion will be a problem which must be minimized by careful site design. However, interpretive trails developed along these slopes will be of value to the river visitor. The steep hardwood and coniferous forests and dominant rock outcrops

can be made accessible for study by such interpretive trails. Stony steep phases of Ashe, Chandler and Watauga soils dominate. Some gently sloped, hilly phases occur on the ridges, and here development of vacation homes is presently taking place if access is possible.

4. Narrow Valley with Steep Meander Bluffs

As the river meets an erosion resistant bedrock that has been uplifted over time, a steep valley wall of exposed rock is often produced (Section #4). This topographic unit is characterized by a river meander in which a bluff is produced opposite a protruding ridge. The stony steep phases of Ashe, Watauga and Chandler series, with slopes in excess of 60 percent where rock outcrops do not exist, are found on the valley walls of the bluff. These slopes are forested with a mixture of mesic hardwood and coniferous species with hemlock and pine usually dominant. Development of the bluff for recreational activities is marginal, as even hiking and interpretive trails will be difficult to design under such soil and slope conditions. The only area that appears to have potential for trail development is the narrow floodplain which exists at the base of the bluff, or the narrow coves that serve as drainage ways from the upland ridge. However, these narrow ravines are extremely steep, averaging 25-45 percent in slope, and are marginal for recreational use. Thus, the principal recreational value of the bluff is its scenic quality, a value which will be protected under scenic river status.

The ridge across the river channel offers a more desirable area for recreation activities. The narrow floodplain associated with this ridge has slopes ranging from 2-15 percent. Cadorous, Congaree, Sodus, Buncombe and Tate soils occur on slopes ranging from 2-10 percent, and the Tate series occurs on 10-15 percent slopes. These slopes and soils are generally considered developable for recreational activities, except for the flooding hazard. For this reason, activity areas for primitive camps, hiking and horseback riding trails and picnic sites will be placed in such situations.

The principal use of the floodplain land has been for grazing and cultivation of forage crops. Thus, this land is very valuable to the cattle producer and large areas should not be taken out of production. If recreational activities are developed in areas of this nature, a minimum of land will be used, particularly on lesser

slopes.

A more suitable site for developing interpretive facilities, tent and trailer camps, and other activities requiring flat surfaces occurs on the valley wall and ridge of the meander. Slopes on the valley wall average from 10-25 percent. The gentler slopes (10-15 percent) are suitable locations for the above mentioned activities. Ashe, Tate and Clifton soils generally occur in situations of this nature, and the loamy and eroded hilly phases are generally considered developable.

The ridges also afford good sites for placement of facilities. Developers have taken advantage of this fact by constructing vacation homes on converted pasture land along the ridges and valley walls. Fast growing white pine is planted to revegetate eroding pastures, and when the pines reach suitable heights, home development begins. Moderately sloping sites on the ridge, 6-15 percent, are the prime areas for development. Access usually comes from a secondary or farm road running along the ridge or the flood plain. Soils in the Clifton, Chester and Watauga series make ideal sites for either vacation homes or recreation activity development. Considering access with soil and slope conditions and the scenic value of the bluff, development of high priority recreational sites on these ridges is possible.

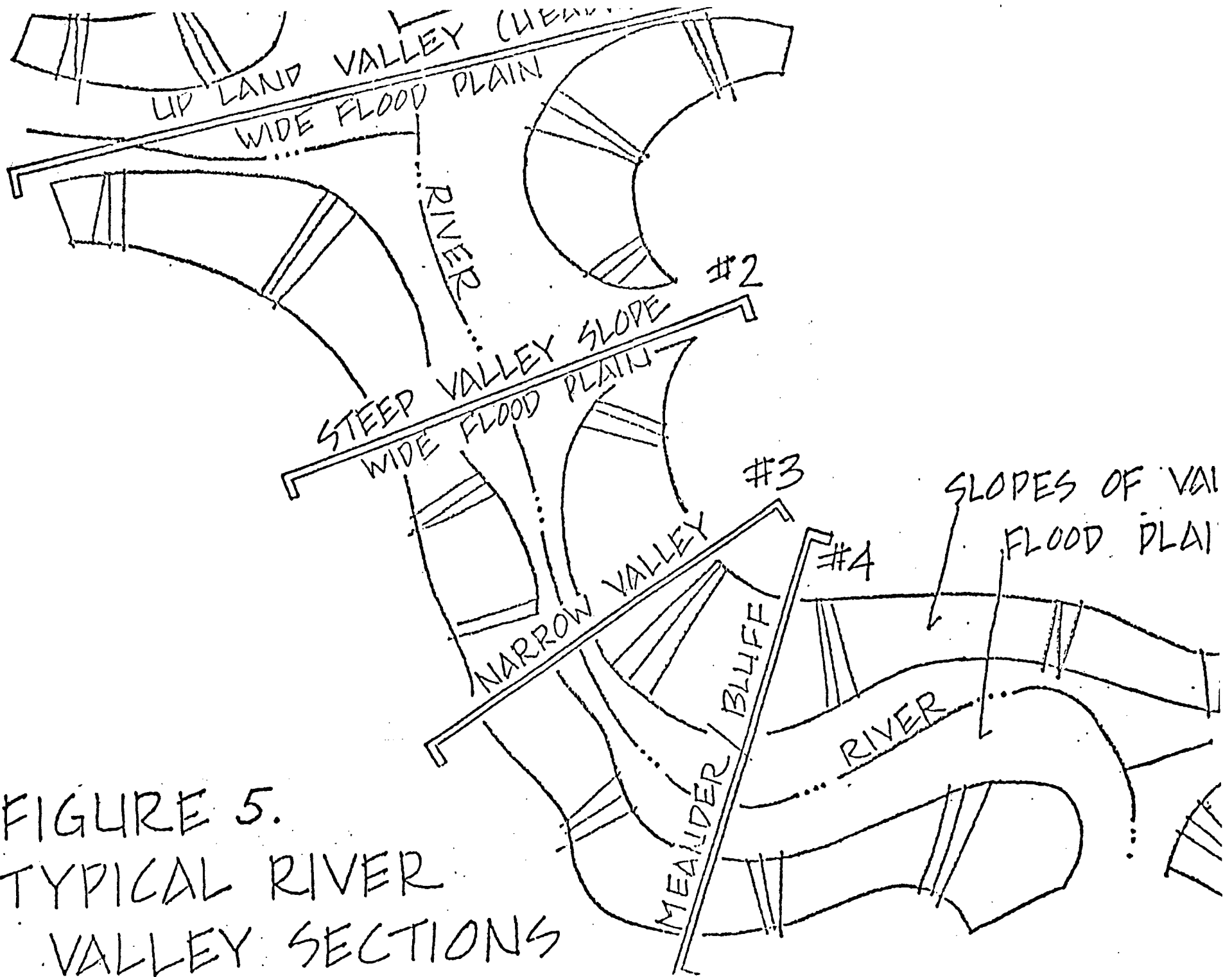
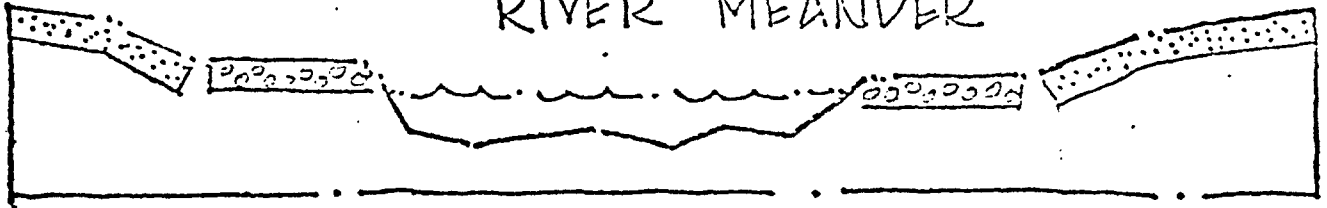
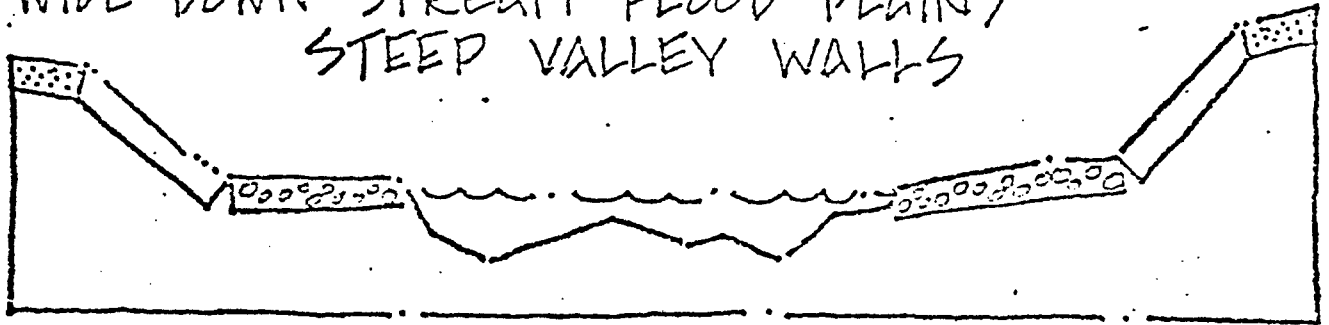


FIGURE 5.
TYPICAL RIVER
VALLEY SECTIONS

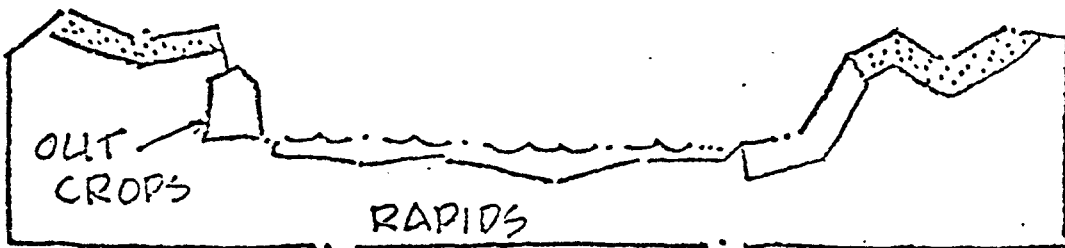
1 WIDE FLOOD PLAIN: UP LAND HEADWATER OR RIVER MEANDER



2 WIDE DOWN STREAM FLOOD PLAIN / STEEP VALLEY WALLS





3 NARROW VALLEY

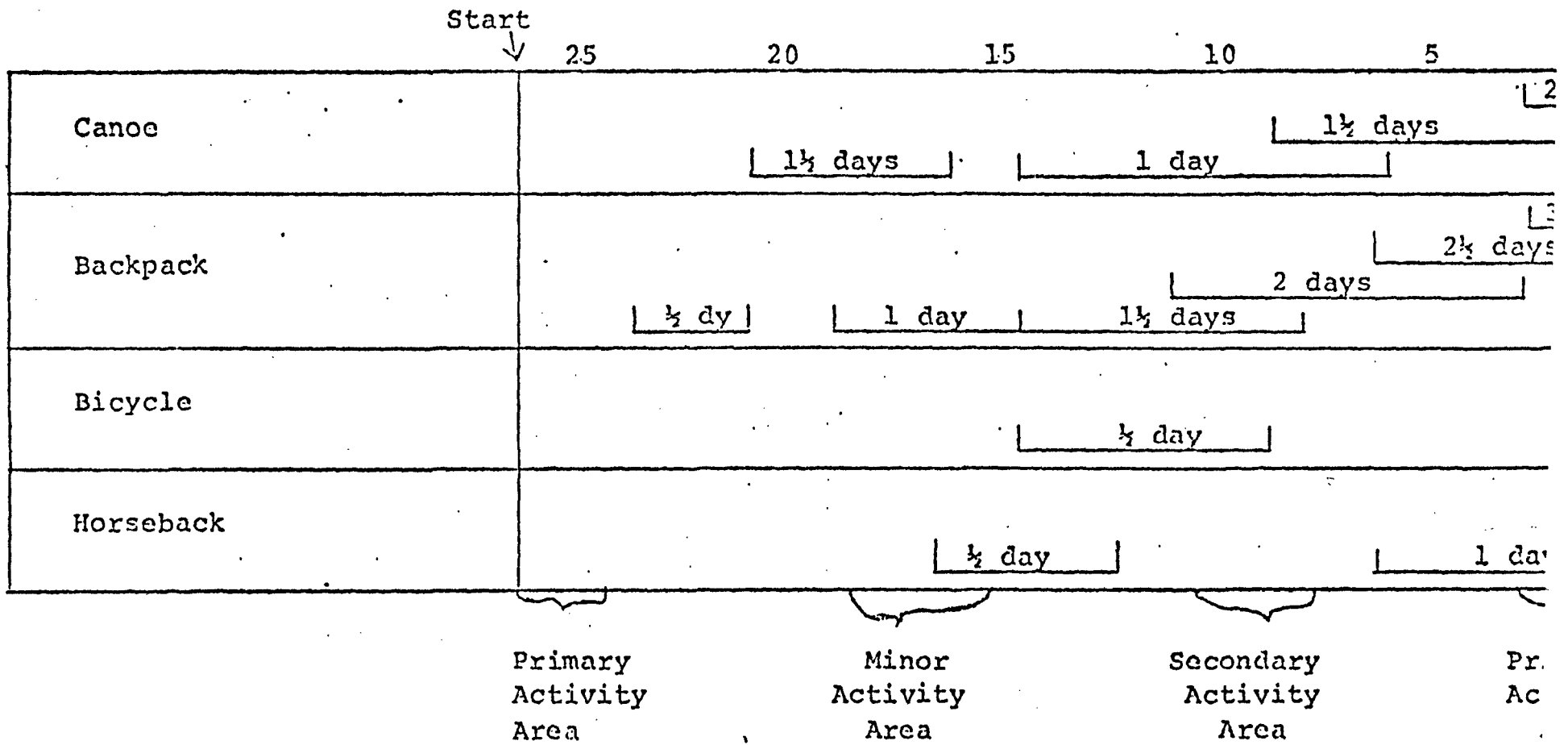


4 MEANDER / POINT BAR & BLUFF



 AREAS SUITABLE FOR INTERPRETIVE CENTER, TENT & TRAILER CAMPS, ACCESS ROADS, AND PARKING FACILITIES

 AREAS SUITABLE FOR PRIMITIVE CAMPING, HIKING TRAILS, PICNIC AREAS, LIMITED ACCESS ROADS, AND PARKING FACILITIES



VII. PROPOSED MANAGEMENT PLAN

Application of the criteria in Section V to the 26.5 mile segment of the South Fork and main stem, New River, designated in the legislative enabling act (Appendix 1), revealed that the river segment clearly qualified for designation as a scenic river area in the State System of Natural and Scenic Rivers. This section describes a plan for management of the river segment consistent with such designation.

The prevailing present land use in this segment consists of active pasture and cultivated lands. In addition, there is a wildlife management area in the Cranberry Creek area. There are numerous rapids and approximately ten outstanding rock outcrops, of which the two most spectacular are located on the main stem of the river near the Virginia border. There are five bridge crossings.

The legislative enabling act includes several legislative directives with respect to the management plan. The act states that the plan must provide for the continued use of land adjacent to the river for agriculture and that, with regard to negotiation of easements adjacent to agricultural land, water rights being exercised at the time the act was ratified shall not be abridged. Furthermore, the act states that the management plan shall "recognize and provide for the protection of the existing undeveloped scenic and pastoral features of the river." The legislative debate on the bill makes it clear that legislative intent with regard to this item is to insure that the management plan will not call for the placement of recreational facilities, including trails, in areas that are now undeveloped in such a way that the quality of the environment of these areas is degraded. All of these goals are entirely consistent with management of the river segment as a scenic river and the management plan and the tools proposed for its implementation reflect these legislative intents.

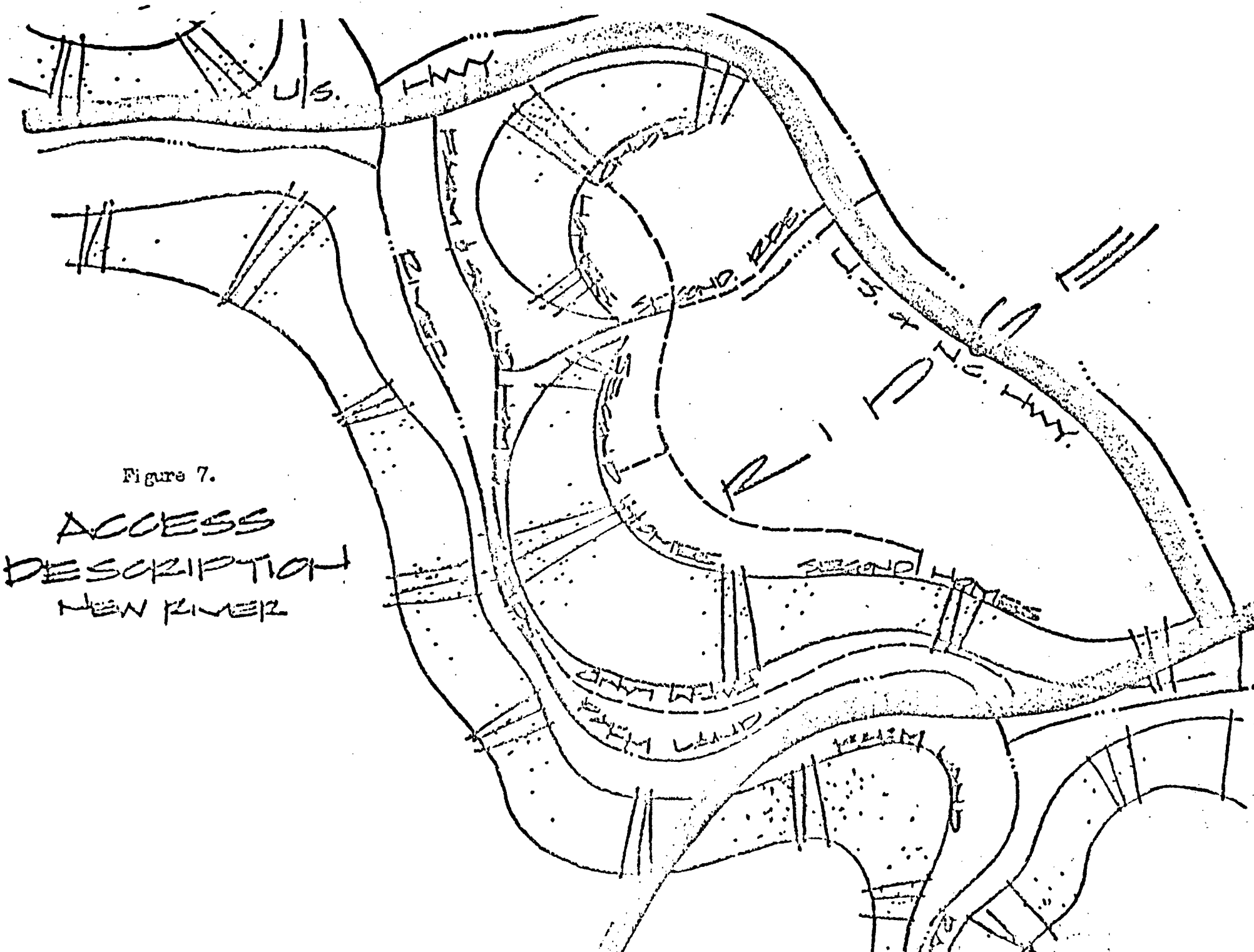


Figure 7.

ACCESS
DESCRIPTION
NEW RIVER

VIII. IMPLEMENTATION

A. Land Control Measures

When one examines the ownership patterns along the designated segment of the New River system, and when one compares them with the needs for various degrees of control to accomplish the goals of the management program and to comply with legislative goals for management, it is clear that no one method will be sufficient to insure adequate protection and control. A combination of several methods will provide the best means to insure that the stated goals will be achieved. Certain goals of the management plan can best be realized if the land remains in private ownership. In such cases, control methods to be utilized may run the entire gamut from cooperative agreements to gift or purchased easements. In other cases, fee simple acquisition by the state is the only appropriate control measure. Determination of the most desirable control method will have to be done on an individual basis for each parcel of land as a result of conversations with the land owner, with representatives of the State Property Acquisition agency and with the Attorney General's office.

1. Zoning

One technique for indirect control is zoning and land use ordinances. In North Carolina, the most immediate effective means for such control, and the most readily available, is implementation of the state's floodway regulation statutes. This law specifies means for regulation of artificial obstructions in floodways, indicates permissible uses in floodways and states that no damageable portion of a structure located outside the floodway will be below the elevation that will be attained be the 100-year flood if the stream were contained within the floodway. This effectively limits the uses allowed within the 100-year flood plain and, when combined with permit procedures for allowing specific uses within these boundaries, provides a very useful means of regulation. Ashe County is now in the process of implementing such legislation (Appendix 2). Local restrictions on uses of flood plains will be examined first to determine the degree of protection that they confer on the river segment under consideration. Other protective

strategies will be employed after the potential usefulness of flood plain restrictions is ascertained.

2. Cooperative Agreements

Cooperative agreements are another technique that will be used. Under this method, both parties agree to certain restrictions which will be beneficial to both. Ownership of the land remains in the private individual and, normally, no consideration is paid for the agreement. This method is unstable and changeable and will, therefore, be of limited usefulness.

3. Lease or Rental

In order to provide for more positive management of specific land areas, either lease or rental terms can be developed. Leasing of land, because it is for a specified time and has fixed payments for the use and possession of the property, is more authoritative and beneficial than renting for the purposes of control. Renting is temporary use or possession of property and is paid for at fixed intervals, but not by fixed payments. Either one of these forms of regulation of land might be used for river system management, but the decision to use one or another must be made on a case-by-case basis.

4. Fee Simple Acquisition

The most definitive form of management from both governmental and private viewpoints is fee simple ownership of a property. This can be accomplished in a variety of ways. One of these is donation to the state. Donations possess definite advantages for tax purposes, along with other less visible advantages. Donations can be made with restrictions and in a variety of ways. For example, a restriction can be listed in a deed that the land will revert to the ownership of the donor if the land is ever used for any purposes other than those specified in the deed. Also, land can be given on an "installment plan," that is, an individual interest in the property can be given each year for a number of years. The variations are numerous, and they include donations both in fee simple and of easement.

Purchase by the state will be used to obtain land on which facilities are to be placed. In such acquisition, purchase is of the land and all the rights vested in ownership of the land, thus insuring complete control and protection of the property. The most desirable circumstance in this type of acquisition is the willing buyer/willing seller relationship. While the state does have the power of eminent domain, it will be exercised only when all other strategies fail. By having the right of condemnation, the state is in a better position to persuade land owners and developers to cooperate on measures that will make condemnation unnecessary.

5. Easements

When no donations are to be made, and when circumstances do not require or allow fee simple acquisition of land, another route is open to the state. This involves negotiation of easements, either affirmative or negative, by gift, purchase or condemnation.

An affirmative easement is perhaps the one with which most land owners are familiar. This type of easement is exemplified by a utility company's right-of-way across property or a municipal water line easement. The affirmative easement gives the possessor of the easement a right to perform some act on or over the subject property. A negative easement is, on the other hand, an agreement by the land owner not to take certain specified actions on or regarding his property, and is commonly called a conservation easement. The great advantage of the easement approach is that the property owner is left with the ownership of the land and the right to take any action consistent with the easement.

Conservation easements can be either positive or negative, depending on the uses allowed and the wording of the document. Positive conservation easements give the grantee the right to perform some action on the subject land. When the easement is granted to a governmental body, it is usually for allowing specific public activities such as hunting or fishing, or for public access in the form of trails or roads. Negative conservation easements, resulting in agreement of a grantor not to take certain actions on his property, are in effect a waiver of specified development rights. The scope and nature of the restrictions and of the rights foregone, can be varied according to the particular situation.

Perhaps the best known form of negative conservation easement is the scenic or visual easement. This type of easement limits the right of the grantor to take actions that may change or affect the quality of the visual experience on his property. A wide variety of restrictions involving restraints on disturbing the natural character of the land, dumping, cutting trees, excavation and building structures can be written into this type of easement. It is even possible to draw restrictions under such easements that allow limited residential development such as a small number of single residences, set back from the water and screened by vegetation. Restrictions are to meet the needs of grantors who wish to use the property but are willing to restrict alteration of the appearance or essential character of the land to an extent acceptable to the grantee. As specifically applied to the New River, one of the important features of the easement concept is that it can encourage the land owner to continue to farm or use his land just as he has before, including row crop production, grazing and Christmas tree farming.

Items that must be considered in creating conservation easements on the New River include both man-made and natural developments. Man-made structures and their accompanying qualities pose one of the largest problems in a scenic area. The density, size, location, architectural style and purpose of these structures must be evaluated and a determination made as to whether or not they can be allowed, and if so, where and in what numbers. The effect of support utilities, such as power, water, solid waste disposal and communication, will also be determined. Any removal of soil, rocks and minerals will be evaluated and prevented if possible. Changes in natural features and in the nature of the use of the land will be restricted. In addition, easements must be consistent with the intent of the General Assembly that agriculture be perpetuated on lands adjacent to the river and that existing uses of water from the river shall not be abridged. Each of these items must be identified and considered on a case-by-case basis, so as to tailor the easement to fit the situation.

Owing to the complexity and variability of both the natural and man-made features of the New River, no one control method will suffice for the entire length of the segment to be managed. Protection and management of the river will require a well-balanced combination of land management programs designed to support the presently existing life style. This combination of alternatives will be applied directly to the identified typical river sections. The land forms due to their physiographic characteristics lend themselves to certain activities and control methods.

B. Administrative Implementation

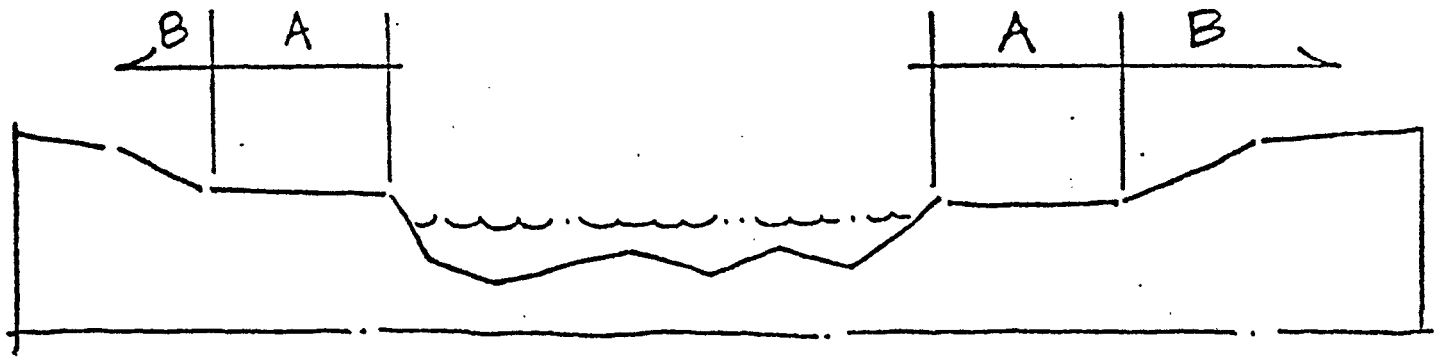
1. Application of Land Control Measures to Management Plan

The characteristics of the land forming the river basin have been classified as flood plain, valley walls and bluffs, outcrops or ridge tops. Each of these land forms will support certain activities or facilities, and therefore, different combinations of land control methods will be needed in order to afford optimum or maximum protection for the land, the activity and the natural experience.

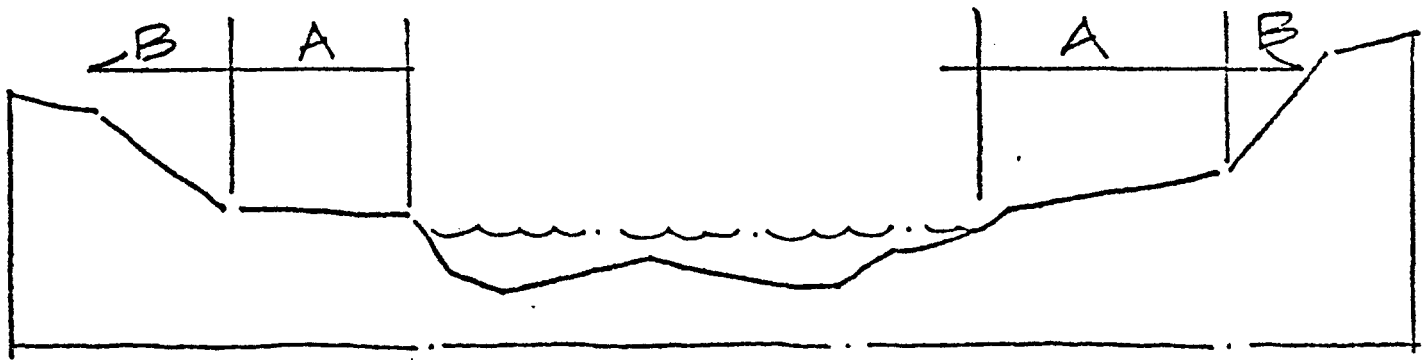
In the flood plains along the river, identified as area "A" on the typical sections (Figure 10), major methods will be utilized to accomplish the control objectives. First control will be sought by use of floodway regulations as authorized in the General Statutes. Such regulation limits development in the flood plain and prohibits development in the designated floodway. Development allowed within the flood plain area must be limited to the specific types listed in local ordinances that implement the act. The second method of management to be used in the flood plain is conservation easements. For example, where trails are to be developed, an easement to allow public access with restrictions to protect the land owner will be purchased. Also, fishing easements to permit linear movement along the river without trespassing on unleased lands will be useful. Any easements purchased in the designated flood plain will contain scenic restrictions but will permit continued exercise of agricultural practices and water rights. The third method of control in the flood plain is fee simple acquisition or lease. Such acquisition will be used only in areas where it is absolutely necessary, such as the

CONTROL ALTERNATIVOS

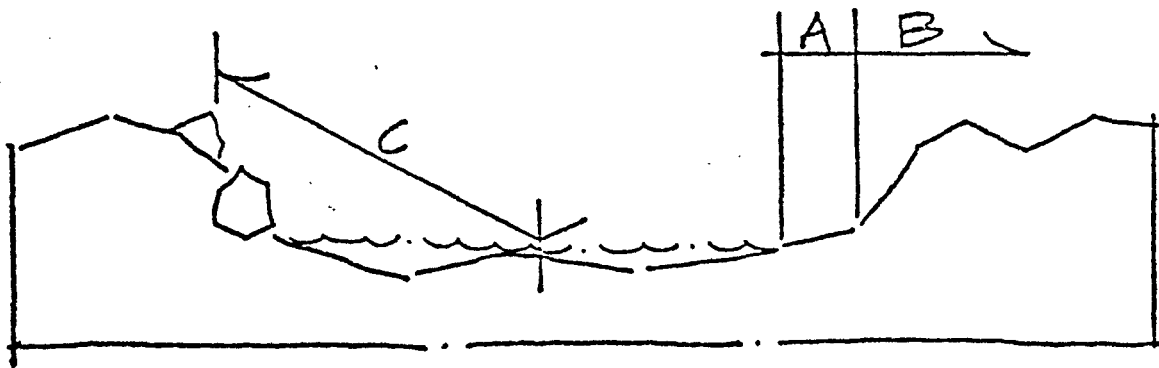
#1



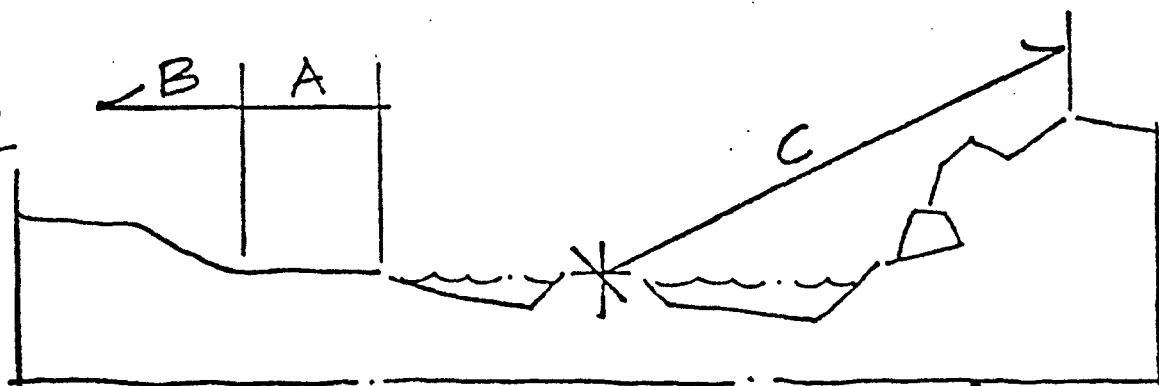
#2



#3



#4



designated activity areas. The activities which will necessitate acquisition include picnic areas, parking facilities and camping sites. The second land form to be considered includes the valley wall and slopes leading away from the river. These can be divided into two sections--moderate slope and severe slope ("B" in Figure 10). The moderate slopes are much more suited to development than either the flood plains or the steeper slopes. Therefore, most of the more intense development activities will have to be located on these moderate slopes. Fee simple acquisition, or lease in some instances, will be needed to provide adequate control for areas where activities, such as an interpretive center, tent and trailer camping and parking are to be located. The roads needed for access to these areas, if not available via public roads, are normally obtained on a fee simple right-of-way or easement, but depending on the intensity and location of the uses, a simple access easement may suffice. When facilities such as these are installed, the scenic qualities of the surrounding area will also require protection. Scenic or visual easements will be useful in this situation to insure that the visual justification for the purchase of the site will be retained. In the regions immediately along the river where second-home developments exist or are proposed, it may be necessary to impose controls in order to protect the river. The development rights on the properties can be purchased or the development densities controlled.

These problems will not be as acute in the areas where the land is characterized by steeper slopes. Due to the higher development costs of building on these slopes, the land is largely left undeveloped. In scenic river management, the steep slopes are normally useful mainly for hiking trails, backpacking trails and horseback trails. Along these routes, fee simple acquisition usually will not be needed. Scenic easements with appropriate clauses allowing trail development and protecting the scenery along the trail as much as feasible will provide the needed control mechanisms.

The third land form to be considered includes the bluffs, outcrops and ridge tops, designated area "C" on the typical river sections (Figure 10). These areas are usually very close to the river and are extremely steep. Where the rock outcrops are visually spectacular and need protection, fee simple acquisition will be the best method to provide that protection. Where this is infeasible, conservation easements on the area visible from the river will be adequate. In some cases, it will be necessary to extend the scenic easement coverage above the rock outcrop itself, possibly up to the ridge top beyond the actual bluff. The objectives will be to protect the scenic quality of as much land as possible that is viewed from the river.

The general locations of major facilities and types of land use controls proposed at various places along the river are portrayed in Figure 9.

2. Availability of Funds

The Department of Natural and Economic Resources has requested \$1,000,000 for each year of the 1975-77 biennium for use in land acquisition for public recreation facilities. Assuming that these funds are appropriated, they will be available for use in fee simple acquisition or for purchase of easements and can, of course, be used to match federal funds available through the Land and Water Conservation Fund. In addition, the department has requested \$5,000,000 for construction of facilities at state-operated public recreation sites during the 1975-77 biennium. These funds, if appropriated, will be used to initiate facility construction.

3. Master Plan and Environmental Impact Statement

Prior to the initiation of development activity, the department will prepare a detailed master plan for the sites to be developed and for the general recreation facility development necessary to implement the management plan. In addition, in accordance with state policy, an environmental impact statement will be prepared for the proposed master plan and facilities it entails.

4. Supervisory Staff

As soon as land acquisition and planning have proceeded to the point where it is deemed necessary, the department will employ the necessary personnel to provide on-site management of acquired lands and, ultimately, facilities. This service will be provided by a Park Ranger in the early stages of development. Ultimately, a Park Superintendent and at least one Park Ranger will be employed to manage the river segment. In the early stages of program development, support facilities will be provided at Mt. Jefferson State Park. It is likely that the New River Scenic Area and Mt. Jefferson will, ultimately, be managed as a single unit of the North Carolina State public recreation facility system.

5. Private Enterprise

As indicated, substantial opportunities exist for private entrepreneurs to develop and manage facilities that will support use of the designated section of the New River as a scenic river. In fact, appropriate private facilities may relieve the necessity of establishment of public facilities at given locations. During master plan development an effort will be made to incorporate private enterprise when the opportunity occurs and when such activity is clearly consistent with management goals for the river.

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 1975

RATIFIED BILL

CHAPTER 404

HOUSE BILL 789

AN ACT TO LENGTHEN THE SEGMENT OF THE SOUTH FORK, NEW RIVER, IN ASHE AND ALLEGHANY COUNTIES INCLUDED IN THE NORTH CAROLINA NATURAL AND SCENIC RIVER SYSTEM.

The General Assembly of North Carolina enacts:

Section 1. G.S. 113A-35.1 is amended by deleting the section in its entirety and substituting therefor the following section:

"That segment of the South Fork of the New River extending from its confluence with Dog Creek in Ashe County downstream through Ashe and Alleghany Counties to its confluence with the North Fork of the New River and the main fork of the New River in Ashe and Alleghany Counties downstream to the Virginia state line shall be a scenic river area and shall be included in the North Carolina Natural and Scenic Rivers System.

The Department of Natural and Economic Resources shall prepare a management plan for said river section. This management plan shall recognize and provide for the protection of the existing undeveloped scenic and pastoral features of the river. Furthermore, it shall specifically provide for continued use of the lands adjacent to the river for normal agricultural activities, including but not limited to, cultivation of crops, raising of cattle, growing of trees and other practices necessary to such agricultural pursuits.

empowered to acquire in fee simple not more than 1,500 acres and to acquire easements, to provide for protection of scenic values as described in G.S. §§3A-38 and to provide for public access, in as many as 1,500 acres. Easements obtained for the purpose of implementing this section and the management plan shall not abridge the water rights being exercised at the time this act becomes effective.

Should the Governor seek inclusion of the said river segment in the National System of Wild and Scenic Rivers by action of the Secretary of Interior, such inclusion shall be at no cost to the federal government, as prescribed in the National Wild and Scenic Rivers Act, and therefore shall be under the terms described in this section of the North Carolina Wild and Scenic Rivers Act and in the management plan developed pursuant thereto."

/// In the General Assembly read three times and ratified,
this the 26th day of May, 1975.

JAMES B. HUNT, JR.

James B. Hunt, Jr.

President of the Senate

JAMES C. GREEN, SR.

James C. Green, Sr.

Speaker of the House of Representatives

FLOODWAY DISTRICT

The F-I Floodway district is intended for use in areas within Ashe County which are subject to flooding. The objective of the F-I District is to impose restrictions upon the use of lands which lie within the Floodway. Floodway is defined as the natural channel of a stream and those portions of the overbank areas necessary to convey the waters of the 100-year recurring interval flood without causing an increase in flood stages. These restrictions will prevent or minimize loss of life, injuries, property damage, and other losses in flood hazard areas.

Uses Permitted. Within the F-I Floodway District, the following uses having a low flood-damage potential and no obstructing flood flows shall be permitted within the Floodway District to the extent that they are not prohibited by any other ordinance and provided they do not require structures, fill, or storage of materials or equipment. But no use shall adversely affect the capacity of the main stream, drainage ditch, or any other drainage facility or system.

1. General farming, pasture, outdoor plant nurseries, horticulture, forestry, wildlife sanctuary, game farm, and other similar agricultural, wildlife and related uses.
2. Loading areas, parking areas, and other similar industrial-commercial uses.
3. Lawns, gardens, parking, play areas, and other similar uses.
4. Golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat-launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding trails, and bicycle trails.

Conditional Uses. The following uses shall be permitted subject to a finding by the Board of Adjustment that both the conditions in Section 112 and those conditions listed below will be met: