

~~BOIS WHITMAN~~

# general management plan

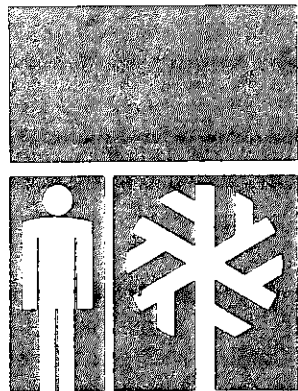
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## NEW RIVER GORGE

NATIONAL RIVER / WEST VIRGINIA



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NOV 1982

GENERAL MANAGEMENT PLAN

NEW RIVER GORGE NATIONAL RIVER  
WEST VIRGINIA

National Park Service  
Denver Service Center  
United States Department of the Interior

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## INTRODUCTION

### PURPOSE AND NEED

This plan provides a comprehensive management strategy for New River Gorge National River. It will direct management and development of the park for the next 10 to 15 years.

The national river includes a portion of the New River and its narrow gorge as they traverse the Appalachian Mountains in southern West Virginia. The 50-mile long, 62,000-acre river corridor from Hinton to the U.S. 19 bridge near Fayetteville was made a unit of the National Park System by Public Law 95-625 on November 10, 1978, when Congress assigned the National Park Service (NPS) management responsibility

for the purpose of conserving and interpreting outstanding natural, scenic, and historic values and objects in and around the New River Gorge and preserving as a free-flowing stream an important segment of the New River in West Virginia for the benefit and enjoyment of present and future generations.

### PLAN SUMMARY

Implementation of the plan will improve access opportunities to the gorge and the river and protect and interpret the natural, cultural, and scenic values for which the park was established.

Generally, the same recreational activities now popular will continue, but their enjoyment and opportunities for them will be improved by more access points and by interpretive programs. For example, there will be public boat put-in/take-out points the length of the river, including major developments at Ames, Stone Cliff, and Grandview Sandbar with changing rooms, comfort stations, river information, and picnic areas. Canyon Rim will be the major visitor contact station, and there will be shuttle service to Fayette Station, where the bridge will be repaired for pedestrian use and visitors will picnic, fish, or sightsee. Three primitive campgrounds will be built along the river, and seven new picnic areas will be built. Fish stocking and game hunting will continue. Some activities may be regulated to improve safety, eliminate user conflicts, or protect resources. For example, game hunting will continue under state regulations, but there will be closures near visitor use facilities.

In addition to this expansion or enhancement of current activities, new programs will be introduced. The natural resources preservation program will be centered around Glade Creek, where significant land acquisition will ensure that this natural, deciduous forest stand will be protected for study and visitor enjoyment. Cultural resources include archeological and historic sites or artifacts and aspects of the lifestyle typical of the area. The focus of cultural resources preservation will be the remains of the Kaymoor town, mine, and coke ovens, which will be acquired and stabilized. In addition, the Thurmond depot will be preserved and used by both the railroad industry and the National Park Service.

An interpretive and information program will be an integral part of all activities. Visitor contact stations at Canyon Rim, Thurmond, and Hinton will offer a full range of information on activities, facilities, and safety in the gorge. Interpretive activities at these and other sites will enhance visitors' appreciation of the area by describing its cultural and natural history. For example, coal-mining history will be described at Kaymoor, a railroad museum will be at Thurmond, and exhibits will describe items of interest such as the geology of the gorge or the McKendree hospital. Grandview Sandbar and Stone Cliff will offer information including river safety and river features.

Private enterprise will be expected and encouraged to build visitor service facilities such as grocery stores, gas stations, or restaurants. In addition, a cooperative agreement will be sought with the Army Corps of Engineers that will seek to achieve water releases from Bluestone Dam compatible with corps, DNR, and Park Service purposes and to provide for proper disposal of trash that collects behind the dam; a law enforcement program and visitor education will protect the park and its users; the National Park Service will help the state maintain the Thurmond-to-Prince, Hinton-to-Sandstone Falls, and Glen Jean-to-Thurmond roads and West Virginia 82 to accommodate increasing use; and all laws and executive orders relating to the administration of the park and its resources will be complied with.

Only land necessary for plan implementation, including for access, resource protection, or public use, will be acquired. The total amount of proposed fee simple land acquisition is about 17 percent of the land within the current boundary; fee simple land acquisition, donations, and purchase of easements are expected to establish federal interest in 24 percent of the land. Donation of state lands at Canyon Rim, Minden, McKendree, and Sandstone Falls is anticipated. When private land is to be purchased, a willing seller will be sought.

A series of boundary changes is recommended. The overall impact of them will be to reduce the overall size of the national river by approximately 10 percent and to make some lands with coal reserves available for mining by excluding them from the boundary.

River use will be managed cooperatively by the National Park Service and the West Virginia Department of Natural Resources (DNR). The current DNR license system will continue to be used to regulate whitewater outfitters; river management programs may be modified in 1984 after completion of studies of the river's ecological and sociological carrying capacities.

In addition to the direct management of some natural and cultural resources (as described earlier), the Park Service will attempt to protect other such resources on private land through a combination of active monitoring programs, cooperating agreements, and technical assistance programs with government agencies and private individuals in and near the park. Toward this end, Summers, Raleigh, and Fayette counties will be urged to enact land use regulations for private land within and adjacent to the park boundary that are compatible with the park's goals and purposes. Accomplishment of the plan's goals is highly dependent on

the implementation of such programs. This is because the National Park Service will acquire only a small amount of land but is still responsible for protecting park values on all lands within the boundary.

Cost of implementing the plan is estimated as a phased gross construction investment of \$13.6 million, an annual operating budget of \$1 million, and a total land protection budget of \$9.3 million.

The plan consists of seven major sections:

"Management Zoning" describes management categories for all land the National Park Service intends to acquire.

"Resources Management" describes the approaches and programs to be used in the treatment of natural and cultural resources."

"Visitor Use and General Development" describes the activities that visitors will pursue in the park and the accompanying facilities that will be built.

"Park Operations" describes how the National Park Service will go about its administrative work and where offices and operations facilities will be located.

"Land Protection" describes the overall NPS land protection philosophy in New River Gorge. It details methods by which the federal government may acquire full or partial interest in the lands necessary to implement the plan. It also lists other important areas and describes methods by which counties may protect them, and has additional information fulfilling the requirements of PL 95-625.

"Costs" summarizes actions described in the plan and assigns facility, land, and operating cost estimates to them.

"Implementation Needs" describes the steps that must be taken to make the plan a reality.

The following two maps will place the park in geographical perspective for the reader, and the "Description of the Environment" section later in this document provides additional background data that will be useful in studying the plan.

#### PLAN DEVELOPMENT AND IMPLEMENTATION

This plan was developed in cooperation with the public and the state of West Virginia in a manner that fulfills National Park Service and Department of the Interior planning requirements and those of the law which established New River Gorge National River. Background data on the national river's resources and public and affected government agencies' views of appropriate uses and management of the park were gathered between 1980 and 1982. That material was analyzed and a series of four possible management and development options was developed. The most feasible one was selected as the draft general management plan and

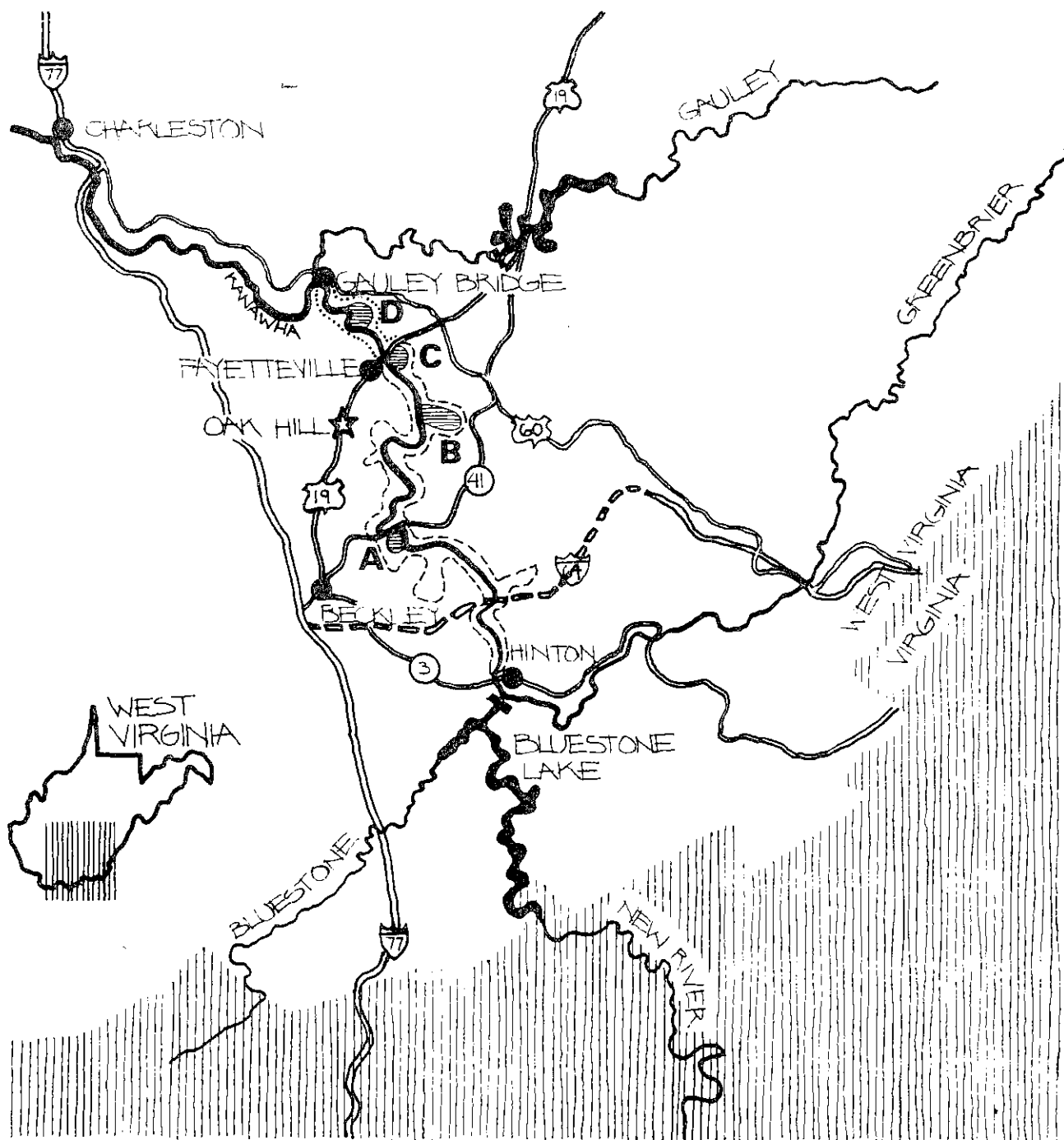
published during August 1982 as the Draft General Management Plan/Environmental Assessment. This document included the draft plan, a detailed description of the environment (included later in this document), descriptions of the alternatives that were considered, and an analysis of the environmental consequences of the plan and the alternatives. Reference copies are available at park headquarters in Oak Hill and at Summers, Raleigh, and Fayette county libraries.

Comments on the draft plan were sought through mailings and a series of public meetings. Revisions were made after consideration of the oral and written comments received. The revised proposal was determined not to cause sufficient impact to merit preparation of an environmental impact statement, and it was adopted as the final plan (see appendix B).

Funds will be sought to implement the plan on a timely basis. A temporary visitor center at Canyon Rim and those cooperative activities that can be initiated with minimal funding will be pursued promptly. Detailed planning for new facilities will proceed concurrently with land acquisition, and initial construction is not anticipated for several years.

Standard NPS procedures for development projects and for compliance with federal executive orders, policies, and legislation have been followed in development of the plan and will continue to be followed during its implementation. These are described in detail in the Draft General Management Plan/Environmental Assessment.

Many of the actions in alternatives 2 and 3 of the environmental assessment were considered desirable by members of the public. Examples would include stabilization of more cultural resources and protection of more natural resources. Given the current financial climate and the 10- to 15-year scope of this plan, it is not feasible or realistic to include such actions at this time. However, the present plan does not preclude these concepts, and they can and should be considered in future planning efforts.



## THE REGION

### NEW RIVER GORGE NATIONAL RIVER

----- AUTHORIZED BOUNDARY

**A** GRANDVIEW STATE PARK

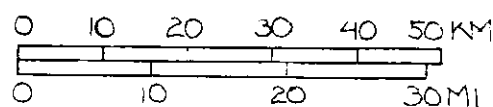
**B** BARBOUR STATE PARK

**C** CANYON RIM STATE PARK

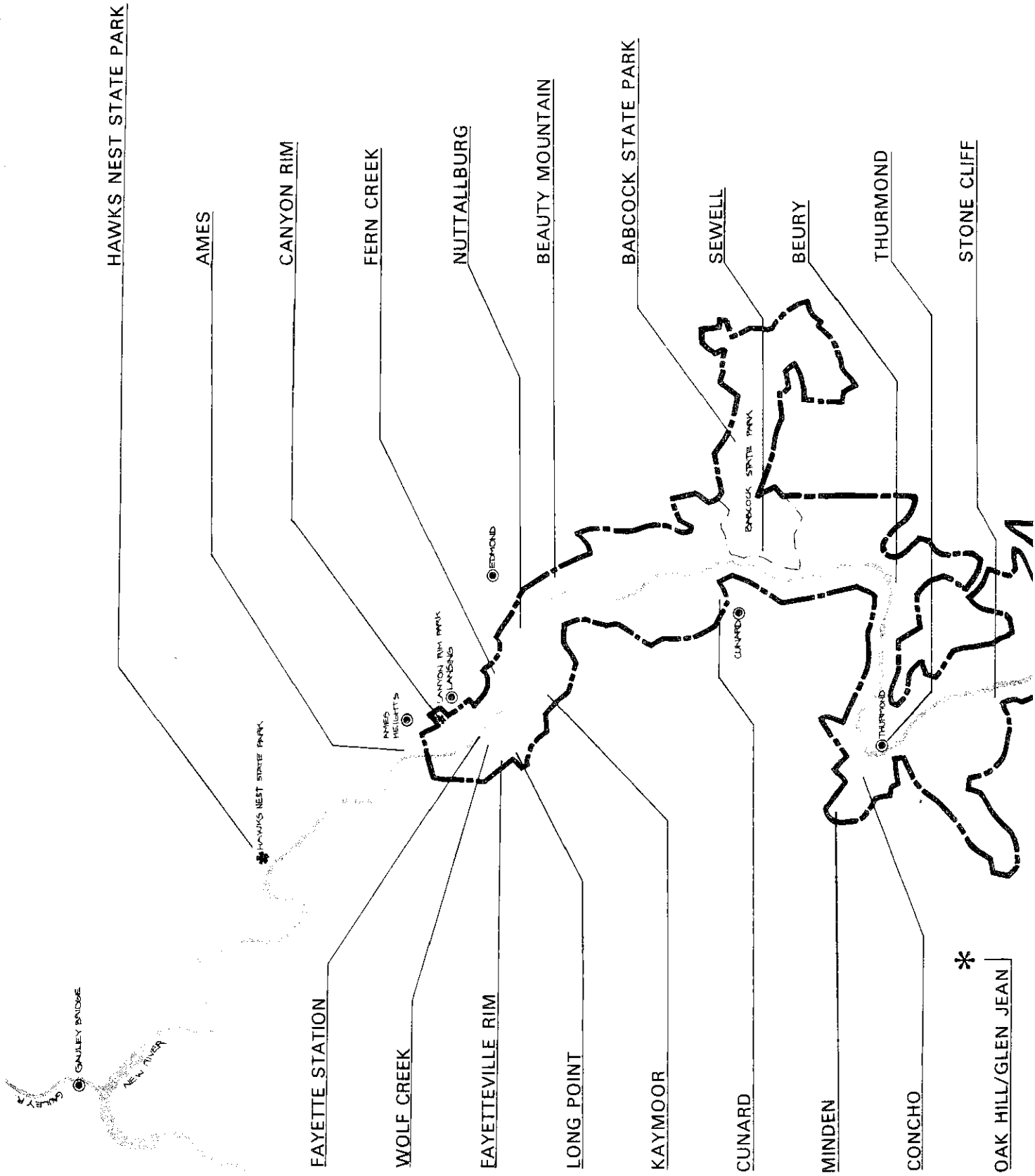
..... STUDY AREA FOR POSSIBLE INCLUSION

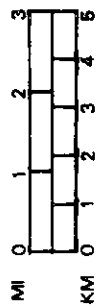
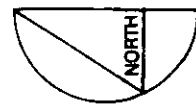
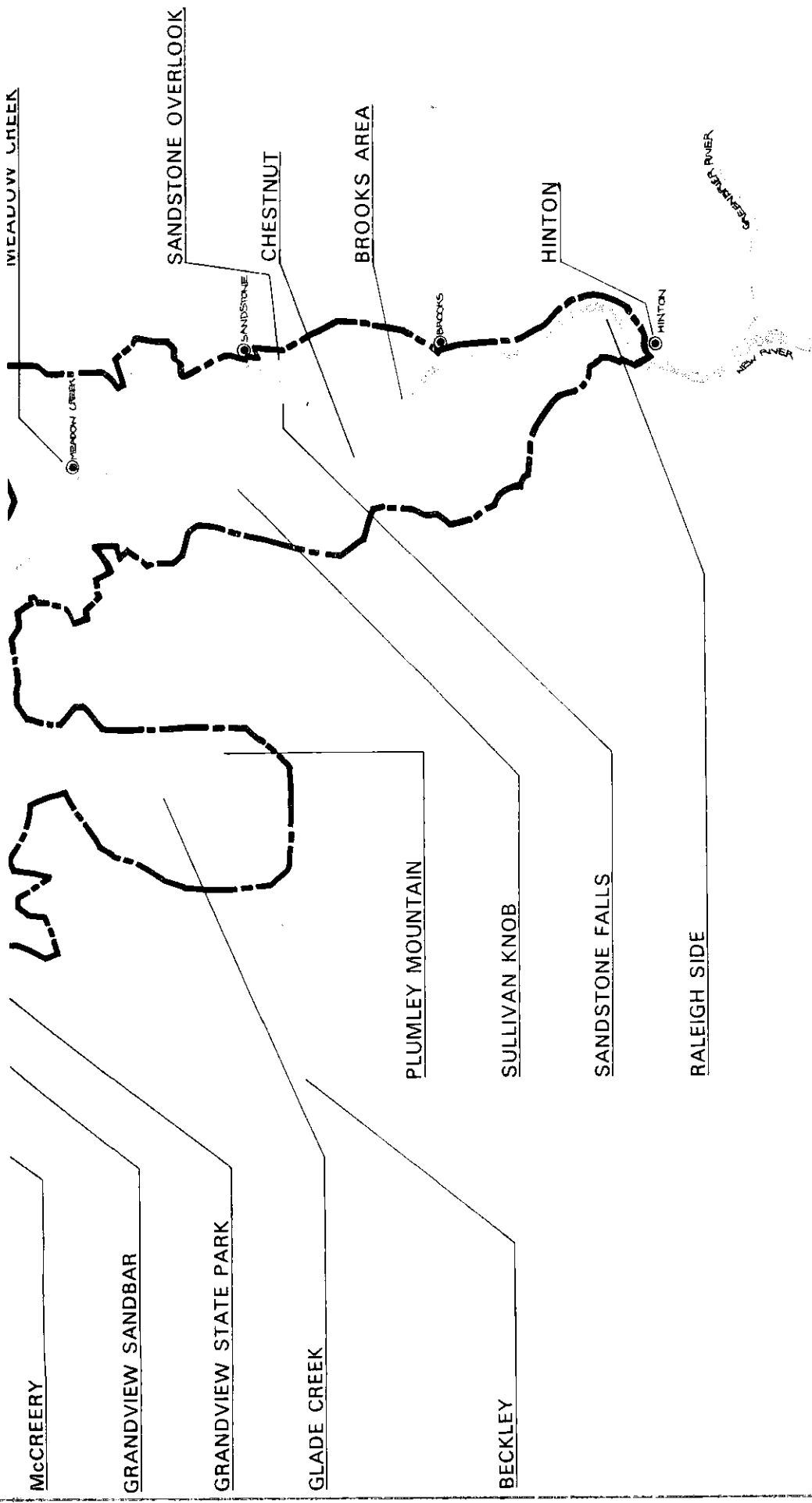
**D** HAWKS NEST STATE PARK

★ NPS HEADQUARTERS



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# NEW RIVER GORGE NATIONAL RIVER

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# GENERAL MANAGEMENT PLAN



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## MANAGEMENT ZONING

The National Park Service has a management zoning system for all federal lands within a park's boundary. Management zones describe what kinds of activities may take place. For New River Gorge National River, all federal lands and all lands targeted for acquisition in this plan have been zoned, utilizing natural, historic, and development zone designations (see Management Zoning map).

Land in the natural zone will remain mostly undeveloped and be managed to conserve natural resources. Visitor uses that do not adversely affect resources, such as hiking, horseback riding, hunting, backcountry camping, and fishing, will be permitted as described later. Trails, trailheads, and primitive riverside campgrounds will be constructed to support these activities. Most of this zone will be located along Glade Creek and along the river's edge.

The historic zone will encompass NPS land with known cultural resources which warrant protection. Vegetation in this zone can be altered as part of stabilization or maintenance of the historic scene.

The development zone will include NPS land which is or will be developed with recreational, interpretive, administrative, maintenance, and/or access facilities. This is divided into two subzones: The visitor use subzone will include visitor contact stations, picnic areas, campgrounds, boat ramps, and associated parking and comfort stations; the access and circulation subzone will include park-maintained roads and trails.

Lands within the boundary that remain in private ownership are not subject to the NPS zoning system; however, the Park Service will encourage uses on them that are compatible with the overall goals of the national river by working closely with towns, counties, and private land owners.

## RESOURCES MANAGEMENT

### Natural Resources

Management of natural resources will rely heavily on cooperative efforts among the National Park Service, the West Virginia Department of Natural Resource, local governments, and individual landowners, since most land will remain in private ownership (see "Land Protection" section). Unless specified, the following programs will be enacted only on federally owned lands.

Water Resources. The protection of the national river's water resources will be the primary thrust of natural resource management activities conducted by the National Park Service. Research programs will concentrate on determining the habitat requirements of native aquatic life, particularly in terms of water quality and quantity. Management programs will focus on achieving and maintaining those habitats on federal lands and through cooperative efforts with other agencies.

The National Park Service will continue to monitor national river water quality through programs such as the one currently being conducted by the Department of Natural Resources. The Park Service will identify and seek to eliminate violations of West Virginia Department of Health and Water Resources Board water quality standards in cooperation with the Department of Natural Resources. The Department of Natural Resources will be urged to raise funding priorities for sewage treatment plants within the New River watershed, particularly at Sandstone, Meadow Creek, Thurmond, and other sites where water quality monitoring has identified sewage pollution.

The National Park Service will work actively with the U.S. Army Corps of Engineers and the Department of Natural Resources to achieve water releases from Bluestone Dam that are consistent with that project's purpose yet facilitate protection of biological resources and recreational use of the national river (as required by the national river's enabling legislation). The Park Service will assist the corps in its data collection and analysis of the impacts of proposed changes. The corps will be asked to provide at least one season of test releases aimed at modifying water releases.

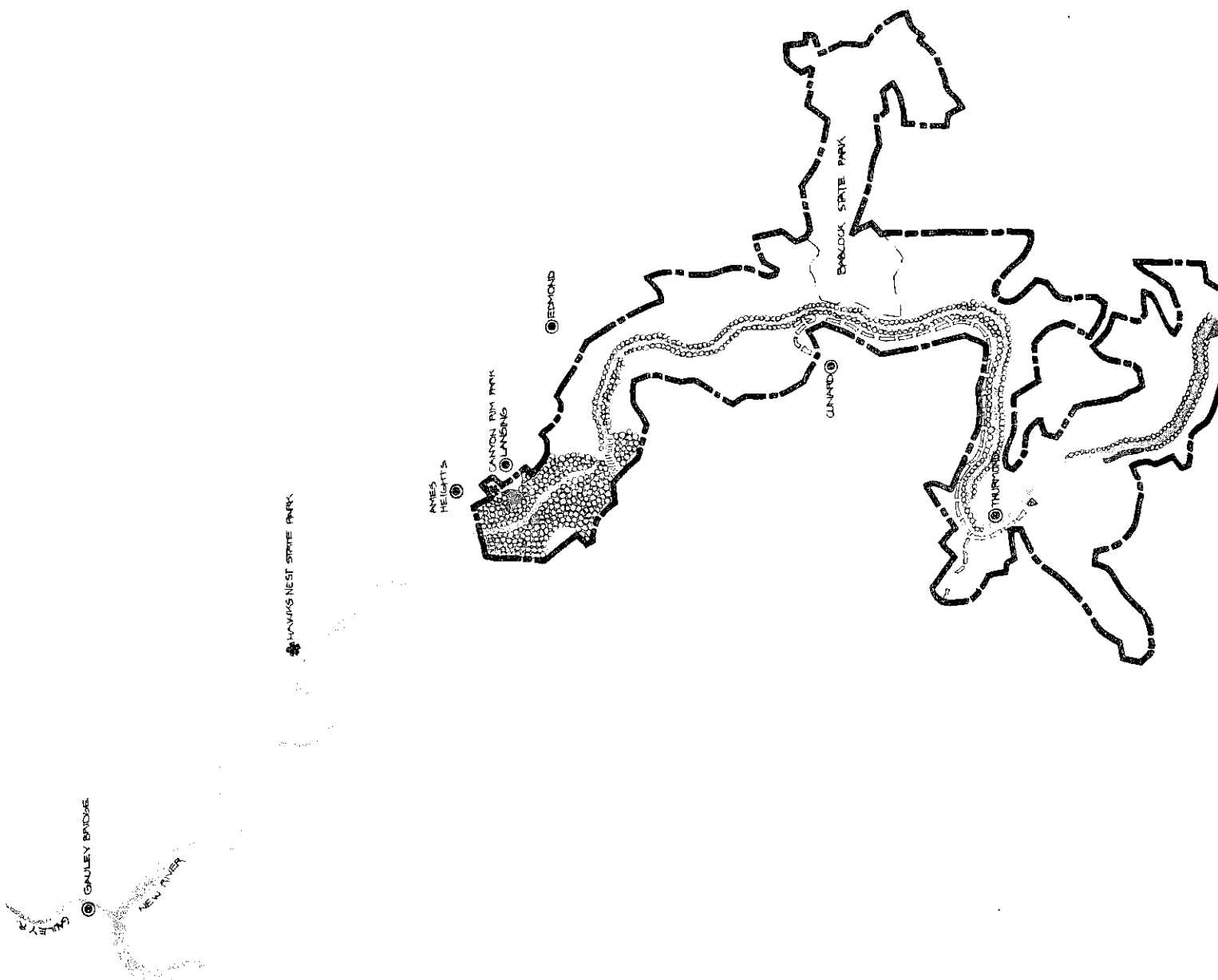
The National Park Service will also seek a cooperative agreement with the Corps of Engineers that provides for collection and proper disposal of debris that it currently passes through Bluestone Dam.

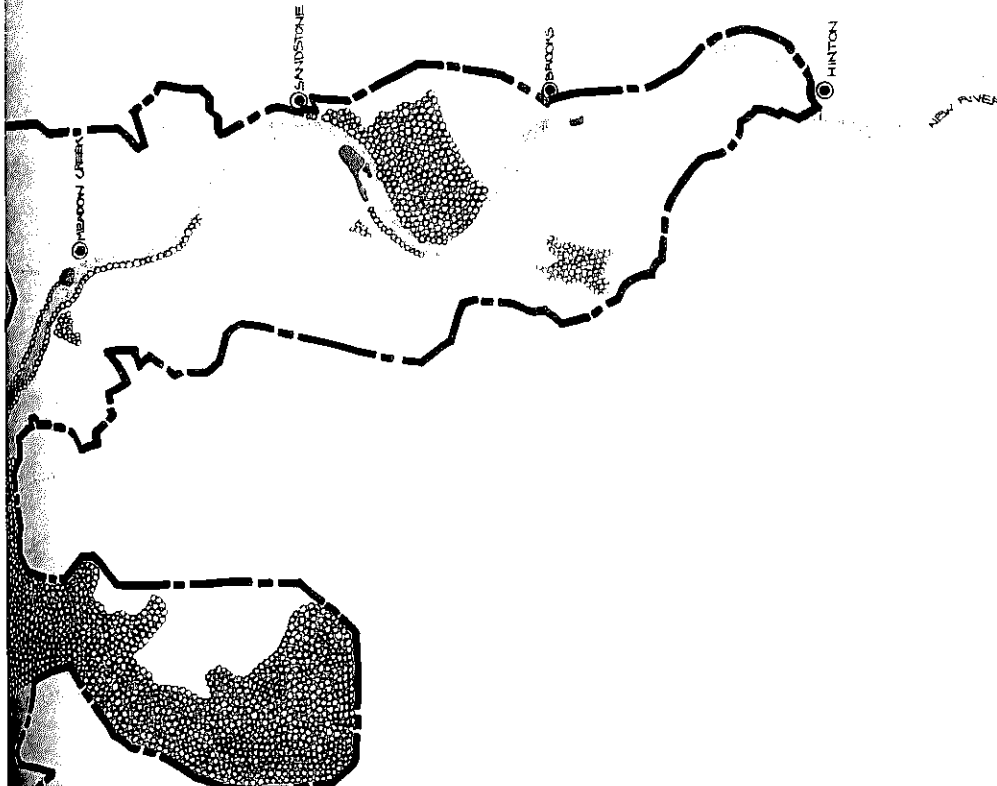
Vegetation and Wildlife. Resource protection will be the primary focus of management at Glade Creek (Raleigh County), where the National Park Service will acquire a significant portion of the watershed and manage it as a primitive area. This area was chosen for protection because of its flora and fauna, its scenic values, and the relative absence of development. It also contains the only known wetland in the area, near the head of Kates Branch. Glade Creek is the largest unified land tract in the park suitable for management as an undisturbed primitive area.

Gathering of edible plants for private consumption will be permitted, but National Park Service regulations prohibit all commercial gathering, collecting, or harvest of plant materials (including timber harvest) on federal lands. Native insects and plant diseases will not be controlled except to prevent extirpation of native host species or to control epidemics which may affect adjoining privately owned lands.

All wildfires within the national river boundary will be suppressed. The National Park Service will initiate and pursue cooperative fire prevention and suppression programs with the Department of Natural Resources, local fire departments, area landowners, and other agencies and organizations.

The National Park Service will not introduce additional exotic species into New River Gorge ecosystems (although the state fish stocking program will continue). Relationships between native and exotic species will be studied, especially when there seems to be a conflict. Where appropriate, the Department of Natural Resources and National Park Service will work cooperatively to control or remove populations of exotic organisms to protect threatened native species and/or ecosystems or to reduce damage to cultural resources. This could entail physical removal, chemical





- NATURAL ZONE
- HISTORIC PRESERVATION ZONE
- DEVELOPMENT ZONE
- VISITOR USE SUBZONE
- ACCESS/CIRCULATION SUBZONE

ONLY LANDS PROPOSED FOR FEDERAL ACQUISITION ARE SHOWN

# NPS MANAGEMENT ZONES

## NEW RIVER GORGE NATIONAL RIVER

UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

control, habitat manipulation, or other methodologies. Any chemical control would be performed in strict accordance with federal and state safety and water quality standards and only if other methods are not feasible or effective.

Recreational hunting of game will be permitted in accordance with state regulations, with the exception of jointly designated limited closures for reasons of public safety or wildlife preservation. The National Park Service and the Department of Natural Resources will provide enforcement. General federal regulations prohibit trapping on federal lands and waters within natural areas of the National Park System and this park's establishing legislation does not specifically provide for it. When necessary, animals hazardous to the public welfare will be controlled.

State fish-stocking programs will continue; rates, methods, and/or species stocked may be altered by the Department of Natural Resources, in consultation with the Park Service, to conserve habitat or other organisms. The National Park Service and the Department of Natural Resources may prohibit fishing in certain waters at certain times to protect spawning grounds of endemic fish or to protect rare, threatened, or endangered plants and animals in the waters or in adjacent habitat.

The National Park Service and the Department of Natural Resources will identify the occurrence, distribution, and critical habitat requirements of federally or state-listed threatened or endangered species found within the national river boundary and may initiate management programs to benefit them. These could include research to determine critical habitat needs, manipulation in favor of rare organisms, removal of exotic competitors, restrictions on use and disturbance of the habitat area, and monitoring of population levels. Background research, involving the U.S. Fish and Wildlife Service, the Department of Natural Resources, and local universities, should include conducting an extensive literature search and basic field research.

Mineral Resources. The National Park Service will work to ensure that the park receives the full degree of local, state, and federal regulatory program protection from the impacts of mining, oil and gas development, or other resource extraction activities on public or private land within or adjacent to the boundary. Staff levels will be adequate to fully enforce relevant regulations. Operations plans for the exercise of nonfederal oil and gas rights where access is on, across, or through federally owned or controlled lands or waters must be approved by the Park Service regional director before any activity related to exploration or production may begin.

When acquiring land, the National Park Service will consider acquiring mineral rights together with surface ownership. This will be evaluated and negotiated on a case-by-case basis.

Air Resources. Baseline air quality data will be acquired to determine normal background levels of regulated pollutants. Existing monitoring data will be used and, if necessary, an air quality monitoring program will be initiated. This information will enable the service to evaluate any

proposals for new emitting facilities on adjoining lands and determine whether the legal pollutant increments for class 2 areas would be exceeded. The National Park Service will seek to prevent any deterioration of air quality in the gorge through active involvement in the reviewing, commenting, and consulting phases of any future projects proposed for land within or adjacent to the national river boundary. It will also support state air quality improvement programs and the state implementation plan.

### Cultural Resources

Approach to Preservation. Several significant historic sites and structures within the national river boundary merit preservation. The Kaymoor mine and lower townsite and the Thurmond depot will be acquired, stabilized, and interpreted. A cooperative approach involving private landowners, local organizations, the Raleigh and Summers counties historic landmark commissions, and state agencies the may achieve preservation goals at other sites. Educational programs and technical assistance will encourage preservation, stabilization, use, and, when appropriate, nomination by the landowner to the National Register.

When there is no cooperative agreement or acquisition and landowners intend to remove or allow the deterioration of significant structures, the Park Service will request that it or an interested historical organization or individual first be allowed the opportunity to record them.

Of particular concern at this time are the Chessie System roundhouse in Hinton and other railroad properties which are threatened with destruction. The National Park Service will work with the state historic preservation officer and provide technical assistance to any local groups that organize to save or record the resources.

An artifact collection will be maintained at park headquarters.

Abandoned Mines and Towns. The Kaymoor site in Fayette County, including the former coal mine and associated company town, will be acquired by the National Park Service and nominated to the National Register. A collection of industrial structures--the tipple, the powerhouse, and numerous coke ovens--survive here with greater physical integrity than at any other abandoned mining site in the gorge except Nuttall. Kaymoor is preferred for preservation because it is better located for public access than the Nuttall mine (Kaymoor is adjacent to Fayette Station and Long Point, lands which the National Park Service will acquire for recreation and resource protection purposes). The headhouse at the mine entrance will be stabilized and all mine entrances will be sealed. The coal tipple will be stabilized, as will the interconnected stone structures at the tipple site (which served as a powerhouse and equipment storage area), the coke ovens, the company store, and any substantial remains of domestic structures located at the town site. Stabilization work will be preceded by preparation of a detailed historic resource study, including a historic structures report. The area will be cleared of timber and other vegetative cover as necessary for stabilization purposes and to prevent further deterioration.

Discarded machinery and other objects abound at the site; these will be collected, cataloged, and stored (for eventual interpretation), or left as exhibits-in-place, as preservation concerns and safety requirements dictate. Access, circulation, and interpretation at Kaymoor are described under "Visitor Use and General Development."

The National Park Service will seek a cooperative agreement with the owners of the Nuttall mine to ensure its preservation. The goals of the agreement would be to prevent vandalism; study and record the site; stabilize the conveyor system, chute, headhouse; and encourage safe public access. It is recommended that the Nuttall mine site be nominated by the landowner to the National Register of Historic Places.

The Sewell mine and coking site adjacent to Babcock State Park is also of National Register quality. Preservation of the site will be sought through the terms of a cooperative agreement with the landowner. If possible, the coke ovens and remains of domestic structures will be stabilized, the site will be signed and patrolled to prevent vandalism, and public access will be provided.

A similar agreement will be sought regarding the buildings at the Beury townsite.

Historic Buildings in New River Communities. The National Park Service will acquire the C&O railroad depot at Thurmond. The structure will be nominated to the National Register of Historic Places as part of a historic district embracing railroad, commercial, and domestic architecture in Thurmond. The depot, built around the turn of the century, is directly associated with the coal-mining period of New River's history. Thurmond was the commercial center of the gorge, and the depot regularly received and dispatched a stream of businessmen, industrialists, and laborers who filled the gorge with activity from the 1890s to the World War II era. The depot will be preserved and a portion of the building will be adaptively used for NPS operations. Treatment will be guided by a historic structures report. Existing railroad-related uses of the building can continue. A more detailed description of NPS operations in the depot is provided under "Visitor Use and General Development."

A cooperative agreement similar to those described earlier will be sought for the Beury monument and iron furnace in Quinnimont.

Prehistoric Archeological Sites. Known prehistoric archeological sites have not been identified for NPS acquisition solely for the purposes of preservation or interpretation. Rather, archeological values on private lands will be protected by directing visitor use and development away from sites identified, in a 1980-81 archeological assessment prepared for the National Park Service and from those found in future surveys. However, if significant archeological resources, such as any of the 34 National Register-eligible sites, are threatened with destruction, the National Park Service will consider acquisition or other protective action.

If land acquired by the National Park Service for other purposes should be found to contain significant archeological sites, appropriate steps will be taken to protect or excavate them. Ground-disturbing activities on



NPS lands, such as construction of trails, campgrounds, and improved river access points, will be conducted in accordance with NPS standards and procedures for archeological protection.

Research Program. The primary value of many cultural resources in New River Gorge is their potential to yield information important in the study of history and prehistory. Recording is often the most effective form of preservation, especially when deteriorated structures have lost their interpretive value yet still illustrate land use patterns, industrial technological systems, and the like. Therefore, the National Park Service will conduct historical, archeological, and architectural research and recording and will encourage private landowners, regional historical societies, and the West Virginia state historic preservation office to do additional work.

In addition, an ongoing oral history program will record the irreplaceable recollections of area residents.

#### VISITOR USE AND GENERAL DEVELOPMENT

People come to New River Gorge to enjoy the scenery, water, forests, history, geology, and wildlife in a variety of ways. Some pursue a single experience such as a whitewater rafting trip while others participate in a variety of activities such as fishing, hiking, camping, and sightseeing. Implementation of the plan will enhance their experiences by providing information and facilities describing the resources and by managing activities for optimum visitor enjoyment.

The National Park Service and the Department of Natural Resources will cooperatively manage boating for visitor enjoyment, safety, and resource protection. Levels of use or new or unusual forms of recreation (such as hang gliding, rock climbing, dirt bicycling) will be managed to avoid problems of visitor safety, conflicts between uses, or resource impacts.

Development in the plan will improve access to the river, provide public boat launching, and increase opportunities for activities such as hiking, picnicking, and shoreline camping for boaters, hikers, and anglers.

Recreation game hunting and fishing will continue under state regulation; no additional federal license will be required. Access for these activities will be enhanced significantly by greater access for float fishermen, who will be provided more boat launches and associated support facilities, and for bank fishermen, who will have access and significant amounts of federally owned land along the riverbanks from which to fish without being in trespass.

Information at key locations will help people learn what opportunities are available and plan their visits. This will be supplemented by a variety of activities at scattered locations, all designed to help visitors understand the area's natural, scenic, and historical values and more fully enjoy their stays.

## River-Based Recreation

River use will be managed jointly by the National Park Service and the Department of Natural Resources under the state's existing management system. Goals will be providing the opportunity for high quality river recreation experiences and minimizing adverse impacts on the natural, cultural, and scenic qualities of the river environment. Visitor activities whose benefits and enjoyment are derived from the natural features and character of the area will be promoted.

A realistic level of visitor use, or carrying capacity, will balance concerns for resource preservation and visitor enjoyment. The determination of river carrying capacity requires extensive site-specific studies. Data on current river use levels and user attitudes are being collected. Additional physical, ecological, and social factors affecting river users and natural resources are also being assessed. The National Park Service and the Department of Natural Resources will survey the activities of all major user groups (bank fishermen, boat fishermen, commercial outfitters and customers, private rafters, kayakers, and canoeists). This study will form the information base for a river management plan that is to be completed by 1984. Carrying capacities and management programs designed to minimize user conflicts and eliminate adverse impacts to the river environment will be developed as part of that plan.

The river management plan and an ongoing monitoring program will provide the data base on which to refine joint management practices periodically.

The characteristics of the river corridor, which naturally favor certain activities and limit others, will help minimize user conflicts and maintain an acceptable experience. The National Park Service will work to resolve existing conflicts among commercial outfitters, fishermen, and private boaters, particularly when safety is involved. If necessary, the agency will also encourage discussions among commercial outfitters that would seek to eliminate conflicts through scheduling of trips (e.g., departure times, etc.).

The National Park Service will initiate a comprehensive river safety program, utilizing education and public contact at river access points and in area communities. Local news media will be encouraged to participate. Accident prevention efforts will be supplemented by the development of river rescue capabilities. The Park Service will cooperate closely with commercial outfitters, private organizations, state and local agencies, and other interested parties to ensure the success of these programs.

The National Park Service will acquire land at Ames, below the last major rapid, and build a boater access facility that will serve as a take-out for whitewater enthusiasts and a put-in for those who wish to float the pool to Hawks Nest. Existing road access to Ames from West Virginia 82 will be improved, and parking, a comfort station with changing area, and a picnic area will be built at the upper part of this development. The loading area will be reached from the river by a pedestrian walkway under the railroad tracks.

If private land at Fayette Station becomes available, it will be acquired. If this precedes development of the Ames site, an interim public take-out point may be established. After Ames is developed, the Fayette Station location will be developed for picnicking, sightseeing, and fishing, thus minimizing congestion by separating boating- and nonboating-related activities.

A second major river access facility will be developed at Stone Cliff, providing a public access point just above Thurmond. It will have a boat put-in/take-out area, a comfort station with changing rooms, parking, and a nearby picnic area. River information will be available.

Smaller river access facilities will be upgraded or developed at Brooks Falls, Sandstone Falls, Meadow Creek, and Grandview Sandbar; each will have gravel parking, boater access facilities, and vault toilets.

These areas will provide safe, convenient public access to all sections of the river and will provide the National Park Service the opportunity to provide interpretation, to advise river users of regulations and safety considerations, and to help control litter and sanitation problems.

#### Land-Based Recreation

Sightseeing, picnicking, hiking, horseback riding, fishing, hunting, camping, and lodging will be available at federal developments, state parks, and private developments. The plan will enhance and expand some of these, particularly day use activities.

The automobile will continue to be the major mode of access to New River Gorge. Most use will occur at the northern end of the national river because of better road access; more people will get to the southern section upon completion of I-64.

The spectacular scenery of New River Gorge offers excellent sightseeing, especially from the rim. Existing overlooks at Canyon Rim, Grandview State Park, Sandstone Falls, and Brooks Island offer broad vistas that attract many visitors; the later two will be upgraded to provide interpretation of the river's geologic story. For inner gorge sightseeing in private autos, use of the Thurmond-to-Prince road, which runs via Thayer and McKendree, will be encouraged. Another opportunity to view the gorge could be from an existing maintenance catwalk underneath the U.S. 19 bridge near Canyon Rim. The catwalk is currently closed to public use; however, the National Park Service will investigate the feasibility of safe visitor access with the West Virginia Department of Highways.

Picnicking, fishing, and sightseeing will be encouraged in the Canyon Rim-Fayette Station area. There will be a visitor center (described later) and picnic area at Canyon Rim. West Virginia 82 leading from there to the river will be improved and a turnaround and limited parking will be built at the bottom. The road will be open to vehicles the year around, but a seasonal shuttle bus will be operated by a concessioner to reduce congestion during the summer season. The West Virginia 82 bridge at the

100

*Schizothorax*

SHUTTLE BUS TO TURNAROUND AT VA-82 BRIDGE  
PARKING

BOAT TAKE-OUT, COMFORT STATION  
ONE WAY LOOP ROAD, RAMP, STEPS  
PEDESTRIAN WALKWAY UNDER R R  
PICNIC AREA  
PARKING

AMES  
BOAT TAKE-OUT, COMFORT STATION  
ONE WAY LOOP ROAD RAMP, STEPS  
PEDESTRIAN WALKWAY UNDER RR  
PICNIC AREA  
PARKING

## FAYETTE STATION

**FAYETTE STATION**  
 DAY USE & POSSIBLE INTERIM TAKE OUT  
 SEASONAL CHILLIE SERVICE  
 MAINTAINANCE 82 & 101 OF BROAD  
 FOR FILL WATER  
 BUCK AREA

## CUNARD

CONARD  
JAMES A. CONARD  
JAMES A. CONARD  
JAMES A. CONARD  
JAMES A. CONARD

TRAIL TO HERMOND

TRAIL TO HERMOND

THE AQUARIUMS  
ADMINISTRATION  
MAINTENANCE

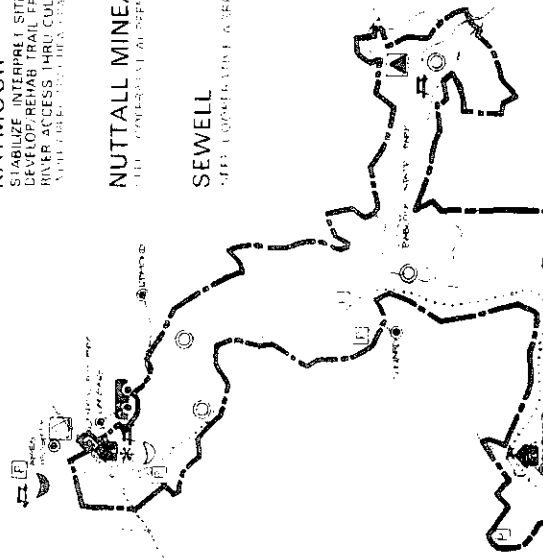
THE AQUARIUMS  
ADMINISTRATION  
MAINTENANCE

## BABCOCK STATE PARK

**BABCOCK STAIR**  
EXISTING LAMP/BEAM  
EXISTING FLOOR AREA  
EXISTING REINFORCED WALL  
EXISTING LODGING, CAPRINS

## BEURY

## BEARY SISK COOPERATIVE AGREEMENTS FOR PRESERVATION



**McKENDREE**  
INTERPRET HOSPITAL

**GRANDVIEW SANDBAR**

RANGER KIOSK  
BOAT PUT-IN/TAKE-OUT  
PARKING  
VAULT TOILET

**CAMP PRINCE**  
PROVIDE PUBLIC ACCESS

**GRANDVIEW STATE PARK**

EXISTING PICNIC AREA  
EXISTING AMPHITHEATER  
EXISTING SCENIC OVERLOOKS

**MEADOW CREEK**  
BOAT PUT-IN/TAKE-OUT  
PARKING  
VAULT TOILET

**STONE CLIFF AREA**  
RANGER KIOSK  
BOAT PUT-IN/TAKE-OUT  
PARKING AREA, COMFORT STATION  
PARKING

**PRINCE/QUINNIMONT**  
SEEK COOPERATIVE AGREEMENTS TO PRESERVE  
BLISS MONUMENT & IRON TURNACE

**GLADE CREEK**  
PRIMITIVE AREA  
PRIMITIVE CAMPGROUND  
TRAILS, TRAILHEAD PARKING  
CLOSE ROADS  
VAULT TOILET

**CHESTNUT**  
PRIMITIVE CAMPGROUND  
VAULT TOILET

**SANDSTONE FALLS**  
PICNIC AREA  
PICNIC AREA, PUT-IN/TAKE-OUT  
LOOP TRAIL AROUND FALLS AREA  
PARKING  
VAULT TOILET

**SANDSTONE OVERLOOK**  
EXISTING OVERLOOK (STATE)  
EXISTING PICNIC AREA (STATE)

**BROOKS AREA**  
EXISTING SCENIC OVERLOOK (STATE)  
BOAT PUT-IN/TAKE-OUT  
PARKING  
VAULT TOILET

**HINTON**  
VISITOR CONTACT/RANGER STATION IN STOREFRONT  
EXISTING BOAT PUT-IN/TAKE-OUT

## LEGEND

EXISTING ROAD

EXISTING 4WD ROAD, HORSES,  
FISHING, HUNTING, BOATING

FOOT TRAIL

FOOT AND HORSE TRAIL

BOAT PUT-IN/TAKE-OUT, FISHING ACCESS

VISITOR CONTACT STATION OR  
RANGER STATION

PARK HEADQUARTERS

PRIVATE BOAT PUT-IN/TAKE-OUT (COMMERCIAL)

ALL FACILITIES ARE PROPOSED EXCEPT WHERE NOTED



PRIMITIVE CAMPGROUND

PICNIC AREA

PROTECTED CULTURAL RESOURCE

SCENIC OVERLOOK

DEVELOPED CAMPGROUND

PRIVATELY OPERATED CAMPGROUND

AMPHITHEATER

PARKING AREA



0 1 2 3 4 5  
KM

# THE PLAN GENERAL DEVELOPMENT NEW RIVER GORGE

# NATIONAL RIVER

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

637/20013A  
DSC MAR 82

bottom will be improved for pedestrian use by visitors who wish to enjoy the excellent views of the high bridge and the tumbling river.

A picnic area, parking, improvements to the west spur of West Virginia 82, and a trail link to Kaymoor will be built on the west side at Fayette Station if the Park Service is able to acquire developable land. NPS control of this land will increase flexibility in managing the area, so circulation patterns and improvement of the bridge for auto traffic will be reevaluated upon acquisition.

Opportunities for picnics will continue at Babcock and Grandview state parks and at Sandstone Overlook. This will be expanded by the new picnic areas already mentioned at Canyon Rim, Fayette Station, and Ames, and additional ones at Grandview Sandbar and Stone Cliff. The campground at Sandstone Falls State Park will be converted to a day use picnic area in an effort to reduce the unacceptable level of human impact on the site.

The existing trail from the Wolf Creek parking area to Cunard via the Kaymoor headhouse and the railroad grade from Cunard to Thurmond will be connected, brushed, and realigned for use by hikers and horses, a distance of about 14 miles. The railroad grade from Minden to Thurmond will be maintained as a trail. Existing trails and the existing road segment at Glade Creek will provide foot and horse access to the natural area and for fishing. A short trail (less than 2 miles) will be constructed at Sandstone Falls; the existing one at Canyon Rim will be maintained. There will be trailhead parking at Wolf Creek, Cunard, Minden, and Glade Creek. Additional trail construction is anticipated in the future as funding is available for day labor projects.

The National Park Service will provide 20-site walk-in/boat-in primitive campgrounds at or near Chestnut, near the mouth of Glade Creek, and near Silo Rapids. Camping will also be permitted on federally owned riverfront land as long as no unacceptable impacts result. Camping will be managed to disperse use, minimize damage from vehicle use, control length of stay and use of semi-permanent structures, and minimize user conflicts. Existing state and private campgrounds are anticipated to continue operations and private campground development outside the national river boundary will be encouraged.

Food, gasoline, lodging, and souvenirs will also continue to be available at existing businesses. New services should be in existing developed areas rather than in scattered locations. Some communities within or adjacent to the boundary are well-suited locations to offer visitor services and, concurrently, the economic activity generated by those services can help to save the special features present. For example, Hinton has architectural charm and a strong sense of history that are both compatible with the national river; some of the historic buildings in the town center would be logical sites for visitor-related businesses.

Kaymoor will become the focal point for interpretation of early day coal-mining technology and mining history because its mine complex is in comparatively stable condition and it has several significant features not preserved elsewhere in the gorge. The structures will be stabilized and

protected as described under "Cultural Resources," and each will be interpreted. Overall access will be from the river for boaters and from the Wolf Creek trailhead via the existing north-south trail to the mine entrance for hikers. At the site, a new, 500-foot-long trail running roughly parallel to the coal conveyor system will lead from the headhouse to the tippie and will continue to the coke ovens and the remains of town. A connecting trail will lead hikers back up the side of the gorge to the headhouse and mine entrance. The existing culvert beneath the railroad right-of-way will be upgraded for pedestrian circulation between the river and water intake structure on one side of the railroad tracks and the town and mine on the other. A vault toilet will be placed in the area. Kaymoor will be signed and patrolled by the National Park Service. Interpretation will be accomplished by unstaffed exhibits and roving staff members.

The National Park Service will encourage the C & O Railroad to cooperate with a local business or nonprofit group (such as a chamber of commerce) to offer train excursions through the gorge. Such rail tours could be provided on heavy use weekends, during the fall foliage season, and for special events, and could highlight the natural and cultural resources of the gorge. The National Park Service would provide on-train interpretive service.

Roads on the West Virginia Department of Highways inventory will continue to be managed by that agency, including U.S. 19; Fayette County 25; West Virginia 82, 20, and 21; Raleigh County 26; and Summers County 7. As described earlier, West Virginia 82 will be improved and seasonal shuttle service will be started between Canyon Rim and Fayette Station. The National Park Service will purchase an access easement along the privately owned four-wheel-drive dirt road to Cunard to ensure public access; there will be trailhead parking and a vault toilet at the top and limited parking for four-wheel-drive vehicles at the bottom. As at present, the Kenneys Creek, Sewell, and Fire Creek roads will be accessible at the landowners' discretion.

Unimproved roads serving the mouth of Glade Creek from Plumley Knob and Mill Creek will be closed and converted to trails upon purchase of that land in order to protect the outstanding condition of the drainage. Trailhead parking will be provided near Mill Creek.

I-64 is currently under construction in the region; upon completion it will provide a route between Norfolk and St. Louis, and will undoubtedly bring significant amounts of additional traffic to the park area. I-64 will cross New River Gorge near the community of Sandstone. Interchanges are currently planned at Sandstone, near the river on the east side, and at Bragg, beyond the rim on the west side. In 1981, the West Virginia Department of Highways studied three alternative I-64-related developments that could provide park visitors access to Sandstone Falls and other upstream recreation areas. They included adding an interchange at river level on the west side and upgrading Raleigh County 27/2 to Sandstone Falls park; construction of a second low bridge from the east side Sandstone interchange to the same road; and connecting the Bragg interchange to Sandstone Falls by upgrading Raleigh County routes 27, 26/1, and 26 to Sullivans Knob and constructing a new road down the

mountain to Sandstone Falls. Further impact assessment is necessary and cost will be a major factor; the National Park Service will explore the subject further with the Department of Highways.

### Interpretation

A major goal of the national river is to help visitors understand and enjoy the natural, historic, and scenic values being protected--an activity generally called "interpretation."

Interpretive activities at various locations in the park will concentrate on certain themes that can be observed in the area. Natural history themes will include the geology of the river and gorge (including mineral deposition and erosion) and the area's vegetation. Cultural history themes will include human occupation of the area (prehistoric, historic, and contemporary), railroad and mining history and methods, and the growth and decline of river communities. Also treated will be the relationships among these themes. For example, the coal seams in the gorge (geologic structure) brought the greatest numbers of people and early industrial development to the area.

The National Park Service will provide interpretation through many activities, such as lectures, guided historical or nature hikes, self-guiding walks, slides, films, publications, exhibits, fishing clinics, and special events. These activities will be centered at the contact stations in order to orient as many visitors as possible, and then extend from these points throughout the gorge.

Interpretive information will also be provided at activity sites such as boater access points and at specific sites of interest such as the store at Prince, the hospital ruins in McKendree, or Sandstone Falls. Signs, guidebooks, or ranger-led activities could be used.

A cooperating association will be established to produce and sell interpretive and informational literature that will enhance visitors' experiences and their understanding of the resources. Sales outlets will be located at contact stations. Examples of topics of publications needed include maps, natural history, human history, recreation guides, and safety. They will vary in depth and level.

Interpretive services will be available for special events such as Bridge Day or commemorative railroad tours through the gorge operated by the Chessie System. On- and offsite educational programs for school groups will also be offered.

One important approach to interpretation will be through cooperation with the state and private groups. Close working relationships will be established between the National Park Service and state parks adjacent to the national river. Mutual benefits can be derived from joint training sessions, interpretive programs, and other exchanges of information and from joint use of property and facilities. Other joint ventures could include publications that both agencies can use, such as one on Sewell (adjacent to Babcock State Park).



Interpretative programs will be developed in cooperation with outfitters, many of whom have enthusiasm and a wealth of information that could help strengthen the interpretive experience for river recreationists.

Associations of private citizens, such as historical societies, nature clubs, and recreation groups, will be encouraged to provide interpretive and informational programs to the public.

### Visitor Contact

The major point of visitor contact for interpretation and information will be at Canyon Rim on heavily traveled U.S. 19. This location offers river access, outstanding scenic views, geologic features, the high bridge, and a glimpse at recreation opportunities and cultural features. An interim visitor contact station will be functional starting in 1983. The permanent facility, to be constructed later, will have orientation, information, and interpretive opportunities; an auditorium; public restrooms; staff offices; and parking. Exhibits will be designed to give an overall introduction to the area and may include a relief model of the gorge.

A smaller visitor contact area will be at the Thurmond depot. Thurmond is a prime historical site accessible by automobile and AMTRAK and is adjacent to the hub of commercial rafting activity. It is also an important place to provide river information, particularly on safety. The Park Service will acquire the historic depot and install a visitor contact station and a museum describing railroading, commerce, nearby coal mining, and local culture; a cooperative agreement can be negotiated if Chessie System and AMTRAK wish to continue their use of the depot. A railside storefront may be remodeled for visitor contact use during an interim period. The Park Service will develop parking facilities on the existing Chessie System railroad car storage yard on the Southside Branch.

Hinton will have a small visitor contact facility in leased space. A self-guiding booklet for walking tours may be written with the cooperation of the town or local historical organizations.

Small ranger kiosks will be at Stone Cliff and Grandview Sandbar, major river access sites. These booth-like structures will provide river use and safety information and will be staffed during heavy use periods.

An additional visitor contact area will be established to serve I-64 traffic. Its location will be determined as planning for the interchange(s) progresses.

### Visitation Projection

Based on the current visitation levels described under "Existing Conditions," projected visitation with the actions described in the plan is 2,010,400 in 1990. This prediction is based on a 7 percent annual increase in visitation.

## PARK OPERATIONS

The superintendent, division chiefs, and their staff support will be assigned to the headquarters facility to consolidate management functions and to promote effective communication within the agency, with outside agencies, and with the public. Park organization will be established along the four functions found in traditional areas of the National Park System: administration, visitor protection and resources management, interpretation and visitor services, and maintenance.

[ Park headquarters will operate in leased space in or near Oak Hill. Maintenance space will be leased or services will be contracted. ]

Field operations will be divided into districts headquartered in Hinton (extending to Prince/Quinnimont) and Thurmond (responsible for the area extending from Prince/Quinnimont to Ames). Additional personnel will be at Canyon Rim, and intermittently at Sandstone Falls, Grandview Sandbar, and Stone Cliff. A total of 25 permanent employees and 19 work-years of seasonal employment will be needed to protect the resources, provide visitor services, and operate facilities. They include:

✓ H Superintendent 1  
✓ H Secretary 1  
✓ H Administrative Officer 1  
✓ H Administrative Clerk 1

✓ H Chief Ranger — 1  
✓ H Resources Management Spec. 1  
Dist. Rangers - 2  
Park Rangers - 2  
Park Rangers (T) - 5 WY  
H Clerk Typist (T) - 1 WY

6+6

✓ H Chief Interpreter — 1  
7 ✓ H District Interpreters - 2  
Park Rangers - 4 - 4 14

✓ H Facility Manager — 1  
Maintenance Foremen - 2  
Equipment Operators - 2  
Maintenance Mechanic - 1  
Maintenance Workers - 2  
Laborers - (T) - 6 WY

8+6

✓ H Park Rangers (T) - 6 WY  
H Clerk-Typist (T) - 1 WY

Land (6)

(T) - Temporary or seasonal employees  
WY - Work Year Equivalent

Day-to-day protection of resources and visitors will be provided by park rangers. Interpretation and information services will generally be provided by park interpreters at visitor contact facilities, special interest sites, and on roving patrol.

Law enforcement and visitor education programs that enhance appreciation of the natural and cultural features of the park will reduce the likelihood of increased visitation leading to vandalism, trespass on private land, and illegal taking of timber.

The National Park Service will provide signs advising the public of the flood hazard and denoting the high-water limit at any facilities located on the 100-year floodplain. In addition, the Army Corps of Engineers will

be asked to notify the superintendent before unusually high-volume releases from Bluestone Dam; National Park Service personnel will then notify visitors of the impending release and evacuate or close necessary areas in accord with an evacuation plan developed with the Corps. Evacuation routes will be via the same trails and roads by which access was achieved. All access roads and trails will be designed on a steadily descending grade to shore so that no portions of the routes will be cut off by high water. High ground, well above historic peak stages, is immediately accessible from shore at all points along the river because the floodplain is quite narrow and the adjacent slopes are steep.

The National Park Service will develop and maintain adequate emergency service capabilities (personnel, equipment, and training) in the fields of search and rescue, fire control, law enforcement, and emergency medical services to ensure the protection of visitors, resources, and NPS facilities on federal land within the boundary. However, the national river's irregular boundary, limited road access, and mixture of federal, state, and private land ownership will require cooperative efforts to provide adequate levels of protection and emergency services on other lands within the park; the National Park Service will take the initiative to develop such necessary agreements and cooperative working relationships.

The National Park Service will also seek authorization for park rangers to enforce West Virginia law on private land within the boundary in order to assist local agencies in emergency situations. The National Park Service will exercise concurrent jurisdiction with the state of West Virginia on federal lands (including the river) within the boundary.

The National Park Service will maintain a radio communication system capable of meeting routine and emergency operational needs; repeater sites will be established and maintained outside the national river boundary and cross-communication capabilities may be developed with cooperating agencies.

Future requests for utility and pipeline rights-of-way will be reviewed in accordance with National Park Service and Department of the Interior policies and regulations. Objectives in reviewing and approving utility and pipeline rights-of-way are to

- protect resources
- prevent unnecessary and undue environmental damage
- promote utilization of common rights-of-way
- coordinate state, local, and quasi-public entities

Signing will be at the minimum level necessary for information and interpretation of the national river.

Artifact collections and archival materials will be professionally curated. A library, scientific and historic collections, slides, and photographs will be maintained for park, public, and scholarly use.

Outreach services and cooperative activities will be encouraged with schools, colleges, state parks, cultural institutions, volunteers, civic groups, etc.

All facilities will be operated in accordance with an approved energy conservation plan.

The National Park Service will cooperate with state and local agencies responsible for solid waste disposal and wastewater treatment to mitigate the impacts of national river facilities and visitors on utility and disposal systems. In addition, the Park Service will help alleviate the impacts caused by park visitors on the road system by helping to maintain West Virginia 82 within the boundary and the Thurmond-to-Prince, Hinton-to-Sandstone Falls, and Glen Jean-to-Thurmond roads. The Park Service will develop safe and adequate water supply systems at its development sites, thus placing no additional strain on existing facilities and causing no degradation of water quality in the gorge.

Any facility installed adjacent to the railroad will include adequate warning signs and safe crossings (to be achieved by cooperative agreement).

Some closed roads will be accessible for operations purposes, such as fish stocking in Glade Creek or campground maintenance.

## LAND PROTECTION

### Introduction

Section 1103 of the legislation authorizing New River Gorge National River calls for a detailed plan to indicate

- the lands and areas which the secretary deems essential to the protection and public enjoyment of the natural, scenic, and historic values and objects of the national river

- the lands which he has previously acquired by purchase, donation, exchange, or transfer for the purpose of the national river

- the annual acquisition program (including the level of funding) which he recommends for the ensuing four fiscal years

- the feasibility and suitability of including within the boundary of the national river the section of the New River from Fayetteville to Gauley Bridge

A draft land acquisition plan for the national river was prepared and reviewed with the public during 1980. However, in order to provide greater conformity to general management plan recommendations and to address current Department of the Interior policy, that plan is being redrafted as the "land protection plan" and will be completed in 1983. The objectives of that plan and some specific recommendations it will contain are described in this section; a preliminary version of the full plan will be available for public review before its finalization.

Approximately 62,000 acres of land are within the national river boundary. Of this total, approximately 4,800 acres are owned by the

state of West Virginia (including three state parks) and 538 acres are owned by the National Park Service. Another 1,500 acres of land are included in developed communities such as Thurmond, Thayer, Terry, etc. The remainder is privately owned and primarily unimproved, with the exception of the Chessie System right-of-way, two coal preparation plants, and one surface coal mine.

This section will describe a series of land protection measures; they are designed

- to assure the preservation of the most significant cultural, natural, and scenic resources

- to provide for access to the river and compatible public use of adjacent lands

- to utilize cost-effective measures compatible with park management needs

- to encourage local, state, and private preservation and cooperation

Only those lands needed to develop NPS facilities, to allow for public use, or that are threatened with uses that will degrade the overall value of the park will be acquired in fee; other protection will be afforded by less-than-fee acquisition, county land use regulations, or cooperative management techniques.

When the land transactions are accomplished, the breakdown of acreage within the park boundary will be:

Existing NPS lands	538
Additional NPS fee simple acquisition	10,500
Easement acquisition	2,500
State lands available for donation	225
Private land donations anticipated	1,200
Lands remaining in state ownership	4,528
Private ownership (no interest acquired)	39,662
Water	<u>2,870</u>
	62,023*

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\*Does not reflect boundary changes listed later in this section because exact acreages are not yet known. Overall effect of boundary changes will be to decrease overall acreage of the national river by more than approximately 10 percent.

#### Recommendations for Privately Owned Lands Within and Adjacent to Boundary

NPS Concerns and Objectives. Unlike most traditional national parks in which most land is owned by the federal government, substantial areas at

New River Gorge National River will remain in private ownership, use, and management. The National Park Service is concerned about the types of land uses that occur within and adjacent to the national river boundary.

Of greatest concern is uncontrolled growth on undeveloped lands to which new visitor-oriented services and new residents will be attracted. Also of concern are developed lands which could be converted to more intensive use. Uncontrolled growth could change both the local lifestyle and the rural character of the area. This growth is most likely in three types of areas: settlements where people and structures are concentrated (including Hinton, Brooks, Sandstone, Meadow Creek, Quinnimont, Prince, Terry, Thayer, and Thurmond); lands adjacent to these settlements that are substantially undeveloped and currently characterized by single family residences, agricultural land, and woodlands; and private lands adjacent to the park boundary and along the major access roads, also currently characterized by minimal highly visible, tourist-oriented development.

NPS authority on such private lands is limited, however establishment of the national river by Congress does establish an inherent national interest in these lands due to their ability to affect the resource and recreational values of the park. The National Park Service will attempt to prevent incompatible land uses or to minimize their impacts. The legislation establishing New River Gorge National River authorizes the secretary of the interior or his representative to assist and consult with local and state agencies to establish zoning laws and ordinances that would help protect the national river by

- restricting incompatible commercial and industrial use of all real property in or adjacent to the gorge area

- aiding in preserving the character of the gorge area by appropriate restrictions on the use of real property in the vicinity including, but not limited to, restrictions upon building, construction, and demolition of all types; signs and billboards; the burning of cover; cutting of timber; removal of topsoil, sand, or gravel; dumping, storage, or piling of refuse; or any other use which would detract from the aesthetic character of the gorge area

Consistent with this direction, the National Park Service will encourage the preparation and adoption of land use regulations (where they do not exist) for lands within and adjacent to the national river which will

- conserve and interpret outstanding natural, scenic, and historic values and objects in and around the New River Gorge for the benefit and enjoyment of present and future generations

- protect and improve the current levels of environmental quality in the areas of water, air, noise levels, and aesthetics

- maintain and encourage economic opportunities which strengthen and enhance the local and regional economy and are compatible with the park

prevent the deterioration of natural resources caused by recreational overuse, water pollution, incompatible land use, or excessive vehicular traffic

preserve the scenic landscape patterns of the river corridor

provide outdoor recreation opportunities in a near natural setting

develop management strategies, site practices, and appearance standards necessary to maintain the positive qualities of the natural and man-made environment

maintain the wooded, rural character of the area

maintain the existing character of the settlement areas

encourage historic preservation

encourage clustering of new development in appropriate locations

Technical Assistance. The National Park Service will, upon request, provide technical assistance to any citizen group or town or county entity in getting efforts underway which would lead to these goals. For example, some Hinton residents have indicated interest in establishing a historic district, which would protect the community's historic values, preserve its buildings as tourist attractions, and possibly qualify the owners for special tax incentives. In addition, Fayette County residents have described zoning goals that are not currently in their ordinances. National Park Service land use planning professionals could be available to such groups on a consulting basis.

Land Use Management Methods. Land use can be managed at various governmental levels: local, state, regional, or federal. Possible approaches to land use management range from land acquisition and tax incentive programs to regulatory controls such as zoning. Several methods that municipalities and counties within and adjacent to New River Gorge National River may want to consider are listed in appendix C.

Land Use Management Recommendations. Based on the Congressional request that the National Park Service work with local agencies to achieve private land use compatible with the national river, it is recommended that

Fayette County continue existing policies and continue enforcing the land conservation district in the zoning ordinance; incorporate the purposes, goals, and management objectives discussed earlier in its land conservation district; and suggest that Thurmond adopt land use regulations (the community could define use districts that correspond to the existing county ordinance and then ask the county to assume responsibility for implementation and enforcement)

Raleigh County continue its current comprehensive planning process and ensure the protection of national river resources

Summers County appoint a planning commission to prepare a comprehensive plan that ensures the protection of national river resources

### Acquisition of Essential Areas

The National Park Service must acquire certain lands in order to comply with the mandates of the national river's enabling legislation. Land proposed for development of visitor use and river access facilities or sites and land containing the most significant natural and cultural resources will be acquired in order to provide full opportunity for public use and resource protection. Acquisition methods may include donation, land exchange, condemnation, or purchase. However, condemnation is the least-preferred method and cannot be invoked on residential, agricultural, or commercial land unless incompatible changes are imminent. All purchases will be made at fair market value. Essential public access may be secured by easements. Where necessary, mineral rights may be acquired together with the surface.

The properties listed in this section will be acquired, but the list is not in priority order because availability, funding levels, resource threats, and development schedules will cause that order to change. Acreages are approximate. All are shown on the Land Acquisition and Boundary Adjustments map.

#### Private Lands.

Riverfront Land--NPS acquisition of undeveloped riverfront property outside existing communities will ensure the protection of riverfront land along a significant portion of the river and will provide for general public access to that land. Acquisition of approximately 1,500 acres of privately owned land in this narrow corridor will afford protection and public use of almost 80 miles of shoreline.

Ames--The acquisition of approximately 300 acres will provide a suitable put-in take-out for river users and provide additional protection of the visual corridor of the gorge. The Ames takeout will add one set of rapids to trips and will separate boaters and other users. Action will necessitate a downstream boundary extension of approximately 1.3 miles on the east side of the river.

Fayette Station, West Side--Two properties are involved. First, acquisition of a 9-acre parcel directly beneath the New River Gorge bridge will allow development of facilities for Fayette Station visitors to fish, picnic, and sightsee after development of Ames. If it is acquired before Ames is developed, it may be used as an interim public take-out. The land is improved commercial property. Second, approximately 2,400 acres of highly scenic property are the focus of a large percentage of the existing visitor use in the Fayetteville and Canyon Rim areas. Included is the major portion of the vista seen from the Canyon Rim overlook, Long Point, and the historic Kaymoor Mine and associated company town. The Fayette Station road (West Virginia 82) provides access through the property from U.S. 19 to the river. The land's natural and scenic values are currently threatened by a commercial timber operation which is



scheduled to remove a minimum of 1 million board feet of timber over the next two years. NPS acquisition will ensure protection of the property's natural, scenic, and historic values and provide for well-managed public use of this highly sensitive area.

Fayette Station, East Side--NPS acquisition of approximately 500 acres will protect the scenic values of the land surrounding Canyon Rim, the New River Gorge bridge, and the balance of the vista from the overlook at Canyon Rim. This property is adjacent to the 3-mile portion of the Fayette Station road that provides river access from U.S. 19 and includes the Fern Creek drainage, with its scenic waterfalls.

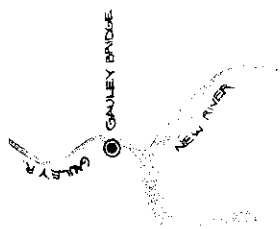
Grandview Sandbar--This 130-acre parcel is the only road-accessible riverfront property in the Prince/Quinnimont/McCreery area large enough to accommodate public facilities for river users without disturbing existing private residential or recreational developments. The National Park Service will develop river access and picnic facilities. Because the property is contiguous to Grandview State Park, acquisition would result in the protection of resources and the management of visitor use from rim to river in this part of the gorge. Access rights from West Virginia 41 will be acquired.

Humphrey's Bait Shop, Thurmond--Acquisition of this 2½-acre riverfront property located at the west approach to the Thurmond bridge will allow the National Park Service flexibility in providing public river access, interpretation, and adequate parking facilities to support other planned services in the Thurmond area. Although the property is developed, the two existing structures are not in good condition. Acquisition can occur only with the consent of the landowner.

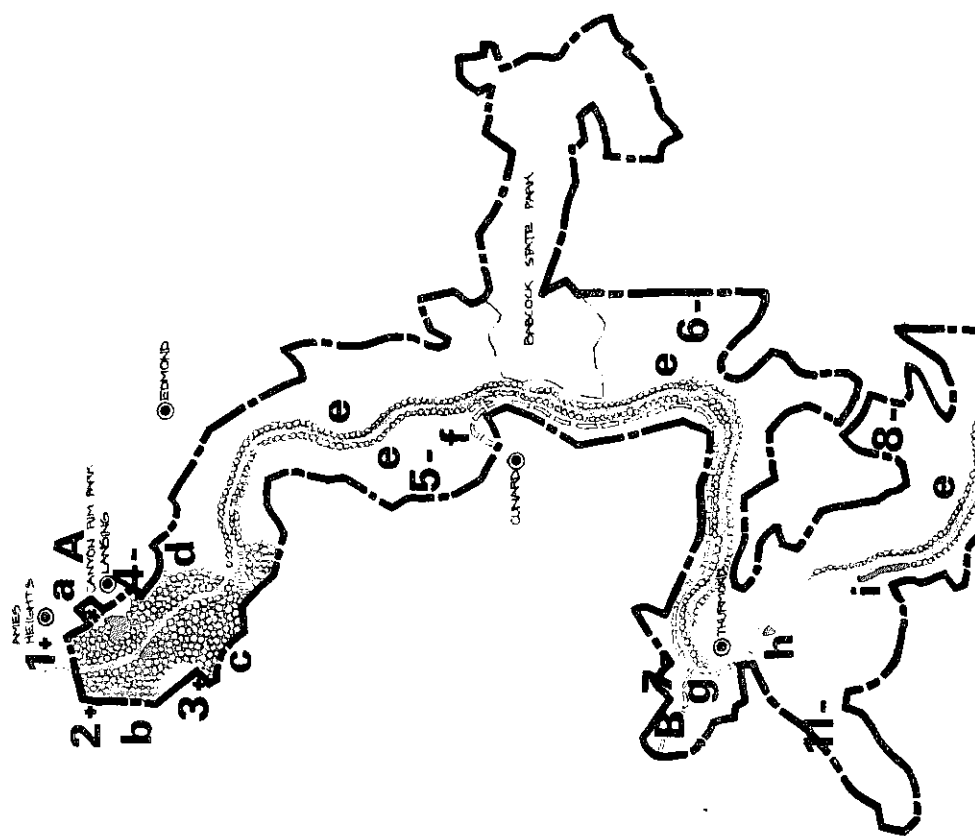
Thurmond Depot--Acquisition of the Thurmond depot and subsequent negotiation of a cooperative agreement with the Chessie System and AMTRAK to provide for their continued use of the structure will allow a number of goals to be achieved. This historic building will be preserved and space will be provided for NPS visitor contact and office facilities, while at the same time public use and the community's economic tie to the railroad will not be affected.

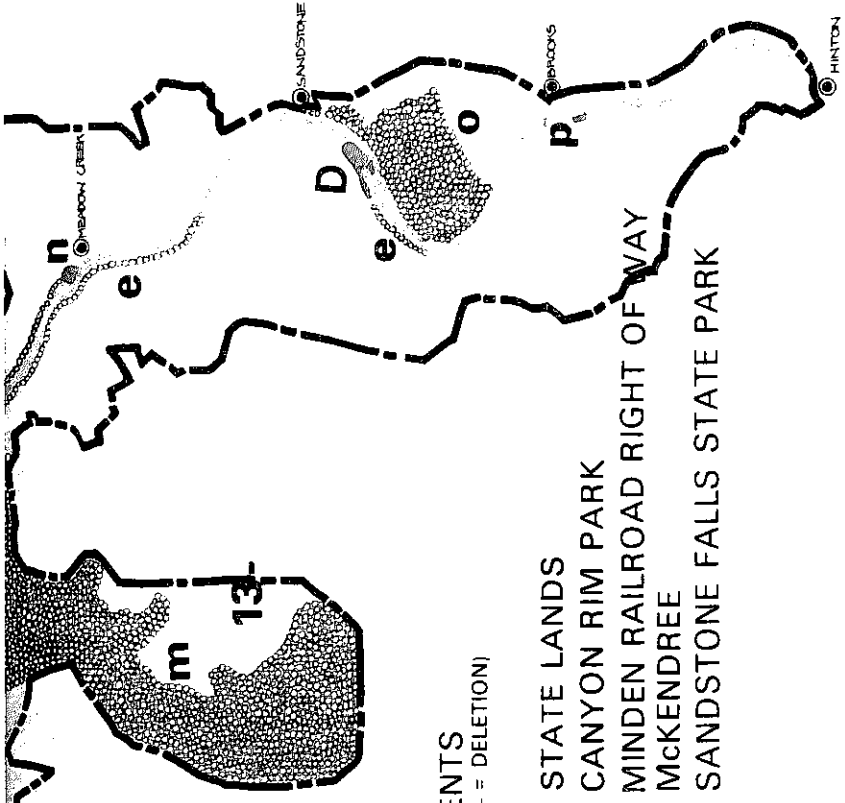
Southside Branch and Railroad Yard--This property consists of abandoned railroad yard and an abandoned 4½-mile section (approximately 60 acres) of C&O Railroad right-of-way. This will provide the only opportunity for the development of a river-level trail along the section of river below Thurmond, because active railroad lines prevent access at all other points. A trail developed on this property will provide access to remote areas of the river for anglers and hikers. The railroad yards will be used for parking.

Stone Cliff--This 23-acre property is the only piece of road-accessible, undeveloped riverfront land near Thurmond that is large enough for a major river access facility, parking, and picnic sites. National Park Service acquisition will guarantee public boating access to the lower 15-mile section of the river and a take-out for boaters traveling downstream from Prince.



\* HAWKINS NEST STATE PARK





**3•, 11-** PROPOSED BOUNDARY ADJUSTMENTS  
(SITE NUMBERS DESCRIBED IN TEXT, + = ADDITION, - = DELETION)  
PARCELS PROPOSED FOR LAND ACQUISITION

PRIVATE LANDS

- a** AMES
- b** FAYETTE STATION TAKE - OUT
- c** FAYETTE STATION--WEST SIDE
- d** FAYETTE STATION--EAST SIDE
- e** RIVERFRONT LAND
- f** CUNARD RIVER ACCESS ROAD
- g** SOUTH SIDE BRANCH
- h** HUMPHREY'S BAIT SHOP, THURMOND
- i** STONE CLIFF
- j** BRAGG FARM
- k** CAMP PRINCE
- l** GRANDVIEW SANDBAR
- m** GLADE CREEK
- n** MEADOW CREEK
- o** NATURE CONSERVANCY TRACT
- p** BROOKS FALLS

STATE LANDS

- A** CANYON RIM PARK
- B** MINDEN RAILROAD RIGHT OF WAY
- C** MCKENDREE
- D** SANDSTONE FALLS STATE PARK

PROPOSED USE OF PARCELS

- VISITOR FACILITIES
- ROAD OR TRAIL CORRIDOR
- CULTURAL RESOURCE PROTECTION
- NATURAL RESOURCE PROTECTION

**LAND ACQUISITION &  
BOUNDARY ADJUSTMENTS  
NEW RIVER GORGE NATIONAL RIVER**

UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

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Nature Conservancy Tract--NPS acquisition of this 1,157-acre property in Summers County will preserve the entire scenic backdrop for the developments at Sandstone Falls State Park and protect the riverfront scenic values visible along a 6-mile stretch of the river. Acquisition will also allow development of primitive campsites along the river and improvement of two existing overlooks along West Virginia 20. The property encompasses a 5-mile section of this highway, which will provide the primary access to Hinton and Pipestem State Park from I-64 (when completed).

Meadow Creek--Acquisition of approximately 5 acres of undeveloped riverfront property, accessible by road, will allow the National Park Service to develop recreational access to the river. No such public facilities exist on this section of the river. The property will provide the most convenient access to the river below Sandstone Falls in Summers County.

Bragg Farm--This abandoned 80-acre farm site is in an ideal location to develop the primitive campground proposed for near Silo Rapids (between Prince and Thurmond). It is isolated from all other developments and will provide the opportunity for camping in an area not affected by other land-based recreational activities. Overnight use is increasing on this section of the river, but no public facilities exist to serve campers.

Brooks Falls--Acquisition of approximately 3 acres of undeveloped riverfront property will allow the National Park Service to develop public access to the river for boaters and anglers. The property would also serve as a portage for boaters around Brooks Falls, which can be hazardous at high water levels. No such public facilities exist along the road which borders the river in Raleigh County.

Glade Creek--Approximately 4,300 acres of the Glade Creek watershed are proposed for acquisition in order to secure protection for the outstanding natural resources and scenic values found in this drainage, including the Kates Branch wetlands. NPS acquisition will also provide the opportunity for public enjoyment of these resources, including use of the trout fishery in Glade Creek and primitive camping on the river near the mouth of the creek.

Cunard Road--This unimproved dirt road provides traditional access to the Southside Branch and the river below Cunard for fishermen, private boaters, and hikers. Approximately 1½ miles (17 acres) of the road lie within the national river boundary. The National Park Service will acquire an easement on this roadway to ensure continued public access.

Camp Prince--This 30-acre parcel of undeveloped riverfront land is accessible by dirt road. Although there are no facilities, the area experiences heavy day use by shore fishermen and picnickers and limited overnight camping. National Park Service acquisition of the property will provide the opportunity for well-managed public use.

I-64 Visitor Contact Station--As plans for I-64 are refined and approved, a site will be selected for this facility.

#### State Lands (Acquisition by Donation Only).

Minden Railroad Right-of-Way--This abandoned railroad right-of-way, totaling about 5 acres, will provide a historic entry to Thurmond by horseback or foot. The 2-mile access begins in the small village of Minden, outside of the gorge. Its use will enable interpretation of geologic features such as landslides and rock outcrops, vegetation, and railroad artifacts such as wooden trestles.

McKendree Public Hunting and Fishing Area--An approximately 100-acre acquisition at McKendree will allow easier access and free circulation at this site that features the ruins of a major turn-of-the-century respiratory hospital and excellent fishing access to the river.

Sandstone Falls State Park--This 78-acre, highly scenic area is managed by the West Virginia Department of Natural Resources. NPS acquisition will provide management of the various visitor activities which occur at this site, including sightseeing, picnicking, fishing, and boating. Interpretive exhibits and services will also be provided.

Canyon Rim--The National Park Service will negotiate an interim agreement with the West Virginia Department of Highways for use of the 42-acre Canyon Rim site while the possibility of NPS acquisition is clarified. Eventual donation by the state may be necessary before the Park Service can undertake the major development described earlier.

#### Areas of Special Concern

These are lands of high scenic value, particularly agricultural river frontage, undeveloped land adjoining or visible from areas of heavy visitor use, and land containing important cultural resources. Their protection is important to the purpose of the national river, but NPS ownership may not be essential to achieving that protection. The areas of special concern are classified as highly visible from the river in the scenic resource study described in the "Description of the Environment" section.

Continued nonfederal ownership of this land is considered desirable. Cooperative agreements with landowners, easements, and/or local land use regulations will be sought by the National Park Service. These methods can lead to restricted public use and/or protection of resource values. If a need for public use or a greater degree of resource protection is identified, incompatible developments or activities are imminent, or the landowner wants to sell to the Park Service, NPS acquisition could occur if funding is available.

The following areas (in addition to some of those described under "Acquisition") are considered to be important because of cultural resources and/or scenic values (see Areas of Special Concern map):

- lands adjacent to U.S. 19 on the approaches to the bridge
- Nuttall Mine structures and conveyor
- visual corridor at the mouth of Keeneys Creek

Caperton and Elverton  
 Sewell and the visual corridor at the mouth of Manns Creek  
 visual corridors at the mouths of Fire and Ephriam creeks  
 Beury  
 visual corridor at the mouths of Coal Run, Rush Run, and Arbuckle Creek  
 visual corridor along the access road to Thurmond (Fayette County 25)  
 Round Bottom  
 visual corridor along Fayette County 25 from Thurmond to Thayer to Prince  
 property visible from overlooks at Grandview State Park, including Stretcher's Neck  
 visual corridor along West Virginia 41  
 ✓ Berry's Grocery (Monk's Store) in Prince  
 visual corridor between Grandview and Meadow Creek  
 visual corridor along the I-64 alignment  
 agricultural property along the river in Raleigh County including Brooks Island  
 land adjacent to Sandstone Falls State Park  
 visual corridor along Raleigh County 26 from Falls Branch to Sandstone Falls

#### Lands Previously Acquired

Four tracts have been acquired, all in Raleigh County:

<u>Tract Number</u>	<u>Acres</u>
103-01	409.4
107-06	30.0
108-04	66.4
113-05	32.0
TOTAL	<u>537.8</u>

#### Annual Acquisition Program

This information will not be available until completion of the land protection plan in ~~1983~~.

*July 31, 1984 - Approved*

#### Fayetteville to Gauley Bridge Boundary Extension Analysis

The National Park Service has evaluated the section of the New River from Fayetteville to Gauley Bridge, as required by section 1103 of PL 95-625, to determine the feasibility and suitability of adding it to the national river.

Suitability. This 10-mile section of the New River flows through a highly scenic portion of the New River Gorge which is a continuation of the steep walls found at the national river's present downstream

boundary. This area represents the end of the New River Gorge, since the New River joins the Gauley River at Gauley Bridge to form the Kanawha River. The timbered walls of the gorge rise 800 feet above the river in this section and are so steep that the area has remained largely undeveloped.

The New River is no longer free-flowing as it passes through this lower portion of the gorge. The Hawks Nest Dam, located approximately 5 miles downstream from the present national river boundary, creates a narrow 4-mile slackwater pool upstream and regulates flows through the 5 miles downstream. The slackwater pool is suitable for certain types of water recreation and is in Hawks Nest State Park. The section below the dam is unusable for safe recreational use during most of the year.

Although the dam and associated generating facilities which supply power to the Elkem Corporation's Alloy, West Virginia, plant are the most notable intrusions on the natural scene, this section of the river is further impacted by activities associated with a deep coal mine, a railroad bridge, and 15 miles of railroad line. All of these developments are anticipated to be of long-term duration and generally serve to compromise the national significance and unique characteristics of this section of the river. It does not meet the criteria set by the legislation which established the national river itself.

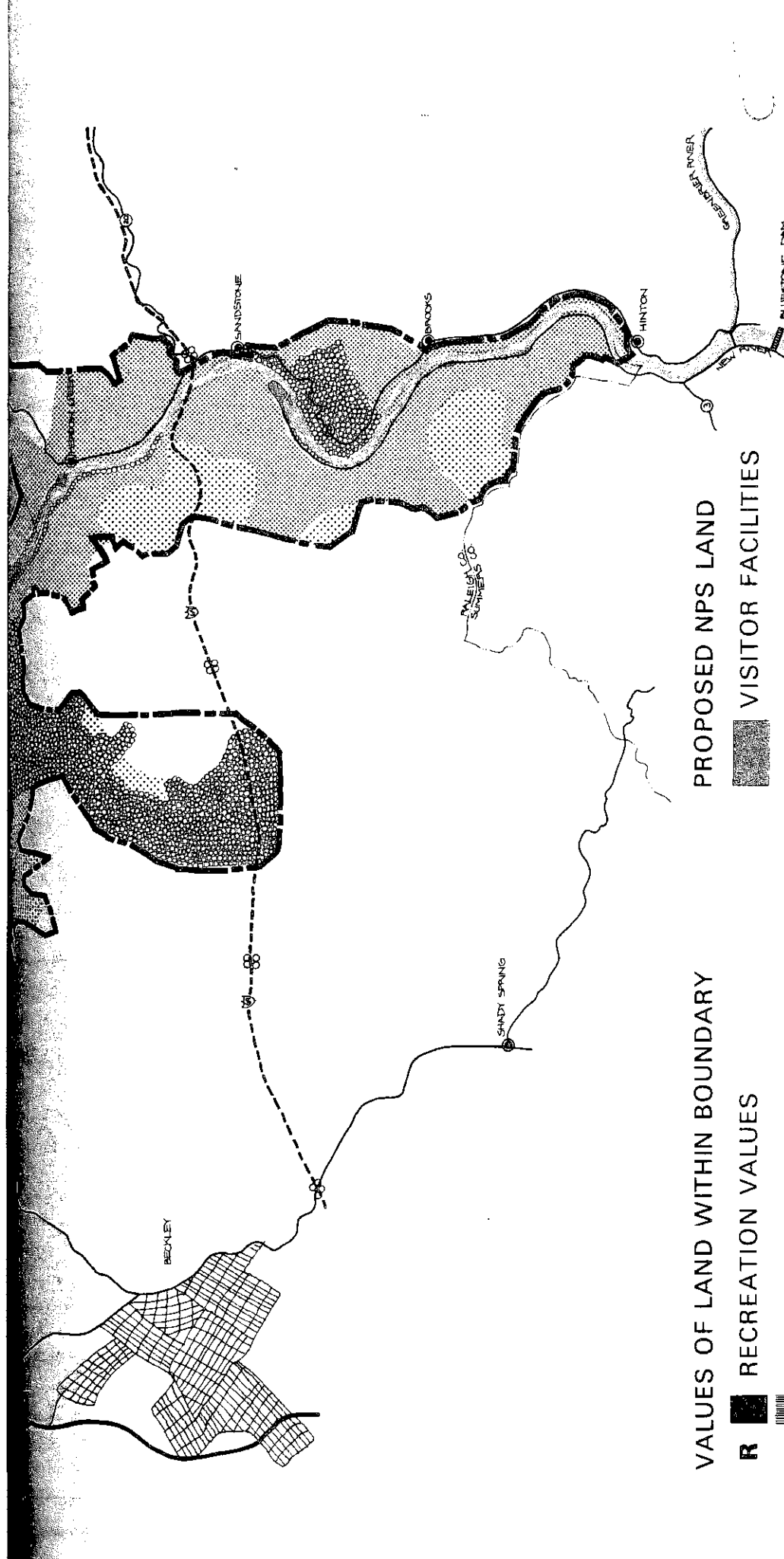
Feasibility. Coal reserves estimated by industry officials to be as high as 10,800,000 tons underlie an area extending to more than 2 miles back from the rim of this section of the gorge from the current boundary downstream to Hawks Nest Dam. One coal reserve study U.S. Bureau of Mines (1977) estimated that 2,259,000 tons of coal reserves remained in an area considerably smaller than that described above. Demand for this coal is expected to rise sharply in the future. The addition of this section of the river to the national river boundary is feasible only if methods are devised to provide for the protection of the area's remaining natural and scenic values and the management of recreational use while ensuring the continued operation of existing industrial developments and the appropriate recovery of coal resources. Such industrial activities are basically incompatible with NPS policies governing the management of natural resources.

Recommendation. The area's natural and scenic values can be protected to a significant degree by regulating development through local land use regulations. The rugged terrain itself will provide a certain degree of protection. The demands for coal resources can be balanced with the need for preservation of scenic values through provisions of the state's surface mining regulatory program. Recreational use of portions of this section of the river and certain adjacent lands is well managed by the state and can be best continued within the framework of West Virginia's cooperative relationship with the Elkem Corporation and Hawks Nest State Park.

The exception to this recommendation is the Ames mine site listed in the acquisition section. Ames is downstream of, but adjacent to, the existing boundary, has no significant coal resources, and will fulfill numerous management needs as (described earlier in the plan).





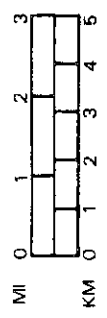
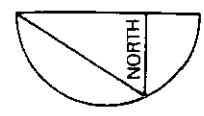


VALUES OF LAND WITHIN BOUNDARY

- R** RECREATION VALUES
- C** CULTURAL RESOURCE VALUES
- SCENIC VALUES - HIGHLY VISIBLE
- SCENIC VALUES - VISIBLE

PROPOSED NPS LAND

- VISITOR FACILITIES
- ROAD OR TRAIL CORRIDOR
- CULTURAL RESOURCE PROTECTION
- NATURAL RESOURCE PROTECTION



# AREAS OF SPECIAL CONCERN NEW RIVER GORGE NATIONAL RIVER

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

## Boundary Adjustments

Exact acreages for boundary adjustments are not currently available, however it is estimated that the combined effect of the following additions and deletions will be to reduce the overall acreage of the national river by more than 10 percent. The tracts will be more explicitly defined in the 1983 land protection plan, after which a new boundary map will be prepared and submitted to Congress.

The following adjustments, keyed to the boundary changes shown on the Land Acquisition map, are recommended.

1. Add Ames: See acquisition section for details.
2. Add: Boundary splits a parcel of developable land, should be moved to include the whole parcel.
3. Add: Boundary splits a parcel of developable land, should be moved to include the whole parcel.
4. Delete the community of Lansing by closing the boundary where Possum Creek road crosses U.S. 19: Adequate protection provided by local zoning.
5. Delete: Area contains coal reserves and developable land not needed by the National Park Service and is outside the visual corridor.
6. Delete: Area is being held for timber harvest, is outside the visual corridor, and has not been identified for National Park Service use.
7. Delete: Land outside visual corridor of Dunloup Creek and the settlement of Concho is not needed in boundary.
8. Delete site of Claremont refuse area: Incompatible and outside the visual corridor.
9. Add Slater Creek drainage: Will protect visual corridor along McKendree road.
10. Delete Dowdy Bluff: Outside visual corridor, no projected park use.
11. Delete: Outside visual corridor, no projected park use.
12. Add Piney Creek: Will protect visual corridor as seen from the New and Batoff Mountain roads.
13. Delete area above Glade Creek outside visual corridor: Contains a large coal reserve, timber, and agricultural land.
14. Delete land in upper Meadow Creek drainage: Outside visual corridor, no projected park use.

Dup?

## ESTIMATED COSTS

### General Development (north to south)

Ames	\$ 457,000*
Boat put-in/take-out, parking (50 cars, 10 buses), loop road/drop-off area, railroad underpass, stairs to river, comfort station, utilities	282,000*
Improve access road	36,000*
Picnic area (30 sites), two vault toilets	
Canyon Rim	\$2,249,000*
Visitor contact/ranger station with interpretive exhibits, restrooms, parking (150 cars, 10 buses), staging area for shuttlebus, entry road, walkway to overlook, utilities	
Picnic area (50 sites), comfort station, utilities	218,000**
Fayette Station	\$ 24,000*
Shuttlebus stop, shelter	
Improve W. Va. 82 from	656,000*
Canyon Rim to Fayette Station	656,000**
Fayetteville to Fayette Station	250,000*
Reconstruct bridge for foot traffic	10,000*
Turnarounds for cars and limited parking	40,000**
Picnic area (30 sites), 2 vault toilets	
Kaymoor	\$ 58,000**
Wolf Creek access: trailhead parking (10 cars), footbridge over Wolf Creek, trail to Kaymoor	13,000**
Rehabilitate culvert for access from river	196,000*
Stabilize mine and town	
Cunard	\$ 35,000*
Trailhead parking (top-20 cars, bottom-10 cars), vault toilet	
Minden	\$ 28,000*
Trailhead parking (20 cars), vault toilet	
Thurmond	\$ 657,000**
Remodel depot for visitor contact station, small museum, ranger office, exhibits	188,000*
Remodel leased storefront for interim visitor contact station	287,000**
Parking area (100 cars, 5 buses), comfort station, utilities, all on west side of river	
Stone Cliff	\$ 55,000*
Boat put-in/take-out, parking (50 cars, 5 buses)	219,000*
Comfort station with changing rooms, utilities	10,000*
Picnic area (30 sites)	19,000*
Ranger kiosk	

Silo Rapids		
Primitive campground (20 sites), vault toilet	\$	15,000**
Camp Prince		
Improve access	\$	94,000**
Prince/Quinnimont		
Visitor contact station in leased storefront, utilities	\$	157,000**
Grandview Sandbar		
Boat put-in/take-out, parking (20 cars, 2 buses), improve existing access road, vault toilet	\$	227,000*
Picnic area (20 sites)		7,000**
Ranger kiosk		19,000*
Glade Creek		
Primitive campground (20 sites), vault toilet	\$	15,000**
Trailhead parking, vault toilet		45,000**
Meadow Creek		
Boat put-in/take-out, vault toilet, parking (30 cars, 2 buses)	\$	76,000*
Sandstone Falls		
Picnic area (30 sites), parking	\$	22,000*
Vault toilet		13,000*
Boardwalk around falls area		94,000**
Boat put-in/take-out/portage		13,000*
Chestnut		
Primitive campground (20 sites), vault toilet	\$	15,000*
Brooks Falls		
Boat put-in/take-out, vault toilet, parking (20 cars)	\$	44,000*
Hinton		
Remodel leased storefront for visitor contact/ranger station	\$	38,000**
Trails		
Stroller trails (short, easy grade, smooth surface)	4 miles	\$ 250,000* **
Foot trails	4 miles	75,000* **
Horse and foot trails	20 miles	625,000* **
Subtotal: Net Construction Cost		\$8,487,000

#### GROSS CONSTRUCTION COST

Net Construction Cost	\$8,487,000
Project Supervision and Contingencies (31%)	2,631,000
Project Planning (15%)	1,273,000
Advance Planning (15%)	<u>1,273,000</u>

TOTAL	\$13,664,000
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NOTE: All above estimated for July 1982

\*Phase 1 Total: \$5,618,000 net construction

\*\*Phase 2 Total: \$2,869,000 net construction

#### Annual Operations

Personal Services	\$ 802,000
Supplies and Materials	<u>200,500</u>

TOTAL	\$1,002,500
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#### Land Protection

\$9,341,000 is estimated for total fee simple acquisition and acquisition of easements. This includes the 538 acres of land already acquired. This is estimated in 1980 dollars and not based on detailed appraisals.

#### Costs Not Estimated

Costs for interpretive wayside exhibits, for leasing facility space, and for NPS participation in proposed cooperative agreements for stabilizing historic structures or joint management programs cannot be estimated at this time.

#### IMPLEMENTATION

##### Additional Studies Required

Resources Management Plan. This document will outline strategies for protecting, perpetuating, and preserving cultural and natural resources, and will include programming documents, summaries, and cost estimates. Both broad and specific strategies will be devised to offer the best professional recommendations regarding resources management.

Interpretive Prospectus. An interpretive prospectus is a comprehensive document that further defines interpretive themes and plans for exhibits, publications, visitor contact facilities, and waysides.

Development Concept Plans. These are detailed site development plans for individual areas where facilities will be built.

Archeological Studies. A 1981 National Park Service archeological survey of the park determined that 34 of the 208 sites within the boundary are significant or may yield significant information. Further studies of selected locations may be necessary.

Historic Resource Study and Documented Historical Base Map and Historic Structure Reports. These will provide information on which to base structural preservation decisions and interpretive programs dealing not only with future NPS properties but also with other sites owned and managed by nonfederal interests.

Scope of Collections Statement. A scope of collections statement will define what artifactual material is appropriate for the park collection and describe how to care for it.

Study and Plan for Hiking Trails. Over 20 existing trails have been identified within the gorge. A plan is needed on how best to integrate this diverse system and to plan for visitor use.

River Management Plan. See "River-Based Recreation" section for description.

Land Protection Plan. See "Land Protection" section for description.

### Cooperative Agreements To Be Negotiated

#### Natural Resources.

Research on threatened and endangered species (with U.S. Fish and Wildlife Service and West Virginia Department of Natural Resources)  
Closure of roads leading to mouth of Glade Creek (with landowner)  
Bluestone Dam releases (with Army Corps of Engineers)  
Bluestone debris discharge (with Army Corps of Engineers)

Cultural Resources. Preservation and use of Nuttall/Nuttallburg (with landowner)

Preservation of Sewell (with landowner)

Preservation of Beury iron furnace (with landowner)

#### Operations.

Maintenance of roads heavily used by park visitors and improvement of the Fayette Station bridge (with West Virginia Department of Highways)

Interim joint use agreement for Canyon Rim (with West Virginia Department of Highways)

River management (with West Virginia DNR)

Mutual-aid law enforcement (with sheriffs' departments, DNR, and state police)

Structural fire protection (with local fire departments)  
 Wildland fire protection (expand existing agreement with DNR)  
 Search and rescue (with state police, sheriffs' departments)

#### Project Development Priorities

Funding for the actions in this plan will be sought immediately upon approval. Following is the sequence in which construction and construction-related planning will be carried out; "Year 1" is the first year in which funds will be available, hopefully 1985. Nonconstruction-related studies and actions may begin sooner.

<u>Year</u>	<u>Action</u>
1	Historic resource study Interpretive prospectus Thurmond historic structure report
2	Canyon Rim/Ames/Fayette Station development concept plan, design, and exhibit plan Sandstone Falls/Meadow Creek development concept plan and design Wayside exhibit plan
3	Ames construction Kaymoor development concept plan and design Kaymoor historic structures report and exhibit plan Canyon Rim/Fayette Station phase I construction Prince/Quinnimont/Grandview Sandbar development concept plan, design, and exhibit plan
4	Sandstone Falls/Meadow Creek construction Thurmond/Stone Cliff construction
5	Prince/Quinnimont/Grandview Sandbar construction Kaymoor stabilization Canyon Rim/Fayette Station phase II construction

## DESCRIPTION OF THE ENVIRONMENT

### NATURAL RESOURCES

#### Climate

New River Gorge has a markedly seasonal, continental climate. May through September is the warm season, and the months November through March are cold. Severe cold spells are usually short, however, and the temperature has not fallen below zero at Bluestone Dam in 37 years of weather monitoring due to the moderating influence of the river. The warmest summer temperatures are normally near 85 degrees, although readings in the 90s are not unusual. Nights are cool, even in summer.

Precipitation averages 43 inches per year at Beckley and 35.5 inches at Bluestone Dam, resulting from winter storms and summer thundershowers.

During cool weather, warm moist air rising from the river into overlying cold air often produces fog which persists through the morning hours.

#### Topography

The gorge is a deep trough cut through the ancient Allegheny Plateau on the west slope of the Appalachians; it is one of the more prominent landforms in the eastern United States. The plateau is greatly dissected near its eastern margin (where the gorge is located). The New River region is a characteristically rugged complex of ridges, mountains, and narrow, steep-sided stream valleys. The gorge averages 1,000 feet in depth, making it one of the most spectacular canyons in the eastern United States. The national river features massive sandstone cliffs on the upper walls along its north-central reach; further south, near Hinton, the gorge is wider and less steep with fewer prominent cliffs.

The national river includes most of the gorge and several major tributary drainages (the last 11 miles of the gorge, between Ames and Gauley Bridge, are excluded from the unit). The highest elevation in the boundary is 3,280 feet at Swell Mountain north of Hinton; the lowest about 830 feet, the river's elevation where it leaves the unit at Marr Branch.

#### Geology

One of the most remarkable features of the New River is its extreme age. The river is unique because it is the only stream to flow northwestward across the Valley and Ridge and the Appalachian Plateau provinces of the Appalachian Mountain system, apparently a result of its role as a remnant of the prehistoric Teays River system. The Teays was the largest river draining the Appalachians to the west during Tertiary time, flowing from the Blue Ridge to the ancestral Mississippi in Illinois. What is now the New River formed the headwaters of the Teays and is believed to be in essentially the same position it was then, making it one of the oldest rivers in North America.



Rocks of New River Gorge are sedimentary formations deposited during the Mississippian and Pennsylvanian periods of the Paleozoic era, ranging in age from about 340 to 280 million years. The older Mississippian strata dominate the upper gorge between Hinton and Meadow Creek. Below Meadow Creek these rocks are confined mostly to lower elevations in the gorge and its tributaries, extending as far downriver as Thurmond. Overlying strata are Pennsylvanian period. Below Thurmond both the gorge and adjacent ridges are composed chiefly of Pennsylvanian rocks, now the only strata exposed because of a regional northwesterly dip. The major formations in these two groups of rocks are named Hinton and Bluestone (Mississippian) and Pocahontas, New River, and Kanawha (Pennsylvanian). This distribution of surface rocks corresponds closely to that of the Calvin and Dekalb soil series.

The Hinton and Bluestone formations are primarily shale and siltstones. Calcareous shale, several sandstone layers, and at least one deep-lying limestone bed are also present. Prominent cliffs and low rapids near Hinton were formed from a resistant sandstone member of the Hinton formation.

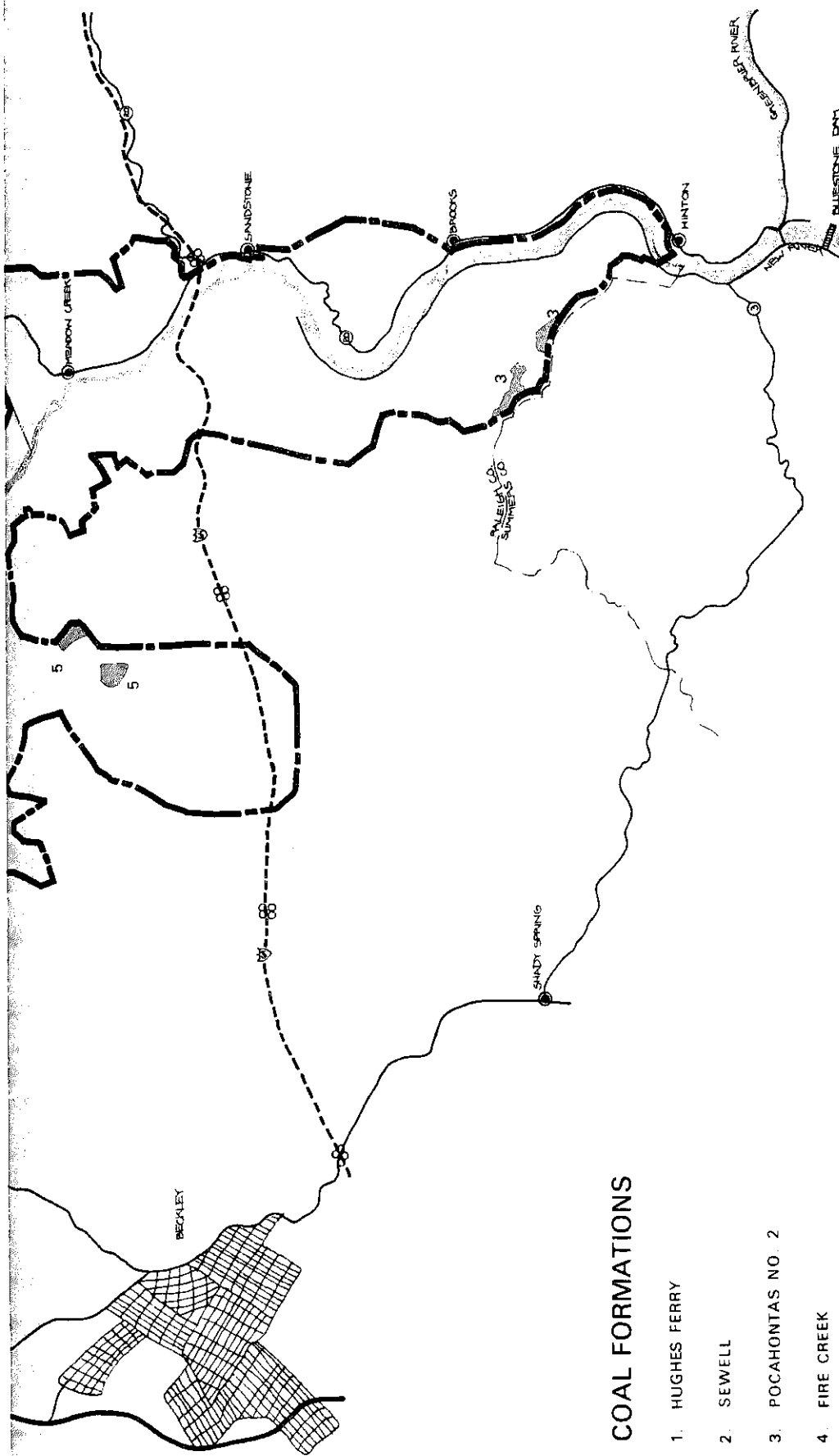
The Pocahontas and New River formations are similar complexes of sandstone with interbedded siltstone, shale, and coal. The New River formation, which dominates most of the gorge, contains a massive quartzose conglomeratic sandstone which has formed the striking cliffs of the deep gorge. It also contains the Fire Creek and Sewell coal beds, the most important coal strata in the immediate gorge area. The Kanawha formation, dominating the lower gorge above Hawks Nest, contains less sandstone and more shale, but is otherwise similar to the preceding rock series.

Two slide areas in the New River Gorge have been active. Both are midlevel on the north wall, upstream of Thurmond. They consist of very slowly moving deposits of weathered sandstone and clay which are no more than 30 feet thick. Where mining activities have altered the toes of slides, small areas of rapid earth flow have occurred. Numerous older slides, which show no signs of present movement, are along the walls of the gorge and in steep side canyons between Stone Cliff and Meadow Creek. Thick deposits of weathered sandstone mixed with clays and silt form the debris that flowed, probably when water-saturated. These slides are now stable, but could be induced to flow by undermining the toes or overloading the tops with fill. Small, rapid slides have sometimes occurred in saturated castings from surface mines on steep tributary valley walls. Destabilization of the castings can result in renewed sliding.

#### Mineral Resources

The boundary of the national river includes up to 7.1 million tons of surface-recoverable coal reserves (U.S. Department of the Interior (USDI), Bureau of Mines 1977 and USDI, Geological Survey 1977). Most lie between Thurmond and Meadow Creek; their approximate locations are illustrated on the Coal Reserves map. By definition, reserves are feasible to mine.





# COAL FORMATIONS

1. HUGHES FERRY
2. SEWELL
3. POCAHONTAS NO. 2
4. FIRE CREEK
5. POCAHONTAS NO. 6

\* EXISTING SURFACE MINES IN BOUNDARY

# COAL RESERVES NEW RIVER GORGE NATIONAL RIVER

UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

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NEW RIVER GORGE

Sewell formation coal has been extensively mined in the gorge area because of its excellent quality and ease of mining. Although considered "mined out" at most locations within the boundary, an unknown tonnage of reserves may exist in the unit on a ridge above Caperton; the bed thickness may not be great enough to make this an economical coal body.

The Fire Creek formation coal bed is second to Sewell in historical production within the gorge. Although the coal is high quality, mining has been hindered to some degree by variable thickness of the bed. The principal reserves lie outside the national river, but over 5.0 million tons of reserves lie at scattered locations within the boundary.

Relatively small areas of Pocahontas No. 6, Pocahontas No. 3, and Pocahontas No. 2 coal beds are present in the unit; reserves from these sources are approximately 2.1 million tons. Pocahontas No. 3 coal is of premium quality, and this bed is regarded as the most important reserve in the vicinity.

A great deal of coal mined outside the national river boundary is transported into it for washing and/or handling and loading onto railcars for shipment to market. Most New River coal finds its way to industrial areas of the Ohio-Great Lakes region or is exported through Hampton Roads, Virginia.

Many abandoned workings exist throughout the area, including shafts, tunnels, "high walls" from strip mines, and "gob" piles (coal refuse); in the gorge itself, coal tipples, coke ovens, and other abandoned facilities can be seen. Many of these workings and structures are partially obliterated by vegetation and litter and may pose safety hazards, but they also provide interpretive opportunities.

Natural gas is produced from Mississippian sandstone at about 2,000 feet deep on ridges and hills above the Gauley Bridge area. Numerous producing wells dot these uplands, particularly near Cotton Hill. Two wells with subeconomic gas shows are within the present national river boundary near the mouth of Farley's Creek and at Prince. Several dry wells have been drilled at points near the boundary, including Fayetteville, Kaymoor, Upper Glade Creek, and northwest of Hinton. Gas production is currently active west of Cotton Hill on both sides of the river. A gas well will soon come on line in the Fire Creek drainage outside the boundary; its pipeline is proposed to traverse the national river. Additional exploration is underway and activity can be expected to increase.

There is no evidence of significant deposits of metallic minerals.

Sandstone and shale of potentially commercial quality exist in the gorge, but these materials are abundant throughout the state. The only commercial-quality limestone is too deeply buried to consider quarrying.

High-silica sandstones of sufficient quality for use in glassmaking exist in several areas of the gorge. Glass sands are also present elsewhere in the state.

## Soils

Soils within the national river boundary are moderately deep silty or sandy loams, usually well drained, very stony, and strongly acid. Acidity normally ranges between 4.5 and 5.5. Most of the soils lie on very steep (40 to 70 percent) slopes. They are of low or moderate fertility, and generally unsuited for crops or pasture except in limited areas of gentle slope.

Between Hinton and the Meadow Creek area, the river basin is dominated by the Calvin-Gilpin association of reddish brown silt loams derived from shale and siltstone. They are moderately fertile and well suited for tree growth, but have severe erosion potential when destabilized. Their engineering limitations are severe because of steepness, stoniness, and relatively shallow bedrock.

From Meadow Creek to Claremont the New River valley bottom and lower slopes continue to be dominated by Calvin-Gilpin soils. The upper slopes, ridgetops, and tributaries, however, contain an association of Steep Rockland-Dekalb-Gilpin soils. Steep Rockland refers to areas of massive sandstone outcrops and broken cliffs 10- to over 50-feet high found along the rims of the gorge. Dekalb soils are rocky, brown sandy loams (derived from sandstone) that occupy the gorge walls and many of the ridgetops. Gilpin soils also occur on many ridgetops in this association. These soils are permeable and rather droughty, with but slight erosion hazard. They have the same engineering limitations as Calvin-Gilpin soils and are equally well suited for timber growth. The minor bank soils along this stretch of river are most often fine sandy loams similar to those previously described.

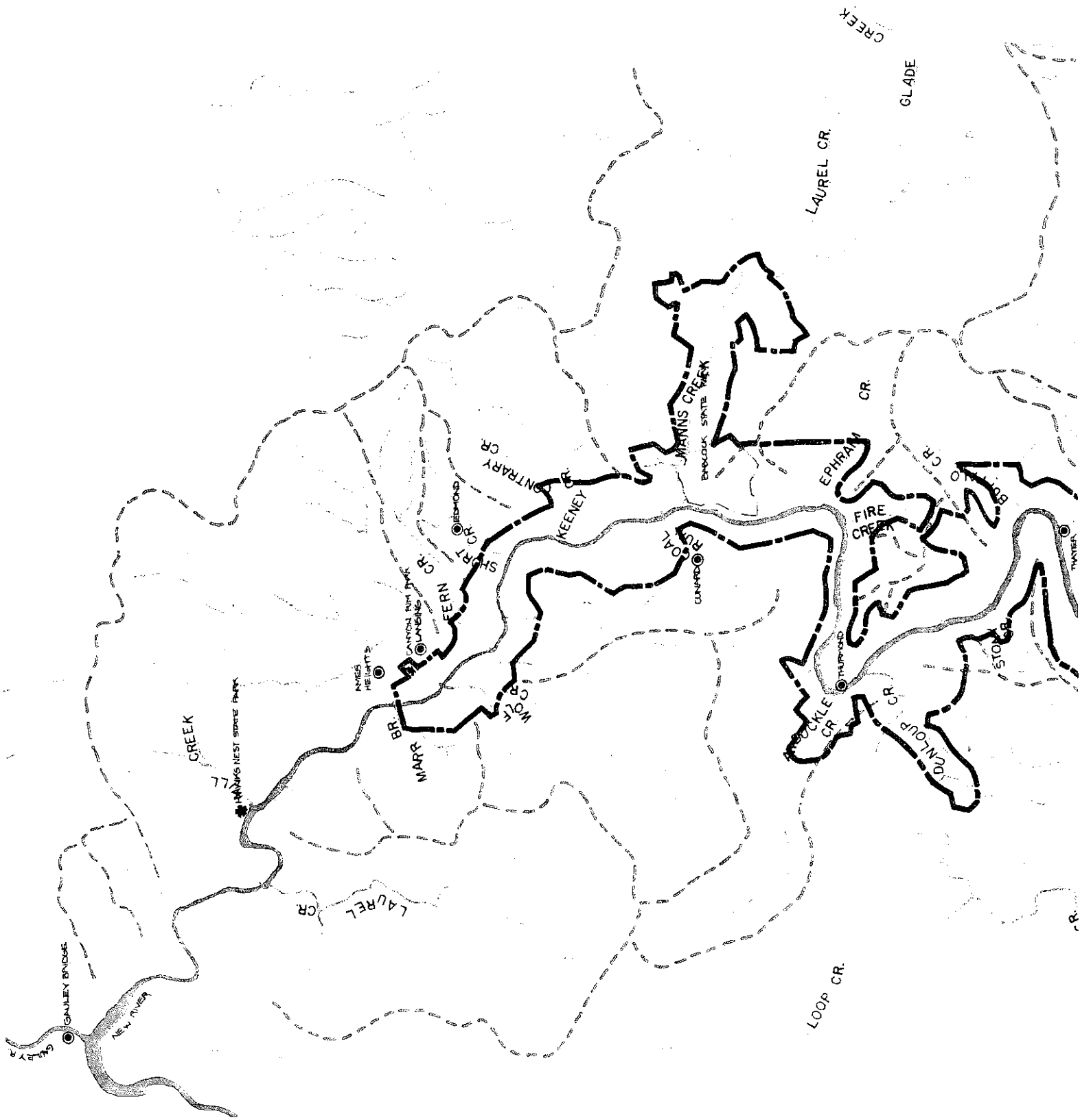
Between Claremont and the lower national river boundary, the gorge is dominated entirely by the Steep Rockland-Dekalb-Gilpin association. The most common bank soils, however, are very stony silt loams of the Earnest series. These are moderately fertile colluvial soils limited by seasonally high water tables.

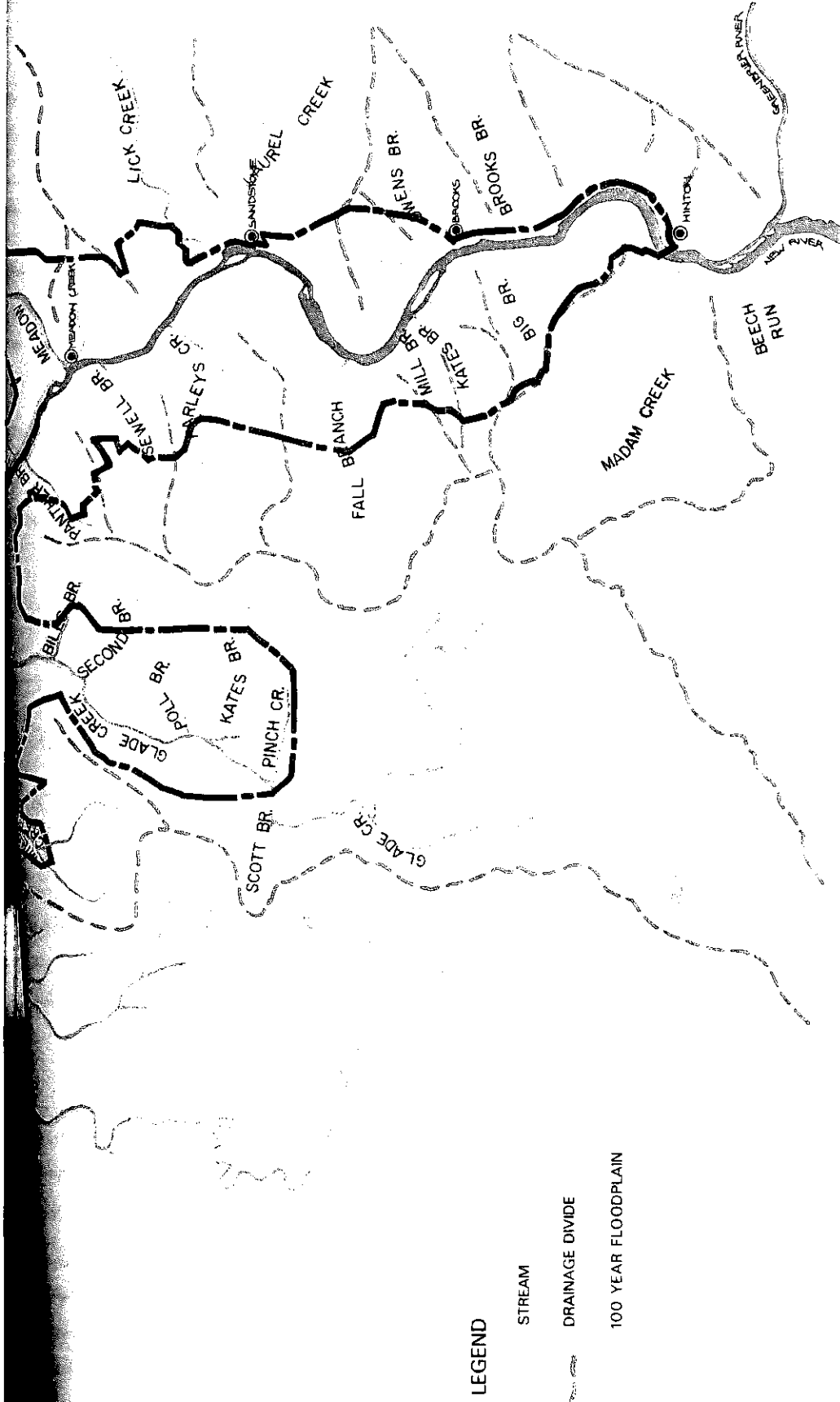
In general, the New River Gorge area has severe soil limitations for development. Because of steep slopes, rocky soil, and erosion hazard, soils at possible building or other development sites should be carefully evaluated.

There are no prime agricultural lands or unconsolidated beaches within the boundary.

## Water Resources

Hydrology. New River is a major part of the Kanawha River drainage, which is the nation's largest north-flowing river system. The New rises in North Carolina near the Blue Ridge Parkway at Blowing Rock. It flows north through the toe of Virginia and across the Appalachians in West Virginia, then cuts deeply through the Allegheny Plateau to join the Gauley River and form the Kanawha River at Gauley Bridge, West Virginia. The New River is 250 miles long, draining about 6,920 square



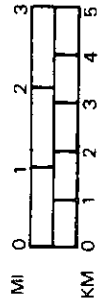
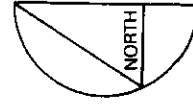


**LEGEND**

STREAM

DRAINAGE DIVIDE

100 YEAR FLOODPLAIN



**WATER RESOURCES**

# **NEW RIVER GORGE NATIONAL RIVER**

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

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miles. Its course within the national river boundary covers 50 river miles from Hinton to Marr Branch, just north of Fayetteville. This portion of the river drains about 590 square miles, or 9 percent of the entire system. Although the full river's average fall is 12.6 feet per mile, within the national river it is 10.6 feet per mile. The steepest grade in this area is between Thurmond and Hawks Nest, where the fall is 20 feet per mile. The river is controlled by major dams at Claytor, Virginia; Bellepoint, West Virginia (Bluestone Dam); and Hawks Nest, West Virginia. It is free-flowing within the unit boundary.

The New River and its tributary creeks have cut relatively rapidly through the soft plateau sandstones, creating the deep, narrow gorge and steep, v-shaped side canyons with boulder-strewn beds. New River Gorge extends from the Sandstone Falls area to Gauley Bridge; it is 1,000 feet deep, rim to river; the channel is 200 to 500 feet wide in the main gorge below Thurmond and 1,000 feet wide at Hinton. Differential erosion of the channel through various sandstone, limestone, and shale strata has resulted in a series of low falls and ledges through the gorge, giving this part of the river its characteristic mix of slow, meandering reaches and tumbling rapids.

The most complete discharge data available for the New River is recorded at the Hinton USDI Geological Survey gauging station, where the average discharge over the course of a year is 7,865 cubic feet per second (cfs), or about 1.25 cfs per square mile of watershed. The estimated average annual discharge at Marr Branch on the downstream boundary is 8,560 cfs. The New River receives a relatively low annual runoff of 15 to 18 inches. This, together with the control provided by several dams, gives it one of the smallest flow ranges in West Virginia. Nevertheless, annual peak discharges at Hinton average 55,600 cfs (1950 to 1977), with an average peak stage of 8.23 feet. Within the gorge, peak stages are nearly twice as high because the channel is narrower. At Caperton (Mann's Creek), 1950-1958 peak discharge averaged 68,740 cfs; peak stage, 14.8 feet.

The highest historical flow occurred in March 1878, when the New River rose an estimated 53 feet near Fayette Station with a discharge of about 310,000 cfs (no gauges were in place; these figures were estimated from marks on the gorge walls). The greatest gauged flood occurred in 1940, the result of a hurricane. During this storm the New River discharged 246,000 cfs at Hinton and rose to 19 feet at peak stage; within the gorge peak stage was 36 feet. Floods of this magnitude are no longer expected in the gorge since flows are now controlled by the Bluestone Dam. The greatest monthly flows are usually in March and the lowest in September or October. During periods of lowest flow, some of the smaller creeks in the area go dry.

The river's floodplain is narrow, since it is confined by the steep walls of the gorge. The Federal Emergency Management Agency (FEMA) has mapped special flood hazard areas along the New River and its tributaries (the hazard zones correspond to the estimated 100-year floodplain). The hazard areas include all of the low ground along both banks of the New River, generally up to the elevation of the railroad tracks or roadways that follow the stream. The floodplain is widest at the mouths of tributary creeks and at sandbars.



Many of the existing developments along the river are on the 100-year floodplain, including temporary fishing camps, a few homes, and buildings owned by rafting outfitters at Thurmond. No federally owned facilities are located on the 100-year floodplain. Copies of the FEMA flood hazard boundary maps for Summers, Raleigh, and Fayette counties are available from that agency or may be inspected at the New River Gorge National River administrative office in Oak Hill.

Floods tend to be more damaging on New River tributaries than on the river itself. The longer tributaries tend to have more residential and small commercial development than the New, where the gorge leaves little space for such enterprises. Both the development and upstream mining have contributed to channel deterioration and lowered capacity on some creeks, increasing flood frequency. U.S. Department of Agriculture, Soil Conservation Service watershed projects to alleviate this problem are in various stages of development on Dunloup, Meadow, Piney, and Arbuckle creeks.

Impoundments. Bluestone Dam above Hinton is just upstream of the national river and Hawks Nest Lake is below the downstream end. One 18-acre recreational impoundment is in Babcock State Park.

Hawks Nest Lake--Hawks Nest Lake was created by a 60-foot high dam completed in 1936. The 4-mile-long lake normally contains about 7,277 acre-feet; its capacity is 7,323 acre-feet. This dam was built by Union Carbide Corporation (now Elkem Corporation) to power a hydroelectric generator at its ferroalloy mill at Alloy, Fayette County. At the dam, New River waters are diverted into a 4-mile-long tunnel, pass through power-generating turbines, and return to the New River channel at the base of Gauley Mountain, leaving an intermittently flowing 5-mile segment between diversion and reentry known as "the dries."

Hawks Nest Lake and the dries occupy a portion of the main New River Gorge, which adds to the significance of the free-flowing portion of the river that is within the National Park Service boundary. They are both outside the park, but are studied for addition in the "Land Protection" section (addition is not recommended).

Bluestone Lake--Bluestone Dam is 165 feet high, holding a 10-mile-long pool. It was built primarily for flood control in the Ohio valley, but the lake was later developed for recreation. The normal summer pool is held at 1,410 feet above sea level (asl). During winter the pool is drawn down to 1,406 feet asl to provide extra capacity for spring flooding. Between the 1,406 and 1,520 foot levels, this lake can store 600,100 acre-feet of water. Hydroelectric generation is being studied; results are expected in September 1983.

Bluestone Dam is managed by the Army Corps of Engineers so that at most times of year as much water is let out of the dam as flows into Bluestone Lake (flood control is the exception). The Corps considers this a natural flow management procedure, defining natural flow as maintaining roughly the downstream water level that would occur if there were no Bluestone Dam. In reality, however, the amount of water in the New River Gorge reflects an uneven and "unnatural" water level because

the flow into Bluestone Lake is substantially affected by hydroelectric generation activity at the nonfederal Claytor Dam farther upstream and by Corps attempts to maintain a relatively constant reservoir elevation to protect development along the lake's shores.

The legislation establishing New River Gorge National River directs the Army Corps of Engineers to cooperate with the National Park Service to provide for water releases "from the Bluestone Lake project consistent with that project's purposes and activities in sufficient quantity and in such manner to facilitate protection of biological resources and recreational use of the national river." Corps of Engineers representatives have stated that no interim measures to improve the present downstream flows can be taken and that changes in the present pattern of releases will not occur until after their two-year Bluestone study is completed in 1983 or 1984. That study will examine the options of maintaining the reservoir at different pool elevations and the effects of different daily release patterns.

The National Park Service has begun to study river flow levels in response to boaters, residents, and other river users who say that river levels fluctuate widely over short periods of time. This is helping to identify specific topics that merit discussion with the corps. These data are not complete and analysis is ongoing; at this time it is not possible to describe nature, frequency, or solutions regarding the fluctuations.

Debris from the Bluestone Dam can create a problem just below the dam near Hinton and, to a lesser extent, the length of the river. The corps annually dumps over and through the dam 5 to 6 surface-acres of debris that has collected in the its trash racks, including both large organic matter such as tree limbs and litter such as cans.

Groundwater. Groundwater is fairly abundant in the gorge area and its supply is reliable. Yields are greatest from sandstone aquifers in Fayette and Raleigh counties; they are somewhat lower from the less permeable aquifers in Summers County. Estimated potential yields from the sandstone aquifers range from 20 to 500 gallons per minute (gpm). Estimated potential yields from the older, more compact sandstone-shale beds in Summers County (Mauch Chunk series) are 1 to 100 gpm. Most wells along the gorge are between 100 and 250 feet deep and encounter the water table at 25 to 100 feet below the surface. Most of the public water supplies for small towns in the area are taken from wells.

Water Quality. The most regularly monitored water quality sampling station in the gorge is located below Bluestone Lake, not far above the mouth of the Greenbrier. The water quality is consistently good for swimming, boating, and other forms of water recreation, as well as agricultural and industrial uses. Use as a public water supply requires pretreatment to eliminate coliform bacteria and suspended solids. Suitability for fish habitat is usually excellent, except for occasional periods of turbid flow during high volume discharge.

NPS monitoring at three New River and seven tributary stations (quarterly since 1980) indicates that high total coliform and fecal coliform counts are encountered on some tributary streams often enough to present

a significant water quality problem (particularly Piney, Wolf, Arbuckle, Meadow, and Dunloup creeks). These bacteria originate from sewage discharges. Small, one-dwelling discharges of untreated sewage occur at various locations along the New River which, together with contamination from tributaries, result in high coliform concentrations. The dilution factor of the river is quite high; therefore state health standards for coliform concentrations are rarely exceeded in the New River itself.

Acid mine drainage from headwaters and other mining-related water pollutants affect many streams tributary to the New River, especially Dunloup, Piney, Mann, Wolf, and Mill creeks (West Virginia DNR 1976). Acid drainage and accompanying sediment from barren, unreclaimed mine spoil lowers the habitat quality of the creeks but does not significantly affect New River, again due to dilution.

Soil Conservation Service watershed projects planned for Dunloup, Meadow, and Piney creeks will aid in mine reclamation and reduce sedimentation in these streams.

The quality of groundwater in the New River basin varies from good to poor. In some areas, groundwater contains undesirable solutes leached from the aquifers. In the certain sandstone aquifers, for example, groundwater may contain excess iron and sulfate originating from coal seams within the sandstone. Near the mouth of the river, shallow aquifers may be contaminated by brine. Salts and iron degrade the quality of water from Mississippian sandstone in certain areas. Wellwater quality data specific to the gorge area are lacking; however, shallow wells near populated areas along the river could be prone to sewage contamination. Water from such wells would probably require chlorination before use as drinking water.

### Vegetation

New River and its tributaries are part of the mixed mesophytic forest region (Braun 1950) of central Appalachia, a forest type characterized by an exuberant growth of deciduous trees and shrubs. Although stand compositions vary from site to site depending on such factors as slope, exposure, depth of soil, and disturbance history, the most common large trees include species of the red and white oak groups, basswood, tulip, sugar maple, buckeye, beech, hickory, and hemlock. Virginia and shortleaf pines are common on drier sites and recently disturbed areas; river edges support elm, silver or red maple, and sweet gum. Frequent associates include white ash, cucumber magnolia, and sour gum. An even greater variety of low trees and shrubs adds to the complexity of this vegetation. Among the common species are dogwood, striped maple, witch hazel, magnolia, rhododendron, redbud, ironwood, spicebush, persimmon, hydrangea, and many others. The herbaceous flora of the area is also rich and abundant, including a wide variety of attractive spring flowers and summer ferns.

The position of New River flora in this formation together with the marked topographic diversity of the gorge itself have led to the development of an unusually varied flora, including species with northern

or southern affinities and disjunct populations of plants from other regions. The gorge serves as a distributional corridor for plants between the eastern coastal plains and the Mississippi Valley and contains plants common to either or both of those regions but uncommon elsewhere in the central Appalachians. Human activities have resulted in the establishment of weedy species from other regions and certain ornamental plants (collectively termed "exotics"), which further complicate the floristic picture. Floristic studies of New River Gorge (including limited areas outside the national river boundary) have recorded 1,067 species in 478 genera and 123 families (Grafton and Grafton 1980), a significant total for a single stretch of river.

Discrete associations common within the gorge include floodplain (riparian) forests of river birch, sycamore, and willow; hemlock-rhododendron stands in ravines; oak-hickory associations on drier ridgetops; and occasional stands of pitch pine on rocky outcrops. There is a small marsh near the head of Kates Branch, a small tributary of Glade Creek. This is believed to be the only wetland association within the park.

The majority of the three-county region encompassing the gorge is classed as commercial forest land, and timber harvest (chiefly hardwoods) is an important economic activity. Those parts of the national river characterized by steep gorge walls are subject to relatively little commercial harvest due to difficult access.

At least two nontimber species of these forests are exploited by local residents or commercial interests. Ginseng (Panax quinquefolium) is common in New River Gorge and elsewhere in the state, and has a lucrative, stable market. West Virginia has imposed a season on the sale of ginseng lasting from August through November, although there are no restrictions on digging. Ramps (Allium tricoccum), also known as wild leeks, are customarily collected in early spring by local residents or commercial interests for use as food. The plant is quite common throughout central and southern West Virginia; its popularity may be increasing with the advent of "ramp festivals" in various parts of the state during the past ten years (Fortney 1978). Ramp collecting is not controlled by statute or regulation.

Exotic Plants. Exotic (nonnative) plants are a prominent part of the vegetation along the river corridor where roads, railbeds, towns, and other disturbances generate appropriate habitat. Almost all of the exotics thrive on open or thinly wooded, disturbed ground where competition from native plants is reduced; most of them are widespread in the eastern and/or southeastern states.

At least two exotic plant species may be harming native vegetation through excess competition. Japanese honeysuckle, an Asian vine that has become naturalized in the U.S. after escape from extensive garden cultivation, was described by Fernald (1950) as "a pernicious and dangerous weed, overwhelming and strangling native vegetation, difficult to eradicate. . . ." The same words would describe kudzu, another Asian vine now rapidly spreading through the east and south in open woodlands and field borders. Kudzu grows rapidly and profusely in locations with sufficient light, soon shading out native plants.

The paulownia, a purple-flowering tree, is also an exotic that is abundant. It is notable in the gorge because it is being harvested and poached due to the value of its wood.

Grafton and Grafton (1980) note that two introduced grasses, Eulalia viminea and Arthraxon hispidus, may be impacting native plants, but the extent of this effect is unknown. Both grasses inhabit waste places, roadsides, ditches, and open shores.

Threatened or Endangered Plants. No plant species known to occur in the gorge are federally designated as threatened or endangered. Among the several rare or localized species of the state, two worthy of note are found within the national river boundary at Babcock State Park and Nuttallburg (West Virginia Department of Natural Resources 1978): Fraser's sedge (Carex fraseri) is endemic to the southern Appalachians and found in moist wooded coves and on cool, north-facing slopes and dwarf anemone (Anemone minima) is found in rich woods. Torrey's mountain-mint (Pycnanthemum torrei) is listed as possibly extirpated from the state (West Virginia Department of Natural Resources 1978), however Grafton and McGraw collected it in the gorge in 1972 and 1973. It is probably quite rare in West Virginia and may be localized in the New River Gorge; it is also found on the central Atlantic Coastal Plain.

#### Wildlife and Fisheries

For a complete description of New River animal life, including lists of species, refer to USDI, Fish and Wildlife Service 1979 and Stauffer et al. 1980 in the bibliography.

Wildlife. A 1951 statewide mammal survey by the West Virginia Conservation Commission identified 69 species, about 40 of which probably occur in New River Gorge (Grafton and Grafton 1980). Approximately 80 bird species probably occur in the gorge, about 60 of which would be considered common and the remainder of which are migrants, rare species, or birds at the edge of their range.

The forests characteristic of the region are highly productive for wildlife. In wooded habitats white-tailed deer, gray squirrel, fox squirrel, raccoon, opossum, skunk, fox, and various small rodents are the most common mammals. Black bears are occasionally sighted in deep forests of the gorge and may be increasing in number.

The varied bird life in the gorge is one of its most interesting and attractive features. Birds are the wildlife most likely to be seen and heard by visitors; they are prominent in all of the seasons, although numbers and diversity are greatest when spring and fall migrants arrive. Game birds of the forest include wild turkey, ruffed grouse, and quail.

Open lands support healthy populations of groundhog, rabbit, sparrow hawk, blackbird, crow, dove, and other common birds and animals. Streamsides provide habitat for such riparian species as muskrat, mink, raccoon, and beaver. Catbird, belted kingfisher, swift, and warblers are some of the many bird species frequenting watersides.

Many reptiles and amphibians are also common. Many species of salamander occur in the gorge, including the blackbellied and green salamanders that are rare in West Virginia. Spring peeper, American toad, and green frog are common representatives of the Ranidae, while box turtle, stinkpot, and snapping turtle are the most common turtles.

Among the numerous snake species of the area, only the copperhead and timber rattler are poisonous. Both inhabit dry upland woods and rocky hillsides and ledges, and are more likely to be found on southern exposures.

There is low-though-consistent hunting pressure. The gorge is not the type of quality game area that attracts hunters from other regions, however. Deer and turkey seasons are restricted in Fayette and Raleigh counties and both species are probably more numerous outside the gorge than within. In general, the most intensively hunted species are squirrel and rabbit, followed by grouse and deer. Hunting of the nongame crow and groundhog is common.

Trapping occurs in the national river, although no specific harvest data are recorded. Muskrat is the species most commonly taken, followed by beaver and bobcat.

Hunting and trapping activities are regulated by the DNR's Division of Wildlife Resources, which is also responsible for wildlife management programs. Hunting and trapping regulations are enforced by conservation officers from its Division of Law Enforcement. The state does not permit hunting in state parks, including Grandview and Babcock.

Fisheries. A recent biological survey of the river (Stauffer et al. 1980) identified 58 fish species. Six species of fish are considered endemic to New River: Nocomis platyrhincus, Notropis scabriceps, Phenacobius teretulus, Percina gymnocephala, Etheostoma kanawhe, and Etheostoma osburni (Stauffer did not find P. teretulus or E. kanawha in his survey; E. kanawha has not been collected in West Virginia). All six are darters or minnows. In another study, Grafton identified 85 fish species occurring in the New River system below Claytor Lake (including the Gauley); not all have been found specifically in the gorge area, but Grafton believes they all may occur there.

Stauffer also found six species of crayfish in the New River Gorge area, although these become less common in the faster waters below Sandstone Falls. Six species of freshwater clams were also collected by Stauffer, including the exotic Asian clam, Corbivula manilensis, which is well established in the river.

The New River and its tributaries comprise one of the most important warmwater fisheries in the state. Its flow gradient and bottom type provide good spawning areas, while riffles and pools supply excellent habitat for a variety of fish. The river has good instream and riparian cover characteristics, further contributing to fish habitat quality. Water quality with respect to fish habitat is normally excellent and the river is highly productive, although a few tributary streams polluted by mine

waste, sewage, and sediment from overland flow have diminished fish populations. Practically all types of warmwater game fish found in West Virginia occur in New River, including largemouth bass, smallmouth bass, flathead catfish, white bass, channel catfish, muskellunge, walleye, crappie, sunfish, and spotted bass. The cooler, rapid-flowing tributaries are habitat for stocked trout, offering an added dimension of sport fishing.

The West Virginia DNR stocks trout each year in coldwater streams throughout the state. The stocking program in the New River basin consists of put-and-take trout stockings in cool, clean, neutral streams that will support trout for most of the spring and summer; most of these creeks will not sustain year-to-year populations. Brook trout probably are not native to the gorge area but are found in numerous headwater streams throughout the New River drainage. West Virginia DNR also stocks the hybrid striped bass ("sunshine bass") in the New River.

Streams in the national river which are stocked with trout include: Wolf, Mill, Glade (Babcock State Park), Pinch, Glade (Raleigh County), and Meadow creeks.

Threatened and Endangered Species. West Virginia's four federally listed threatened and endangered bird species might occasionally be seen in the New River area, but there are no recorded nesting sites in the gorge for any of these birds. The Indiana bat could occur in the gorge, but no wintering caves or other concentration areas are known to occur there. Two of the state's endangered mollusks are found in the Kanawha River, downstream of the park boundary (U.S. Department of the Interior, Fish and Wildlife Service 1980), but not in the park.

Two of the fish species endemic to the New River system are considered threatened by the American Fisheries Society; both are known from the Gauley and Greenbrier rivers and may occur in the gorge. They are Phenacobius teretulus and Etheostoma osburni. These two species have not, however, been formally nominated for federal listing as threatened species.

### Air Quality

The New River Gorge is classified under the Clean Air Act of 1977 as a class 2 area, meaning that only specified levels of increase in particulate matter and sulfur dioxide concentrations are allowed. In addition, national and state primary and secondary standards are applicable for certain pollutants. The standards indicate numerical maximum concentrations of the pollutant that can be allowed over a specified time period. The West Virginia Air Pollution Control Commission is responsible for enforcing these standards through its federally approved state implementation plan for maintaining air quality.

The air quality monitoring stations nearest New River Gorge are at Fallsview (near Gauley Bridge) and at Beckley. Both stations monitor suspended particulates (minute particles of dust, smoke, ash, liquids, and other substances suspended in air). Beckley also monitors sulfur

dioxide concentration. "The levels of these substances measured in 1979 were within the standards.

Carbon monoxide concentrations near highways at Bragg and Green Sulphur Springs measured during peak traffic hours averaged a little over 1 milligram per liter, well below the legal maximum (U.S. Department of Transportation, Federal Highway Administration 1976).

Air quality over the national river is certain to be better than at the above monitoring sites, which are closer to concentrations of vehicular traffic and industry. Pollutant levels within the gorge are probably well within the standards, and air quality in the area can be characterized as good.

### Scenic Resources

The scenery of New River gorge is an outstanding resource of the area. The first sentence of the enabling legislation establishes New River Gorge National River "for the purpose of conserving and interpreting outstanding natural, scenic, and historic values and objects in and around the New River Gorge . . ."

The gorge is a spectacular feature whose walls rise as much as 1,200 feet above the river (see Scenic Resources map). The upper end of the gorge is a mile or more wide, fairly open, and surrounded by hills and scattered farmland. From Thurmond downstream, the river corridor is narrower and deeper and has more rock outcroppings and tumbling rapids. Throughout, the sides are generally covered with a mature mixed stand of hardwood trees which change in color and texture through the seasons.

When traveling down the river, one generally sees lowland forest. The occasional towns and industrial, residential, or recreational developments are not overly intrusive.

Spectacular panoramic views can be gained from various points on the rim. The depth of the gorge is impressive. Natural features dominate the view, with ridges fading into the distance. Towns, roads, mine structures, and other features become interesting details in miniature.

Computer and field techniques were combined to inventory and evaluate these scenic resources of New River Gorge. To identify land which is seen from public use sites, 150 viewpoints along the river, 60 along roads in the gorge vicinity, 10 in state parks, and 10 on prominent highpoints were selected. The computer mapped land seen from these points. Over 65 of those viewpoints were surveyed in the field; in addition to mapping visible land, visual elements and relationships were noted for these sites.

Analysis resulted in the Scenic Resources map, which shows five categories of land:

"Highly Visible Land" is seen from five or more viewpoints on the river. This visual corridor extends roughly rim to rim.



"Visible Land" is seen from fewer than five viewpoints on the river, from roads within the boundary, or within 3 miles of a prominent high point or state park overlook. This area extends further than the highly visible land.

"Scenic Landscape Features" are outstanding visual attractions such as waterfalls, rapids, cliffs, rock outcroppings, farms, historic structures, and some bridges. Intrinsic beauty of these features attract viewers' attention.

"Focal Points" attract attention because of their location in the view, but are not particularly positive or negative on their own merit. These include towns, railroad yards, highwalls, recreation facilities, small industries, tunnels, and bridges.

"Visual Intrusions" are elements which disrupt the unity of views and include utility corridors, road cuts and scars, trailer camps and fish camps, active strip mines, and coal-washing plants.

Identification of these visible lands will help to determine management actions to strongly protect highly visible land and scenic landscape features, moderately protect visible land and focal points, and mitigate visual intrusions.

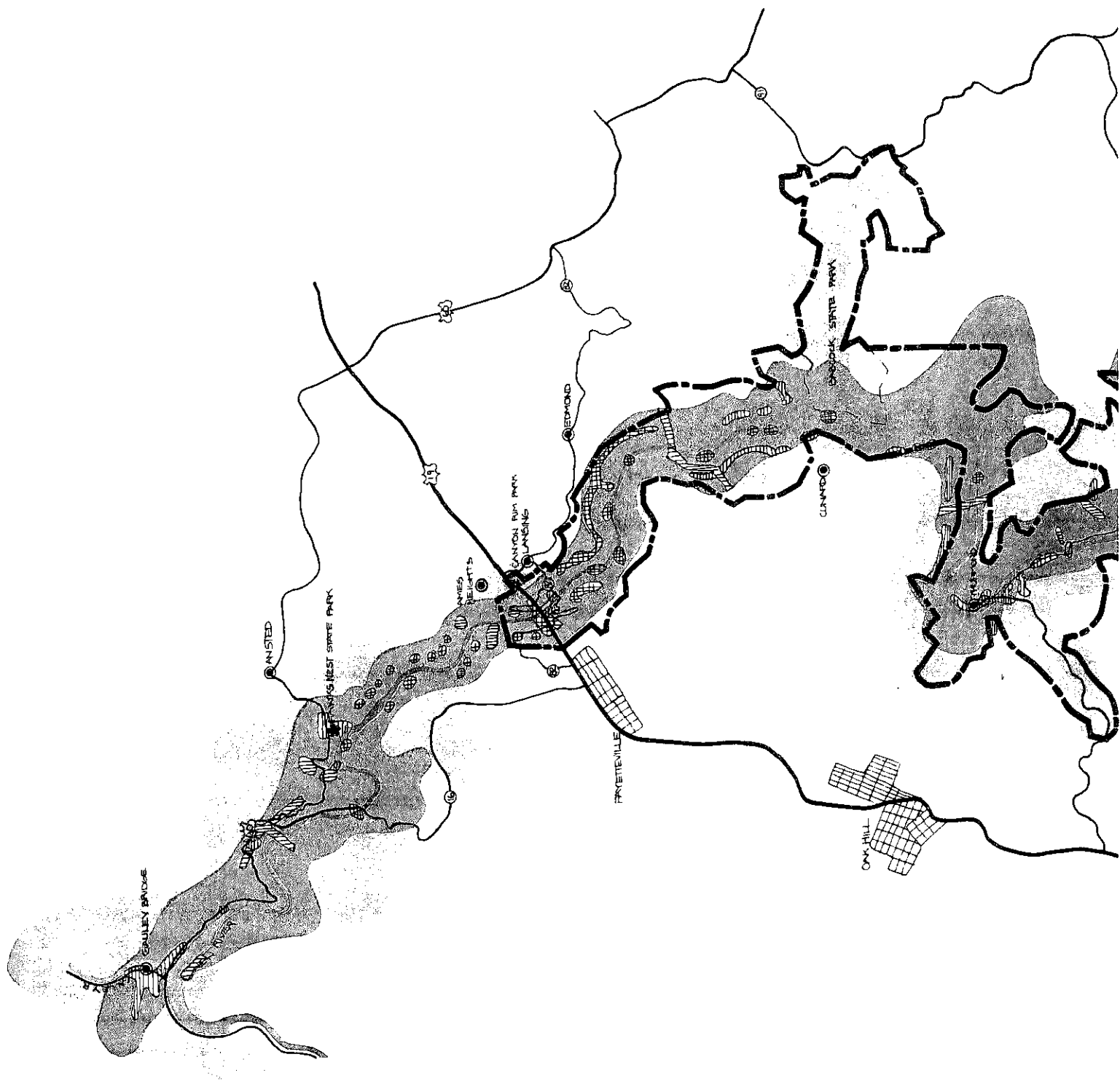
## CULTURAL RESOURCES

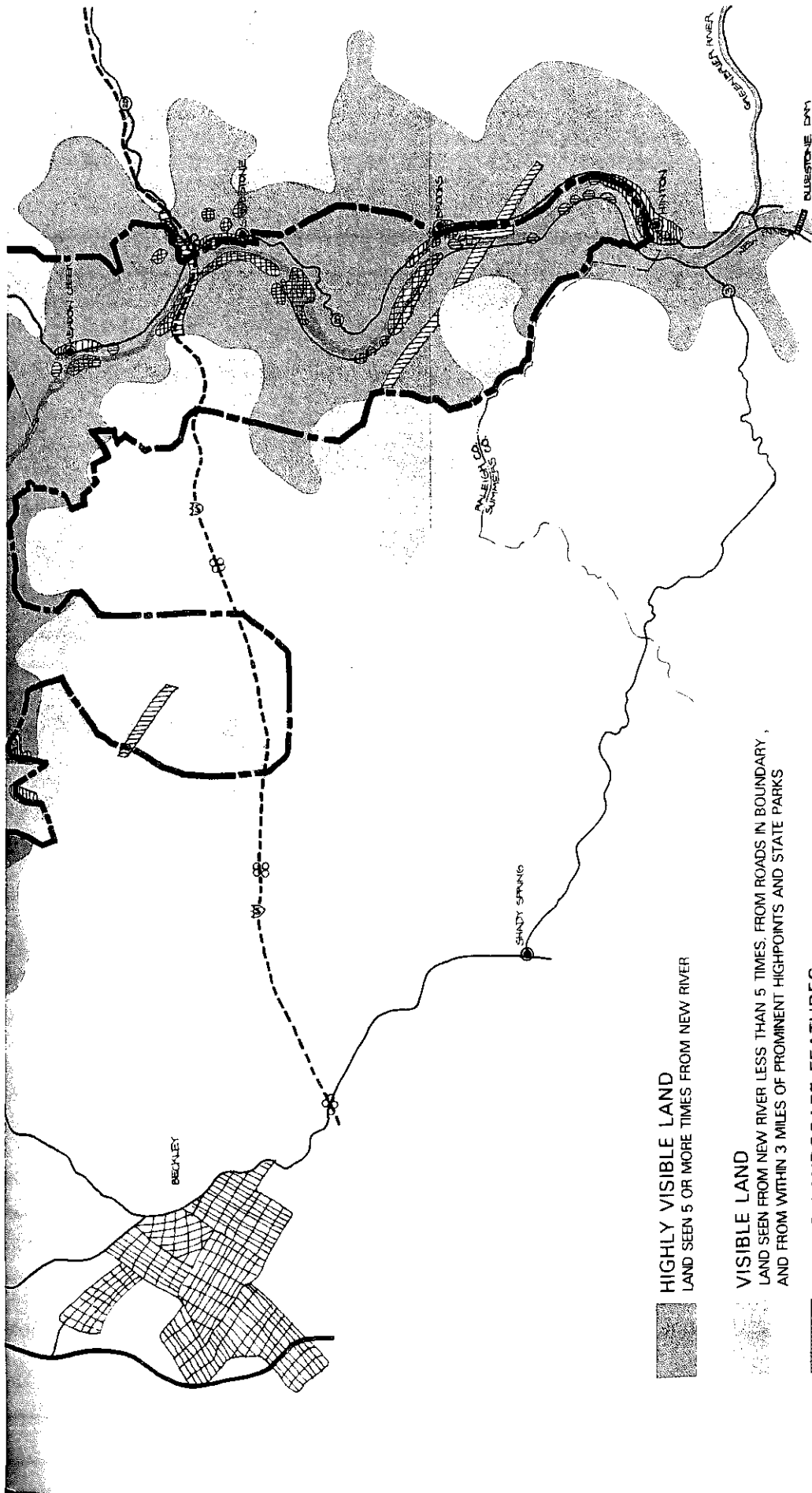
To meet its responsibilities under the National Historic Preservation Act, the National Park Service sponsored a comprehensive survey of archeological, historical, and architectural resources within the national river boundaries (Paul D. Marshall & Associates 1981); it also included an overview history of the park area. In addition, a 30-interview oral history study completed in 1981 captured important recollections of some area residents who participated in the varied industries that dominated New River's past (Nyden 1981).

### Prehistory

The archeological survey undertaken in 1980-81 for the National Park Service identified 258 sites within the boundary of New River Gorge National River. Ten of these sites had been previously identified; the remainder were discovered by the survey. The survey also investigated 30 nearby sites (outside the boundary) that aided in the understanding of the cultural history of the area. Thus a total of 288 sites were investigated.

The overwhelming number of sites (220 of 288, or 76 percent) were found in upland settings. These sites consisted primarily of rock overhangs, though a significant number were located in stream-side settings. Bench, low gap, and ridgetop settings accounted for relatively small numbers of upland sites. A lesser number of sites (68 of 288, or 24 percent) were located in lowland settings. The largest proportion of these sites was on the upper terraces and floodplains of New River. Benches (along New





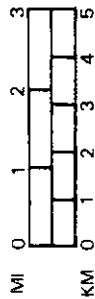
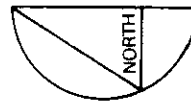
**HIGHLY VISIBLE LAND**  
LAND SEEN 5 OR MORE TIMES FROM NEW RIVER

**VISIBLE LAND**  
LAND SEEN FROM NEW RIVER LESS THAN 5 TIMES, FROM ROADS IN BOUNDARY, AND FROM WITHIN 3 MILES OF PROMINENT HIGHLIGHTS AND STATE PARKS

**SCENIC LANDSCAPE FEATURES**  
RAPIDS, WATERFALLS, CLIFFS, OUTCROPPINGS, FARMS, HISTORIC STRUCTURES AND TOWNS, BRIDGES

**FOCAL POINTS**  
TOWNS, RAILROAD YARDS, OLD HIGHWAYS, RECREATION FACILITIES, INDUSTRY, BRIDGES AND TUNNELS

**VISUAL INTRUSIONS**  
UTILITY CORRIDORS, ROAD CUTS AND SCARS, TRAILERS AND FISH CAMPS, ACTIVE STRIP MINES, COAL WASHING PLANTS



# SCENIC RESOURCES NEW RIVER GORGE NATIONAL RIVER

UNITED STATES DEPARTMENT OF THE INTERIOR/NATIONAL PARK SERVICE

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River and its tributaries) and stream terraces collectively accounted for 26 percent of lowland sites; rock overhangs represented 28 percent.

Of the different sites types investigated by the survey, the greatest number (140 of 288, or 48 percent) were classified as camps. This category was further subdivided into limited activity camps (76 percent), multiactivity camps (20 percent), and multiactivity base camps (4 percent). Rockshelters were nearly as numerous (139 of 288, or 48 percent); of them, 77 percent were limited activity rockshelters and 13 percent were multiactivity rockshelters. Only 2 of all 288 sites investigated were villages or villages with mounds. Burial mounds were also rare, constituting only 5 of 288 sites.

The survey results indicate that limited and multiactivity rockshelters and camps tend to be found in upland settings. Multiactivity base camps, on the other hand, occur equally in both locales. The few villages investigated were found entirely in lowland settings in Summers and Raleigh counties where the bottomland is widest. Except for the mounds associated with other site types, burial mounds were evenly distributed in various upland settings (e.g., ridgetops, benches, and stream junctures).

All of the sites, with the exception of some burial mounds and limited activity ridgetop sites, were closely associated with level landforms near water. Very few sites were found on rocky or gravelly ground. As anticipated, village sites were situated on rich alluvial soil along New River. Due to the leaching caused by acid soils, subsurface structural remains (firepits, hearths, etc.) were typically represented only by fire-cracked rock, scattered charcoal flecks, or burnt and calcined bone. Preservation was much better in rockshelters because of drier conditions.

In most cases the cultural affiliation of specific sites could not be determined, because artifacts from which this information could be derived were not found. Where sites with identifiable components (such as artifact styles) were found, the largest number of components corresponded to Late Archaic times. It is known from sites investigated in the park vicinity that prehistoric occupation was continuous in the New River region from the PaleoIndian to Historic periods (13,000 B.C. to A.D. 1800).

#### Significant Prehistoric Sites

At present, no archeological sites within the national river boundary are listed in or have been nominated to the National Register of Historic Places. Of the 258 sites investigated within the national river in the 1980-81 study, 34 were deemed to meet the criteria of eligibility for the National Register because of their demonstrated potential to yield information important to the study of prehistory. Tables and maps indicating the site number, site type, research potential, and geographical location of each of these 34 sites are on file at the New River Gorge National River headquarters. This information is not made public in this document in order to protect archeological resources from disturbance.

## History

The earliest known exploration of the New River by Europeans was in 1671 by Batts and Fallam, who traveled downstream to Narrows, Virginia, in search of a route through the Appalachian Mountains. Their discovery added validity to England's claim to the Ohio valley and to much of the Allegheny region. Later explorers traveling on Indian trails penetrated New River near the park boundary.

Roads and related developments were slow coming to this rugged land. In 1790 completion of the state road spawned settlement in the area. Early settlers, mostly of English, German, and Scotch-Irish descent, moved in from Virginia and Pennsylvania. Early valley-floor settlements gradually filled, forcing newcomers to move up the hollows and later onto the ridges and plateau areas. Settlements grew near early turnpikes, ferries, and forts. Today, small farm sites in the park still have log cabins and small log outbuildings from this early period.

Civil War activity touched the park area, chiefly in Fayette County. The Gauley River area, Fayetteville, and the Sewell mountain area were held first by the Confederates and then by the Union Army as the struggle for the Kanawha Valley began. Several minor skirmishes occurred in this area.

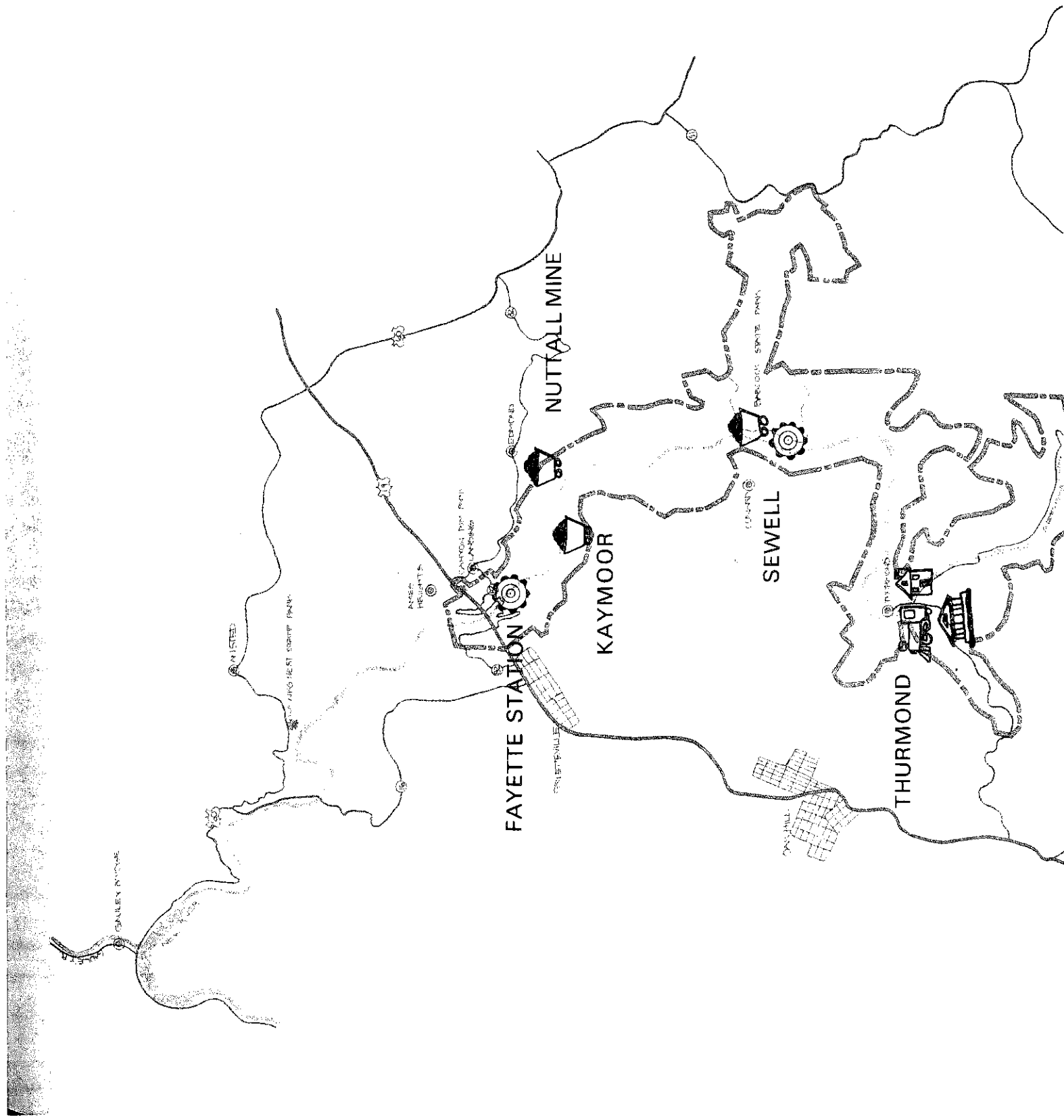
New River's major period of European settlement began in 1873, when the coming of the Chesapeake & Ohio (C&O) Railroad opened the entire gorge to the coal and timber industries. The railroad grew rapidly in the decades before 1900. Narrow gauge lines were constructed to move the coal to the mainline shipping points.

Quinnimont, founded by Joseph Beury, was the earliest railroad shipping point; the stack of an iron furnace which operated as late as 1886 still exists. The Longdale Iron Company of Pennsylvania opened mines in the 1870s above Sewell and produced coal for coke by 1874; coke was made in Sewell's beehive ovens until 1956. Coal was extracted throughout the gorge and shipped by the railroad.

In the 1890s, Thurmond grew into a major shipping center and commercial hub for local mines. Today the most striking features of this small community along the New River's north bank are pre-World War I railroad buildings and a row of brick commercial structures strung along the tracks.

Several mine towns developed sawmills to cut timber for use in the mines and to prepare lumber for building construction. Glade and Hamlet were scenes of major logging activity and a railroad was built about 15 miles up Glade Creek to exploit Raleigh County's timber. Timber operations preceded the railroad, but the railroad provided access to new markets and subsequently the needs of the mining industry increased demand. The stave and lumber industry was one of the principal industries of Summers County.

Thus coal mining, railroading, and logging characterized the company towns and hamlets which blossomed in New River Gorge between



GAILEY RIVER

MINISTEE

INYO-NEVADA STATE PARK

WHEELER

CANYON DOW RIVER

WHEELER

FAYETTE STATION

CRISTEVALLE

KAYMOOR

NUTTALL MINE

SEWELL

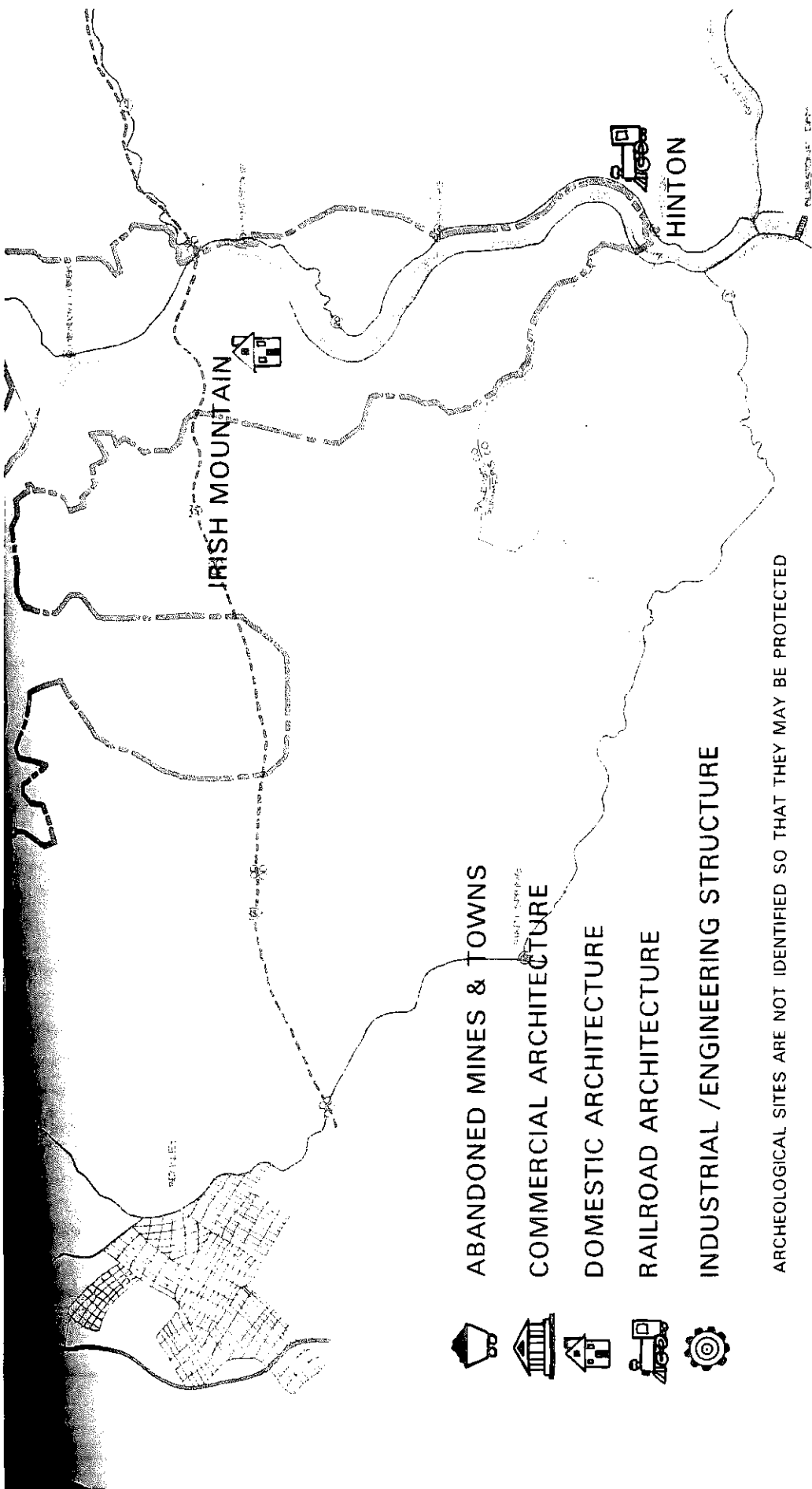
BRIDGES STATE PARK

WHEELER

THURMOND

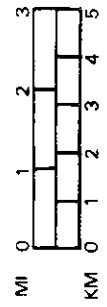
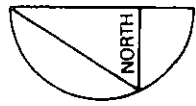
CRISTEVALLE

SEWELL



# CULTURAL RESOURCES OF NATIONAL REGISTER QUALITY **NEW RIVER GORGE NATIONAL RIVER**

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE



Sandstone and Fayetteville during the 1900-to-1935 period. Immigration into the gorge continued as individual coal ventures and new finds led to the establishment of communities such as Caperton, Beury, Nuttallburg, Elverton, Keeneys Creek, and Kaymoor. Much of the present-day New River population is descended from these early residents who clung to the old farms, worked the mines, or ran the railroad.

The post-World War II deterioration of New River Gorge communities was swift and complete. By the 1960s, Sewell had been abandoned and many mines closed. Residents either moved to the nearby towns or left the area entirely; however, many from this 1930-1950 period remain to document the end of the New River's most dynamic era and coal and railroading continue to sustain the region's economy.

For a full overview history of New River Gorge, see the 1981 Marshall report.

### Significant Historical Resources

Many places significant in New River's industrial history are best described today as historical archeological sites. Abandoned coal mines and coal towns, which might have survived as "ghost towns" in a different environment, have deteriorated rapidly in the humid New River climate. Most structures in the coal towns were designed to be short lived, and many were dismantled when abandoned. Mining structures such as coke ovens and tipples have survived better than the flimsy coal town houses, but both have been subjected to vandalism and the destructive effects of rapid and dense vegetative growth. Between Thurmond and Fayette Station, only a few historic structures survive relatively intact in the old coal towns, and many towns have disappeared altogether.

Upstream of Thurmond, however, several towns founded in the late nineteenth century continue as active communities and some notable examples of railroad architecture and domestic and commercial architecture have survived. These resources, set in small communities still strongly affected by mining and the railroad, provide an effective link with the past.

Appendix K of the Draft General Management Plan/Environmental Assessment, "Historic Communities of New River Gorge," describes all known historic communities within the national river boundaries. Except where otherwise noted, these sites are located at the bottom of the gorge, along the river's edge. Surviving historic engineering structures in the New River Gorge may be found in volume two of A Cultural Research Project: New River Gorge National River (Paul D. Marshall and Associates 1981).

Sites, structures, and districts that appear to be eligible for the National Register of Historic Places and appear on the Cultural Resources of National Register Quality map are listed below. There are currently no National Register sites and none have yet been nominated.



Nuttall/Nuttallburg: Mine and associated structures, remains of town  
 Kaymoor: Mine and associated structures, remains of town  
 Hinton: The C&O roundhouse, turntable, powerhouse, and passenger depot  
 Irish Mountain: The Irish Mountain settlement district, including remains of log homes and barns, St. Coleman's church and cemetery  
 Sewell: Mine and coking site  
 Prince: Prince Brothers Store  
           C&O Interlocking Tower  
 Thayer: Coal town architectural district, including many coal town houses illustrating typical domestic styles.  
 Thurmond: Depot, C&O engine house, water towers, coal chute  
           Mankin store, National Bank of Thurmond, and connecting stone building  
           Thurmond Union Church  
           Several houses illustrating various styles of coal town era domestic architecture  
 Fayette Station: 1889 iron truss bridge over New River

Other structures are not of National Register quality only because their physical integrity has been lost through deterioration. These include the stone ruins of the company store at Beury and the ruins of the iron furnace at Quinnimont. Both structures illustrate important events and patterns in New River's industrial history, despite their ruined condition.

## SOCIOECONOMIC ENVIRONMENT

All information in this section is from the report Projected Economic Impacts of Three Management Plans for the New River Gorge National River, 1981-1990 (FEC Associates 1981).

### Population

Between 1960 and 1970, Summers, Raleigh, and Fayette counties lost 14.5 percent of their population, or 23,500 residents. This was due to the lack of employment opportunities in the area and represented a continuation of the trend established during the 1950s when increased coal mine mechanization and a decline in coal markets prevailed. Most seriously impacted was Fayette County with a loss of 20.1 percent, followed by Summers County--15.4 percent, and Raleigh County--9.9 percent.

The 70s saw a reversal of these trends, confirmed by the preliminary 1980 census figures which show an overall gain in population of 19.2 percent for the period 1970-1980 for the three counties.

A June 1980 population forecast completed by the West Virginia Governor's Office of Economic and Community Development (GOECD) shows continued positive population growth rates. Together, the three-county area's population is projected to grow by 16.7 percent between 1980 and 1990.

### Employment and Income --

Employment rates in this area depend dramatically on the coal industry. Recent elimination of the use of the area's mid-volatile metallurgical coal by the steel industry has led to the need to find alternative markets, primarily for steam coal for utility plants. Coal operators suggest they should be fully recovered from their late 1970s slump in another two to five years. Mining employment also has a significant impact on the transportation, manufacturing, wholesale, and retail sectors.

There has been some diversification to nonmining manufacturing and travel and tourism, which will help to increase the economic health and well-being of this area. The government sector, primarily education, also generates some income. Based on the best available estimates of future employment trends, the three-county area appears to have a solid foundation for growth in coal and related industries.

For the three-county area, the total personal income growth rate was 13 percent per year and compares quite favorably with the 10 percent per year for the state between 1968 and 1978. The area grew 21 percent faster than the state. Thus, although still below the state personal income average, average income in the area has increased from 83.3 percent to 95.3 percent of the state average. It is projected that total personal income will increase 3-1/2 times over the next decade (not adjusted for inflation).

### Public Facilities and Services

A major obstacle for future residential and economic development in the three-county area is the shortage of adequate water, sewer, and solid waste facilities and systems. A comprehensive program to develop these facilities throughout the region is being undertaken; however, given the state's constitutional limitation on property taxes, it is unlikely that local governments will be able to fund the necessary services. Limited federal and state funds are available, but not enough to do the job.

Southern West Virginia is located within a 500-mile radius of approximately 60 percent of the nation's population. With completion or near-completion of major interstate highways, access into the region has improved considerably; however, 95 percent of the primary and secondary roads need upgrading.

Major bus lines serve two of the three counties. Fayette County is served by Greyhound and the Mountain Transit Authority (a nonprofit corporation). In Raleigh County, Trailways and Greyhound bus lines operate. Summers County has no bus service.

Rail traffic in the region is primarily industrial, most freight being coal on unscheduled runs. AMTRAK operates six passenger trains each week over the Chessie System tracks through New River Gorge. Stops within the national river include a whistle stop at Thurmond and a regular stop at Prince.

Commercial air service is available at Charleston, 45 miles away, and locally at Raleigh County Memorial Airport near Beckley.

### Overall Development Prospects

The future of the area is particularly promising, especially for Fayette and Raleigh counties. Aside from the mining activity which will be scattered throughout these two counties, the principal industrial and development area is along U.S. 19, extending from its link with the West Virginia Turnpike north of Beckley and continuing north through Fayetteville in Fayette County. Beckley has been designated as a regional growth center by the state. The completion of I-64 will have a significant impact on development in Summers County.

### LAND USE AND ACTIVITY PATTERNS

#### Zoning

Raleigh, Summers, and Fayette county governments are empowered by the West Virginia legislature with planning and zoning authority, including subdivision regulation.

The status of planning and land use regulations in New River Gorge counties is as follows:

	<u>Fayette</u>	Raleigh (Beckley area only; not applicable to park)	<u>Summers</u>
Comprehensive Plan	1969 Adopted '69	1970 Adopted '70 1980 Update Not Adopted	1969 Not adopted
Zoning Ordinances	1966 Adopted '66 Updated '78	1964 Adopted '64 Updated '66	1968 Not Adopted
Subdivision Regulations	1968 Adopted '69	1964 Adopted '64 Amended '66	1969 Not Adopted

Fayette County has specifically designated the gorge area a land conservation district; this includes more than one-half of the gorge corridor and provides for uses such as agriculture, recreation, trailer parks, and public utilities.

As a complement to the use of local zoning for land control, the West Virginia legislature has designated the New River a state-protected stream. This designation provides for continuation of the river in its free-flowing state by banning impoundment and channelization projects and for greater protection and preservation of the river's natural characteristics.

Land uses around the edge of the national river are changing. Some of the idle fields, forests, and marginal agricultural lands are being directed to a new use--country, vacation, and second homes. Improvement of services such as sewage and garbage disposal in this area is necessary. In addition, prime natural areas, scenic vistas, or stream frontages may be negatively affected if developments are poorly planned.

### Landownership Patterns

Commercial Developments. Approximately 57,000 acres (92 percent) of land within the national river boundary are privately owned. Much of this land is undeveloped and is held in large tracts by companies or individuals for coal production and/or timber harvest. Some land in Raleigh County is in agricultural use.

Although diminishing in economic importance within the boundary, coal mining and railroading continue to have a major land use impact. Abandoned structures, mine openings, and refuse piles remain from past mining activities, and there are numerous used and abandoned powerlines, access roads, and railroad lines along the river and its tributaries. There are major coal-processing plants within the boundary at Claremont and Meadow Creek. There is an active strip mine above Caperton (within the boundary), two strip mines operate immediately adjacent to the boundary, a deep mine occupies much of lower Marr Branch (outside boundary), and an abandoned gob pile is being mined near Kaymoor (in boundary). The main line of the C&O Railroad runs the length of the gorge on the north side of the river and for about 8 miles on the south side; its primary use is coal transportation. Major rail and storage yards are in Hinton and Quinimont, with smaller yards at Thurmond, Meadow Creek, and Claremont.

Logging within the park boundary is currently conducted on a small scale due to the cost and difficulty of working in the gorge. However, several large tracts of land are owned by timber companies and the likelihood of a harvest is not known.

Communities/Public Lands. The boundary encompasses all or portions of 11 communities, only two of which are incorporated. Within these communities the land use is primarily single family residential, with very few commercial developments. Seasonally occupied riverfront fishing camps are also associated with many of these towns.

These communities impact the national river through riverside developments, associated service facilities such as powerlines and inadequate solid waste disposal, and generally inadequate sewage treatment facilities which adversely affect the water quality of tributaries.

Public solid waste-disposal service is not available within the boundary, leading to dumps, abandoned vehicles and appliances, and litter accumulations along local roadways.

Approximately 4,800 acres of land within the boundary are owned by the state of West Virginia, mostly in the state parks described under "Recreational Use/Visitor Services."

### Access and Circulation

The river itself is directly accessible by all-weather roads in only a few locations: West Virginia 82 at Fayette Station; Fayette County 25 at Thurmond; West Virginia 41 at McCreery and Prince; Raleigh County 26 from Hinton to Sandstone Falls; West Virginia 3 at Hinton; West Virginia 20 at Hinton, Brooks, and Sandstone; and Summers County 7 at Meadow Creek. Other road access to the river is extremely limited, generally over a few very primitive dirt roads, such as the one to Camp Prince. Otherwise, most dirt roads leading into the gorge terminate at the railroad tracks. Recreationists must cross the tracks to gain river access, trespassing on the railroad right-of-way and creating safety hazards.

The Fayette Station road (West Virginia 82) was the principal river crossing in this area before construction of the New River Gorge bridge; after completion of the new bridge, the deteriorated 1889 Fayette Station bridge was closed to both pedestrian and auto traffic, leaving unlinked spurs from rim to river on both the east and west sides. The west side section is heavily used by whitewater recreationists due to a major river take-out at the bottom. The east side section receives considerable use from sightseers who drive down from the Canyon Rim visitor contact area to watch boaters, hike upstream to Fern Creek Falls, and view the New River Gorge bridge towering 876 feet above the river. Both sides receive use by anglers.

River crossings are very limited: the New River Gorge bridge on U.S. 19 spans the gorge high above the river; West Virginia 25 crosses at Thurmond and again a mile upstream at Stone Cliff bridge; West Virginia 41 crosses at Prince; and West Virginia 20 crosses the river just outside the boundary at Hinton. The I-64 bridge crossing at Sandstone is under construction, but will probably not provide additional direct access to the river.

Circulation within the national river boundary by vehicle is difficult because few maintained roads run parallel to the river within the gorge and no road runs the length of the river. Visitors can drive among widely separated points only by leaving the river, using parallel roads adjacent to the boundary, and then returning to the river by way of one of the access roads previously described. Many parallel or access roads are used by coal trucks.

The most notable road along the river corridor is the 11.4-mile dirt road from Thurmond to Prince via the Claremont processing plant, Thayer (one of the last coal communities on the river), and McKendree. The road

winds along the inner gorge, in and out of drainages, and provides varied and spectacular vistas. It is especially enjoyable during the spring wildflower fall foliage seasons.

Abandoned railroad rights-of-way, logging roads, mining roads, and high walls provide limited opportunities for hiking and horseback riding because they are not interconnected into a system. Active railroad rights-of-way are often used by hikers or others wanting to explore or reach the river; this is both trespass and a major safety hazard.

## RECREATIONAL USE/VISITOR SERVICES

### Visitor Activities

Visitor use is concentrated in the three milder seasons of the year. Some winter use does occur, such as hunting, fishing, and limited boating, but there generally is not sufficient snow for cross-country skiing or similar activities.

Boating. The New River offers a variety of recreational boating opportunities, including whitewater rafting, kayaking, and the use of canoes and small open boats on calm water and scattered flatwater pools.

Private boating use is heaviest between Thurmond and Hinton, where easy access and calm water are conducive to fishing and pleasure boating activities. This stretch of river is quite popular with local fishermen and canoe clubs. Very little overnight use takes place. Canoeing and both private and commercial scenic raft trips here increase in popularity each year; however, use remains at a relatively low level.

The river between Thurmond and Fayette station is different both in physical nature and in the use it receives. Recreation use here for years consisted primarily of fishing and light boating; however, since the area's first commercial whitewater outfitter began operations in 1969 both private and commercial whitewater use on this narrow, rocky stretch has steadily increased. In 1981, about 55,000 boaters used this section.

It is estimated that private use constitutes less than 10 percent of that, composed primarily of whitewater enthusiasts in kayaks and rafts, with some local fishermen using open boats on several long pools. The difficulty of rapids in this section, which is among the wildest stretches of water in the eastern United States, allows use by only experienced boaters. Access is a problem for private boaters because there are no public put-in or take-out facilities within the boundary. Private boaters needing access make special arrangements with landowners, trespass, or float on 4 miles of slackwater on Hawks Nest Lake to the state-maintained ramp at Hawks Nest State Park to take out.

The commercial whitewater rafting season lasts from April through October, with peak use on weekends. Most trips are one-day runs between Thurmond and Fayette Station. Accurate figures on past use levels are not available, but the very rapid growth of the whitewater rafting industry on the New River is reflected by the increase in the

number of licensed outfitters: In 1976 there were four and in 1982 there were 22. The typical outfitter maintains a base camp outside the gorge and transports customers and equipment to Thurmond, where the trip begins from a company-owned or -leased riverfront lot (local zoning ordinances restrict commercial development of these lots). Most commercial outfitters end their trips at Fayette Station, where the only appropriate take-out is owned by a private party who leases to outfitters the right to use his land.

As river use has grown, conflicts among user groups have become more common, competition for river access has become a serious problem, and questions have developed concerning the quality of the recreational experiences available and impacts on the natural environment of the gorge.

The West Virginia code (20.2-23a) covering outfitters and guides allows the Department of Natural Resources to regulate all aspects of commercial river use in designated whitewater rafting zones. This authority includes the section of the New River within the park boundary. The recently adopted legislation requires the department to conduct special studies in whitewater rafting zones, to allow only licensed outfitters to operate, and to restrict the issuance of additional licenses in these sections until rules and regulations for the sections are adopted. In accord with the law, the Department of Natural Resources has established a commercial whitewater advisory board for the area and numbers of outfitters and use levels between Thurmond and Fayette Station have been limited. The eventual DNR/advisory board regulations must include, but are not limited to, minimum safety requirements for equipment, criteria for increasing or limiting the number of commercial outfitters operating in the whitewater zone, standards for the size and number of rafts and numbers of persons transported in rafts, and qualifications of guides.

The National Park Service is cooperating in the preparation of the special studies and analysis required for the New River and will continue to cooperate in the implementation of recommended rules and regulations.

Camping. Organized camping facilities are available in nearby state parks (as described in the next section). In addition, two small private campgrounds are located on U.S. 19 near the New River Gorge bridge and one is near Brooks along West Virginia 20. Several of the whitewater outfitters offer primitive camping facilities for their customers at base camp locations. A few landowners with riverfront property near Hinton have installed limited facilities and rent spaces on a long-term basis to individuals with self-contained units.

Other riverfront camping is limited to "fish camps" and to unregulated camping on undeveloped private land with no support facilities. Fish camps are seasonally occupied small trailers, campers, modified buses, or similar shelters on individually owned or leased riverfront lots or in trespass on private land. They provide easy access to the river. Fish camps are common along the south side of the river from Hinton to Sandstone Falls and near McCreery. Primitive camping use peaks during summer weekend, holiday, or vacation periods in areas where primitive roads provide access to the river (very often without permission of the

landowner). The most popular areas for such camping activities are along the south side of the river from Hinton to Sandstone Falls, the mouths of Glade and Mill creeks, Grandview Sandbar, Camp Prince, McKendree, Stone Cliff beach, Brooklyn Mine, and Fayette Station. In many areas, noticeable impacts resulting from these camping activities are temporary structures, litter accumulation, damage caused by off-road vehicle use, damage to vegetation, and sanitation problems.

Hiking. No maintained trail systems exist within the boundary except in the state parks. Abandoned railroad rights-of-way, logging roads, mining roads, and high walls provide some opportunities for hiking and horseback riding; however, these trails receive very little use because they are privately owned, not maintained, and are generally located toward the top of the gorge walls with no access to the river. During the summer months, heavy vegetation impedes hikers' progress and restricts the views from these trails.

The active railroad line running the length of the river does receive hiking use, although such activity is not permitted by the Chessie System for reasons of safety and liability. Hikers seem to find this route convenient because it is free of obstacles and provides ready access to the river and other points of interest.

Rock Climbing. Climbing activity within the national river boundary is generally limited to the rocks and cliffs near Fayette Station and below the Beauty Mountain overlook. Although interest in the sport is not widespread and the sandstone rocks provide rather unstable support, rock climbing is becoming increasingly popular. Several of the whitewater rafting companies have opened rock climbing schools to provide additional services to their customers and create further local interest in the sport.

Fishing. Fishing use is heaviest on the upper portion of the river between Hinton and Meadow Creek, but there is also significant fishing use on the middle and lower sections.

The New River produces some of the best bass fishing in the state, especially smallmouth bass. In 1980, the Department of Natural Resources issued 26 trophy citations to anglers who caught smallmouth bass over 3 pounds in New River. A creel census in 1965 yielded data indicating a generous 0.47 fish per hour of fishing effort; in 1980 a similar study conducted between the dam and Meadow Creek recorded an angler success rate of 0.45 fish per hour. This study noted that over three-quarters of the fishing occurred from shore. In 1969, 43,000 anglers fished the ½-mile section of New River below Bluestone Dam, indicating heavy general fishing pressure, especially near Hinton.

Fishing is equally good between Sandstone Falls and Thurmond, though this area receives less attention due to difficult access. The sites in this stretch that are served by road do experience significant fishing pressure, including the use of boats and trotlines on large flatwater pools.



### State Recreation Sites Within Boundary

Babcock State Park contains a campground, cabins, and various day use recreational and interpretive developments. Grandview State Park, a day use site, features presentations of two popular outdoor dramas. Sandstone Falls State Park is a riverfront day use site with picnic facilities. Canyon Rim (administered by the Department of Highways) offers minimal orientation and day use facilities at the north approach to the New River Gorge bridge, itself a significant tourist attraction. The McKendree Public Hunting and Fishing Area is an undeveloped 108-acre riverfront site which provides primitive access to the river. The Minden Railroad is a 4-mile section of abandoned railroad right-of-way leading to Thurmond.

### Commercial Facilities Within Boundary

The only private developments within the boundary which currently provide visitor services are a major whitewater outfitter at Thurmond, a small hotel and restaurant at Thurmond, three private campgrounds/trailer parks, and a few combination grocery/gas and fishing supply facilities.

### Visitation Statistics

Visitation to New River Gorge has three components: visitation to the existing state parks within the national river boundary (Babcock and Grandview); river-based recreation comprised of boating, fishing, and swimming; and land-based recreation comprised of sightseeing, picnicking, camping, hiking, and hunting.

Most commercial boating is on the whitewater run between Thurmond and Fayette Station, estimated at 52,000 in 1981. The second most popular section for commercial boating is between Prince and Thurmond, a stretch of river that provides a good introduction for novice rafters on the first leg of a two-day trip. Sixty-four percent of the commercial boating occurs on summer weekends.

Of the 7,000 private boaters, most travel between Prince and Thurmond or Hinton and Meadow Creek, which are accessible and fairly easy to navigate. The Thurmond to Fayette Station stretch was used by approximately 3,000 private boaters in 1981.

Swimming (other than from watercraft) occurs at Fayette Station, McCreery Beach, and Sandstone Falls.

Most fishing occurs between Hinton and Meadow Creek, with the stretch between Prince and Thurmond second in popularity due to its fairly easy automobile access.

The least-used section of the river is between Meadow Creek and Prince, where fishing and canoeing dominate.

With easy access from the heavily traveled U.S. 19, sightseeing at Canyon Rim is an estimated 250,000 visits annually.

The largest single day of visitation occurs during Bridge Day, an annual event during the third week of October commemorating the opening of the New River Gorge bridge. The event attracts nearly 30,000 visitors.

Visitation figures for 1980 were:

<u>State Parks</u> <sup>1</sup>	<u>1980</u>
Babcock	158,000
Grandview	<u>448,000</u>
Subtotal	606,000
 <u>River Recreation</u> <sup>2</sup>	
Commercial boaters	55,000
Noncommercial boaters	7,000
Fishermen <sup>3</sup>	29,500
Swimmers	<u>8,500</u>
Subtotal	100,000
 <u>Land Recreation</u> <sup>4</sup>	
Sightseeing	300,000
Camping	10,000
Picnicking	4,000
Hiking	1,500
Hunting	<u>500</u>
Subtotal	316,000
 TOTAL	 1,022,000

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<sup>1</sup>Visitation estimates for the state parks are based on counts conducted by the Department of Natural Resources. The higher use at Grandview reflects that area's popular outdoor dramas and the heavy day use by residents of Raleigh County.

<sup>2</sup>The river recreation estimates are partially based on 1980 DNR river surveys from Hinton to Meadow Creek and by the National Park Service during the 1981 season at Fayette Station.

<sup>3</sup>This is based on a DNR survey conducted from Hinton to Meadow Creek from April through November during daylight hours. Thus fishing use is underestimated, since 30 miles of river, night time fishing, and December through March were not evaluated.

<sup>4</sup>The most reliable data on camping and picnicking comes from the 1980 DNR survey between Hinton and Meadow Creek.

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## APPENDIXES

### A: LEGISLATION

92 STAT. 3545

PUBLIC LAW 95-625—NOV. 10, 1978

#### TITLE XI—NEW RIVER GORGE NATIONAL RIVER

Establishment  
and  
administration.  
16 USC  
460m-15.

Boundary  
description,  
availability for  
public inspection.

Acquisition of  
lands, waters, or  
interests.  
16 USC  
460m-16.

Non-federally  
owned lands.

"Improved  
property."

SEC. 1101. For the purpose of conserving and interpreting outstanding natural, scenic, and historic values and objects in and around the New River Gorge and preserving as a free-flowing stream an important segment of the New River in West Virginia for the benefit and enjoyment of present and future generations, the Secretary of the Interior (hereinafter referred to as the "Secretary") shall establish and administer the New River Gorge National River. The Secretary shall administer, protect, and develop the national river in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535; 16 U.S.C. 1 et seq.), as amended and supplemented; except that any other statutory authority available to the Secretary for the preservation and management of natural resources may be utilized to the extent he finds such authority will further the purposes of this title. The boundaries of the national river shall be as generally depicted on the drawing entitled "Proposed New River Gorge National River" numbered NERI-20,002, dated July 1978, which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior.

SEC. 1102. (a) Within the boundaries of the New River Gorge National River, the Secretary may acquire lands and waters or interests therein by donation, purchase with donated or appropriated funds, transfer, or exchange. Lands owned by the State of West Virginia or a political subdivision thereof may be acquired by donation only. The authority of the Secretary to condemn in fee, improved properties as defined in subsection (c) of this section shall not be invoked as long as the owner of such improved property holds and uses it in a manner compatible with the purposes of this title. The Secretary may acquire any such improved property without the consent of the owner whenever he finds that such property has undergone, since January 1, 1978, or is imminently about to undergo, changes in land use which are incompatible with the purposes of the national river. The Secretary may acquire less than fee interest in any improved or unimproved property within the boundaries of the national river.

(b) On non-federally owned lands within the national river boundaries, the Secretary is authorized to enter into cooperative agreements with organizations or individuals to mark or interpret properties of significance to the history of the Gorge area.

(c) For the purposes of this Act, the term "improved property" means (i) a detached single family dwelling, the construction of which was begun before January 1, 1977 (hereafter referred to as "dwelling"), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures necessary to the dwelling which are situated on the land so designated, or (ii) property devel-

oped for agricultural uses, together with any structures accessory thereto which were so used on or before January 1, 1977, or (iii) commercial and small business properties which were so used on or before January 1, 1977, the purpose of which is determined by the Secretary to contribute to visitor use and enjoyment of the national river. In determining when and to what extent a property is to be considered an "improved property", the Secretary shall take into consideration the manner of use of such buildings and lands prior to January 1, 1977, and shall designate such lands as are reasonably necessary for the continued enjoyment of the property in the same manner and to the same extent as existed prior to such date.

(d) The owner of an improved property, as defined in this title, on the date of its acquisition, as a condition of such acquisition, may retain for himself, his heirs and assigns, a right of use and occupancy of the improved property for noncommercial residential, or agricultural purposes, or the continuation of existing commercial operations, as the case may be, for a definite term of not more than twenty-five years, or, in lieu thereof, for a term ending at the death of the owner or the death of his spouse, whichever is later. The owner shall elect the term to be reserved. Unless the property is wholly or partially donated, the Secretary shall pay to the owner the fair market value of the property on the date of its acquisition, less the fair market value of the property on that date of the right retained by the owner. A right retained by the owner pursuant to this section shall be subject to termination by the Secretary upon his determination that it is being exercised in a manner inconsistent with the purposes of this title, and it shall terminate by operation of law upon notification by the Secretary to the holder of the right of such determination and tendering to him the amount equal to the fair market value of that portion which remains unexpired.

SEC. 1103. (a) Within two years from the date of enactment of this title, the Secretary shall submit, in writing, to the House Committee on Interior and Insular Affairs, the Senate Committee on Energy and Natural Resources and the Committees on Appropriations of the United States Congress, a detailed plan which shall indicate—

(i) the lands and areas which he deems essential to the protection and public enjoyment of the natural, scenic, and historic values and objects of this national river;

(ii) the lands which he has previously acquired by purchase, donation, exchange, or transfer for the purpose of this national river;

(iii) the annual acquisition program (including the level of funding) which he recommends for the ensuing four fiscal years; and

(iv) the feasibility and suitability of including within the boundaries of the national river, the section of the New River from Fayetteville to Gauley Bridge, and reasons therefor.

SEC. 1104. The Secretary shall on his own initiative, or at the request of any local government having jurisdiction over land located in or adjacent to the Gorge area, assist and consult with the appropriate officials and employees of such local government in establishing zoning laws or ordinances which will assist in achieving the purposes of this title. In providing assistance pursuant to this section, the Secretary shall endeavor to obtain provisions in such zoning laws or ordinances which—

(1) have the effect of restricting incompatible commercial and industrial use of all real property in or adjacent to the Gorge area;

Right of use and occupancy, term.

Fair market value.

Termination, notification.

Plan, submittal to congressional committees.  
16 USC  
460m-17.

Zoning laws and ordinances, establishment assistance.  
16 USC  
460m-18.

	<p>(2) aid in preserving the character of the Gorge area by appropriate restrictions on the use of real property in the vicinity, including, but not limited to, restrictions upon building and construction of all types; signs and billboards; the burning of cover; cutting of timber; removal of topsoil, sand, or gravel; dumping, storage, or piling of refuse; or any other use which would detract from the esthetic character of the Gorge area; and</p> <p>(3) have the effect of providing that the Secretary shall receive advance notice of any hearing for the purpose of granting a variance and any variance granted under, and of any exception made to, the application of such law or ordinance.</p>
<p>Mining, prohibition and limitation. 16 USC 460m-19.</p>	<p>SEC. 1105. (a) Notwithstanding any other provision of law, no surface mining of any kind shall be permitted on federally owned lands within the boundary of the national river where the subsurface estate is not federally owned. Underground mining on such lands may be permitted by the Secretary only if—</p> <p>(1) the mining operation will have no significant adverse impact on the public use and enjoyment of the national river;</p> <p>(2) the mining operation will disturb the minimum amount of surface necessary to extract the mineral; and</p> <p>(3) the surface is not significantly disturbed, unless there is no technologically feasible alternative.</p>
<p>Timber harvesting.</p>	<p>(b) The harvesting of timber on federally owned lands within the national river boundary is prohibited, except insofar as it is necessary for the Secretary to remove trees for river access, historic sites, primitive campgrounds, scenic vistas, or as may be necessary from time to time for reasons of public health and safety.</p>
<p>Recovery.</p>	<p>(c) The owner of a mineral estate subject to this section who believes he has suffered a loss by operation of this section, may bring an action only in a United States district court to recover just compensation, which shall be awarded if the court finds that such loss constitutes a taking of property compensable under the Constitution.</p>
<p>Hunting and fishing zones, designation. 16 USC 460m-20.</p>	<p>SEC. 1106. The Secretary may permit hunting and fishing on lands and waters under his jurisdiction within the boundaries of the New River Gorge National River in accordance with applicable Federal and State laws, and he may designate zones where, and establish periods when, no hunting or fishing shall be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Except in emergencies, any rules and regulations of the Secretary pursuant to this section shall be put into effect only after consultation with the appropriate State agency responsible for hunting and fishing activities.</p>
<p>Rules and regulations, consultation.</p>	
<p>New River Gorge National River, project work prohibition. 16 USC 460m-21.</p>	<p>SEC. 1107. The Federal Energy Regulatory Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063) as amended (16 U.S.C. 791a et seq.), on or directly affecting the New River Gorge National River, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above the New River Gorge</p>

National River or on any stream tributary thereto which will not invade the area or diminish the scenic, recreation, and fish and wildlife values present in the area on the date of this section. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary, or request appropriations to begin construction on any such project whether heretofore or hereafter authorized, without advising the Secretary in writing of its intention to do so at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this section and would effect the national river and the values to be protected by it under this section.

Advisement to Secretary and report to Congress.

SEC. 1108. Section 5(a) of the Act of October 2, 1968 (82 Stat. 910) is hereby amended to provide for study of three principal tributaries of the New River in West Virginia, by adding the following new paragraphs:

New River, W. Va., tributaries study.  
16 USC 1276.

"(73) BLUESTONE, WEST VIRGINIA.—From its headwaters to its confluence with the New.

"(74) GAULEY, WEST VIRGINIA.—Including the tributaries of the Meadow and the Cranberry, from the headwaters to its confluence with the New.

"(75) GREENBRIER, WEST VIRGINIA.—From its headwaters to its confluence with the New."

SEC. 1109. Within three years from the date of enactment of this title, the Secretary shall develop and transmit to the Senate Committee on Energy and Natural Resources and the House Committee on Interior and Insular Affairs, a general management plan for the protection and development of the national river consistent with the purposes of this title, indicating—

General management plan, submittal to congressional committees.  
16 USC 460m-22.

- (1) measures for the preservation of the area's resources;
- (2) indications of types and general intensities of development (including visitor circulation and transportation patterns, systems and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
- (3) identification of and implementation commitments for visitor carrying capacities for all areas of the unit; and
- (4) indications of potential modifications to the external boundaries of the unit, and the reasons therefor.

SEC. 1110. The Secretary of the Army shall cooperate with the Secretary of the Interior concerning the water requirements of the national river. The Secretary of the Army shall provide for release of water from the Bluestone Lake project consistent with that project's purposes and activities in sufficient quantity and in such manner to facilitate protection of biological resources and recreational use of the national river.

Cooperation.  
16 USC 460m-23.

SEC. 1111. For the purposes of part C of the Clean Air Act, the State may redesignate the national river only as class I or class II.

16 USC 460m-24.  
42 USC 7470 *et seq.*  
Appropriation authorization.  
16 USC 460m-25.

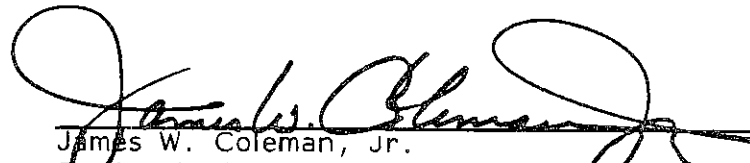
SEC. 1112. There are hereby authorized to be appropriated such sums as may be necessary for the purposes of this title, but not to exceed \$20,000,000 for the acquisition of lands and interests in lands, and not to exceed \$500,000 for development.

B: FINDING OF NO SIGNIFICANT IMPACT

This General Management Plan for New River Gorge National River, West Virginia, with further detail included in the Draft General Management Plan/Environmental Assessment (August 1982), does not constitute a major federal action which will significantly affect the quality of the human environment as defined in section 102 (2)(C) of the National Environmental Policy Act of 1969 (Public Law 91-190, 83 Stat. 853). Therefore, the National Park Service will not prepare an environmental impact statement for the general management plan.

I have also determined that this plan is consistent with Executive Orders 11988 "Floodplain Management" and 11990 "Protection of Wetlands." It conforms to all applicable state and local floodplain protection standards in that plan implementation will help maintain and preserve natural and beneficial floodplain values. A list of other agencies and individuals contacted in the planning of this plan is included in the environmental assessment described above.

10/10/82  
Date

  
James W. Coleman, Jr.  
Regional Director, Mid-Atlantic Region



## C: LAND USE MANAGEMENT METHODS

All the methods discussed promote the health, safety, and welfare of the public and should prevent harm to the region as a whole. Although they may limit the use of property, they do allow for uses that enable economic gain (although perhaps not maximum economic gain). Land use regulations can reduce the economic value of specific parcels of land by limiting density or a particular type of development; however, the overall land values in the area generally increase because of the improved quality of the environment. Land use regulations should ensure that new construction is compatible with the natural environment and should minimize intrusions. Such regulations should apply equally in similar situations in any county or municipality.

### Zoning

The primary uses of zoning are to separate incompatible development, such as residences and industry, and to assign dimensional limitations on structures and sites. These limitations may be for density, minimum setbacks, required frontage, height limitations, and maximum slope for construction. A zoning map accompanies zoning regulations to define districts of permitted and prohibited uses.

### Subdivision Control

Subdivision regulations direct location, design, and construction of new roads; lot location; and the allocation of areas for public facilities such as schools and open space. They apply only to lands that are subdivided into two or more parcels.

### Floodplain Regulations

New development is often prohibited from hazardous and unsuitable building areas such as floodplains. These areas may be delineated by Federal Emergency Management Agency maps, soils, vegetation, records of past floods, or other appropriate methods. Structures exempt from floodplain restrictions can include fences, docks, river access, parking areas, boat ramps, and structures related to agricultural use. Open space uses are usually permitted in floodplains.

### Sign Regulations

Such regulations could call for signs to be subdued in appearance, harmonize in design and color with surroundings, not be attached to any tree or shrub, and not be illuminated by neon or flashing devices. Nonconforming signs are often allowed to remain in place until they are destroyed, structurally altered, changed, or moved. Size and type limitations are often determined by municipalities. Off-premises signs (billboards) can be limited to commercial directories established at various public locations, such as along the river and in settlement areas.

### Recreational Vehicle Park Regulations

Recreational vehicles (RVs) include campers and trailers and can be regulated in a manner similar to the way that residential housing is regulated by zoning and subdivision control. Thus road layout, density of RVs, and location in general can all be considered. In addition, RV parks can be adequately landscaped to provide an attractive appearance.

### Performance Standards

Performance standards enable specific types of projects to be evaluated and reviewed by predetermined criteria. In this manner, major projects such as a hotels or campgrounds can be designed to minimize erosion, prevent water quality problems, prevent visual intrusions, prevent hazardous traffic generation and consider sensitive lands such as wetlands, open space, and river banks. Performance standards allow for flexibility in the enforcement of regulations.

### Special Permit and Design Review

These procedures allow for additional flexibility in the application of land use regulations. Negotiation with project proponents and a reviewing committee may result in better-designed projects for the benefit of the entire community. For these procedures, design review boards and special permit-granting authorities must be established through a legislative body.

### Special Districts

Special districts are similar to zoning districts, except that a special district may overlay or act as an umbrella over existing districts. Special districts may be established for river areas, agricultural and forest areas, ridge crests, wildlife and natural areas, scenic areas, and historic areas.

### Mineral Extraction

Although municipalities cannot prohibit the extraction of minerals, they can regulate mineral extraction by addressing access to mine areas and restoration of sites after resource extraction.

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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