

wild and scenic river study

September

~~June~~ 1982

FINAL REPORT

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CACAPON RIVER



WEST VIRGINIA

The authors, on behalf of the National Park Service, express appreciation to the private landowners, other interested individuals, organizations, and agencies who are truly concerned about the future of the Cacapon, Lost, and North rivers. Both their comments and the technical information they provided were instrumental in the development of this plan.

REPORT

U.S. Department of the Interior / National Park Service

WILD AND SCENIC RIVER STUDY

FINAL REPORT

CACAPON RIVER

West Virginia

Date

National Park Service
United States Department of the Interior

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SUMMARY

BACKGROUND AND PURPOSE OF STUDY

authorized
The Wild and Scenic Rivers Act (PL 90-542, October 2, 1968) established a national policy to preserve certain outstanding rivers or river segments in their free-flowing condition for the enjoyment of present and future generations. It also established the National Wild and Scenic Rivers System, designating eight rivers as its initial components. Subsequent amendments named additional rivers to be studied for the consideration of the president and Congress as potential components of the system. Currently, 61 rivers or river segments are included in the national system; the Cacapon is one of 46 remaining rivers on the study list now totaling 88 rivers. The Cacapon is one of five rivers in West Virginia that are being studied; the others are the Gauley, Greenbrier, Bluestone, and Birch.

Interest in the Potomac River basin, of which the Cacapon River drainage forms a major portion, dates back to the early 1940s. Numerous studies have been completed by federal, interstate, state, regional, and local agencies. Many of these studies dealt with basinwide planning, striving to identify suitable sites for the construction of dams and reservoirs. However, no dams have been constructed on the Cacapon or its tributaries aside from an old power dam on the lower portion of the river near Great Cacapon. Several reports completed in the 1960s proposed actions to preserve the basin's natural and scenic values while providing areas for recreational pursuits. The U.S. Department of the Interior prepared several reports on the Potomac River basin that proposed certain areas on the Cacapon River for recreation development and others for scenic protection. These proposals, however, provoked both local and environmental concerns, and many have languished.

It was also during the 1960s that the Cacapon River was proposed for designation as a component of the national system in the original Wild and Scenic Rivers Act, but because of both local and congressional opposition, it was not designated. The Cacapon River, which also includes the Lost and North rivers, was authorized by Congress for study under the 1978 National Parks and Recreation Act (P.L. 95-625), which amended the original Wild and Scenic Rivers Act.

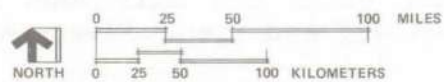
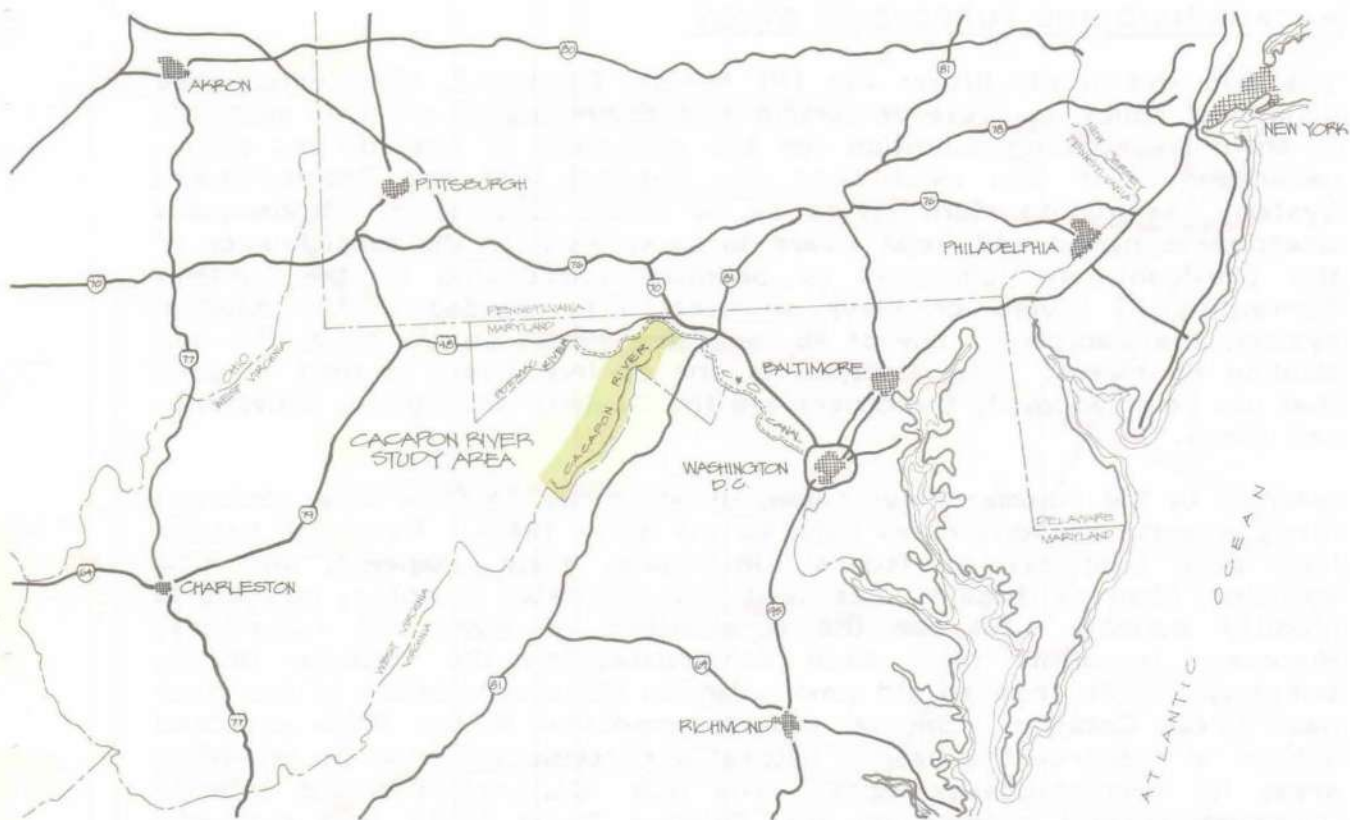
there's only one!

The purpose of this study is twofold: to determine whether the Cacapon River or any of its segments meet the criteria of eligibility for designation as a wild, scenic, and/or recreational river, and to determine whether the river should be recommended to Congress as being suitable for this status. Among the factors to be considered in assessing suitability are the extent of land in the affected area which is under Federal administration and the degree of local and state government support for inclusion in the national system. In addition, as a part of this study, various ways to protect the river's resources through a cooperative effort between private landowners, local/state government, and other parties have been explored; this material is included at the request of local interests.

as an addition to the national

extent of public lands in the river area, costs required for acquisition, development and management and operation; public, local or state interest in acting to protect and manage the river, the timeliness and feasibility of such action, etc.

area



VICINITY

CACAPON WILD AND SCENIC RIVER STUDY
UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

DSC / CARI-40,000A / APRIL 82

SUMMARY

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The purpose of this study is twofold: to determine whether the Cacapon River or any of its segments meet the criteria of eligibility for designation as a wild, scenic, and/or recreational river and to determine whether the river should be recommended to Congress as being suitable for this status. A nonsuitable river (one that would not be recommended for designation) would lack extensive lands already under federal administration, and local or state governments would display no inclination to include it in the national system. In addition, as a part of this study, various ways to protect the river's resources through a cooperative effort between private landowners, local/state government, and other parties have been explored; this material is included at the request of local interests.

CONSULTATION, COORDINATION AND COMMENTS

was conducted and this report
The study ~~was~~ prepared by a team of federal and state representatives in consultation with local governments and the public. Led by the National Park Service (NPS), the team collected and analyzed technical information from knowledgeable individuals, organizations, and agencies. Public participation--comments, ideas, and concerns expressed during the public meetings and workshops--~~have~~ *has* been one of the most important elements of this study. *cont*

Comments on the draft wild and scenic river study report were requested from federal, state and local government agencies and ~~the~~ *from* the public during meetings and on public response sheets. A number of federal agencies and the West Virginia Department of Natural Resources provided comments on the study report. (Refer to Appendix B) No comments were received from local governments. Over 200 draft reports and mail-back public response sheets were sent out before the meetings. Of the nearly 100 people who participated in the June 1982 meetings and the 11 who sent in public response sheets, most were in agreement with the ~~reports~~ *study* findings that any river preservation effort should be accomplished at the local level. There was agreement that the issues and concerns in the study report were accurate as they relate to the Cacapon River drainage.

RIVER SETTING

The Cacapon River flows through Hardy, Hampshire, and Morgan counties in the northeastern panhandle of West Virginia. The area designated for study includes the Cacapon River (78 miles), Lost River (27 miles), and North River (49 miles, the Cacapon's major tributary). The Cacapon and Lost are the same river; the name changes where the Lost flows under Sandy Ridge and emerges as the Cacapon several miles south of Wardensville.

The Cacapon drains nearly 700 square miles of an area characterized by parallel valleys and long mountainous ridges. This Valley and Ridge province is composed of sedimentary rocks arranged in one great syncline, with numerous alternating anticlines and synclines. Forest, mostly a mix of evergreen and deciduous trees, covers 79 percent of the total land area; agricultural land accounts for 19 percent; the remaining 2 percent consists of urban land, barren land, and water.

The Washington, D.C., and Baltimore, Maryland, metropolitan areas, with a combined population of approximately five million people, are within 100 miles of the river. Although agriculture and forestry have predominated, the Cacapon area is becoming a popular recreation area for residents of these densely populated urban centers. Accordingly, subdivision sales and second-home development have increased dramatically over the last five to ten years.

The study was prepared by a team of federal and state representatives in consultation with local governments and the public. Led by the National Park Service, the team collected and analyzed technical information from knowledgeable individuals, organizations, and agencies. Public participation--comments, ideas, and concerns expressed during the public meetings and workshops--may be the most important element of this study. When this draft report has been reviewed by all concerned parties, a final report will be prepared for transmittal to Congress.

RIVER SETTING

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ISSUES AND CONCERNS

The overriding concern expressed by the public during meetings held in December 1981 and workshops conducted in February 1982 is the dramatic change in the river's natural character over the last ten years. The following sections describe the major actions that are responsible for changes in the river's character and summarize the major concerns expressed by the public.

Resource Issues

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Resource Issues

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~~concern about~~ subdivision sales and residential development, especially second homes, which have increased at a rapid rate during the last five to ten years; over 50 percent of the land adjacent to the river has been platted for individual lot or subdivision development in Morgan County alone

greater demand on river resources such as soils, vegetation, fish and wildlife, and water quality degradation caused by increased recreational usage and visitation; litter, trespass, and vandalism have been particular problems for private landowners, as has trash buildup at bridge crossings and at the river access sites

recent degradation of water quality (although the Cacapon River is still considered a high quality stream by the West Virginia Department of Natural Resources); major sources of water pollution are leakage and improper placement of septic tanks, erosion due to road construction, litter, and increased river usage

impact of oil and gas extraction on the river's character in the future; while there are no extractive operations within the river corridor, there have been recent oil and gas explorations adjacent to the river . . . the results of these explorations are not yet published

notice
~~concern~~ that the Atlantic Power Development Corporation has been issued a preliminary permit by the Federal Energy Regulatory Commission to study the feasibility of building a hydroelectric power project dam at the site of the existing dam near Great Cacapon; the dam is currently in disrepair, and in 1976 the state legislature passed a bill to demolish it. Some landowners felt that demolishing the dam would cause their river frontage to become a mudflat. To date, demolition funds have not been appropriated

release by the West Virginia Department of Highways *of* ~~released~~ a Draft Environmental Impact Statement proposing five alternative highway routes for the Appalachian Corridor H highway. Three routes (Alternates A, B and D) would cross and impact the Cacapon River near Wardensville, while the other two (Alternates C and E) would cross at Capon Bridge. It is unlikely that funding would be available for construction of the Corridor H highway in the near future.

Public Concerns

A long history of strong local opposition to any manner of government control of private lands exists in the Cacapon River area. This general concern was expressed by local officials and citizens at meetings and workshops conducted within the study area late in 1981 and in 1982. In particular, opposition to any form of federal control was voiced. The study team was given a clear message: If anything is to be done to protect and conserve the Cacapon River, it should be done by local citizens and local government, perhaps with some assistance from the state of West Virginia, but not by the federal government. } note!

Concerns expressed most frequently during the course of this study include:

fear that wild and scenic river designation will trigger more publicity and bring more people to the river, resulting in more litter, pollution, vandalism, trespass, subdivision development, poorer fishing, disregard for property-owner rights, and increased control and regulation over property owners

suspicion that the federal government might in the future insist on a strong voice in river management or buy out private property or rights and take over control of the river

doubt

~~concern~~ about state and local government effectiveness in enforcing water pollution laws, health codes, and other regulations

skepticism

~~concern~~ about the financial capability and willingness of state and local governments to manage and protect the river

distrust

~~concern~~ over content of the study report--the accuracy and completeness of the description of public concerns, appropriate potential river classification levels, information on successful local efforts to solve river problems and protect important river resources, and effects of local stream conservation measures on landowners.

FINDINGS

During the study process, the Cacapon, Lost, and North rivers were evaluated on eligibility criteria outlined in the Wild and Scenic Rivers Act. In addition, the study analyzed whether the eligible river segments were suitable for designation to the National Wild and Scenic Rivers System. The findings that follow are based on the above analysis and public input received during and after public meetings and workshops.

It is generally agreed by the study team, consultants, and local public that the Cacapon and a short segment of the Lost River should be preserved in their present condition. Consensus was that any preservation effort should be accomplished at the local level with the involvement of private landowners and town and county governments, with assistance from Regional Planning and Development Councils VIII and IX and the state.

Methods for river protection without federal involvement were developed at the public workshops and revised later. Many citizens felt that a tri-county agreement (option 2) outlining planning regulations would be the most workable and easily implemented solution. Some felt that ideas contained in the other options could be used to strengthen option 2. Preparation and implementation of a local river management plan could be accomplished with establishment of a responsible management entity such as that identified in the "River Preservation Approaches" section. In addition, there was interest in approaching the state legislature to sponsor legislation to include the river in the state's Natural Streams Preservation System.

The 25 miles of the Lost River from its headwaters to the West Virginia Highway 259 bridge and the entire 49-mile-long North River do not qualify for inclusion in the national system because of the lack of outstandingly remarkable resource values and low water flows.

While not outstandingly remarkable, the Lost and North rivers do contain resource values of local and state significance. The Lost flows through a pleasant farming valley and is designated by the West Virginia Water Resources Board as "trout waters," which means it sustains a year-round trout population. The North River flows through several scenic sections with North River and Ice Mountains being the most prominent visual attractions. Ice Mountain contains unique botanical features because of the presence of year-round accumulations of ice. A short segment of the North River is also designated as "trout waters."

*or is it?
ice mountains*

Seventy-seven and one-half miles of the Cacapon and 2.5 miles of the Lost River, from the point where the Lost River disappears underground at the West Virginia Highway 259 bridge south of Wardensville to its confluence with the Potomac River, are eligible for designation in the National Wild and Scenic Rivers System.

In order to analyze eligibility, the river was divided into four segments based on the presence of outstandingly remarkable values and the amount of road access and shoreline development. Segment A, 5 miles long, possesses both outstanding scenic and recreational values and meets the criteria for classification as a scenic river. Segment B, 25.5 miles, is considered an outstanding recreational stretch and is classifiable as a recreational river. Segment C, 26.5 miles, has outstanding scenic and recreational values and meets the criteria for scenic river classification. Segment D, 23 miles, is classifiable as a recreational river and has outstanding recreational values.

Although four segments of the Cacapon/Lost River are eligible for inclusion in the national system, the lack of public, local, and state government support for designation and the nearly total private ownership of the river corridor appear to preclude it from federal administration. Therefore, the study finds the river nonsuitable and the Department of the Interior does not propose designation in the national system. If Congress concurs with this study's determination there will be no further federal involvement for wild and scenic river consideration.

for

speculation!

During the public meetings and workshops in December 1981, February 1982, and June 1982, most participants (and those who responded later) believed that national designation was not the best means for protecting the Cacapon River and that it would increase problems that already exist. Most felt that the river was being degraded by development, overuse, septic tank leakage, littering, and water pollution from new road construction. The majority of citizens want to preserve the river at the local level, where they believe they can more effectively identify specific problems and implement solutions.

ELIGIBILITY AND CLASSIFICATION DETERMINATIONS

ELIGIBILITY

Analysis of the Cacapon/Lost River and its major tributary, the North River, has determined that an 80-mile segment of the Cacapon/Lost River is eligible for inclusion in the National Wild and Scenic Rivers System. This finding is based on criteria contained in the Wild and Scenic Rivers Act (PL 90-542).

The Act states that in order to be eligible, a river or its segments must possess one or more outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values and that it must be free-flowing. Outstandingly remarkable values should be of ~~national or multistate~~ significance, ^{be} unique or very rare when compared with similar areas, and valuable scientific and educational resources.

with respect to the physiographic province of location

Lost and North Rivers

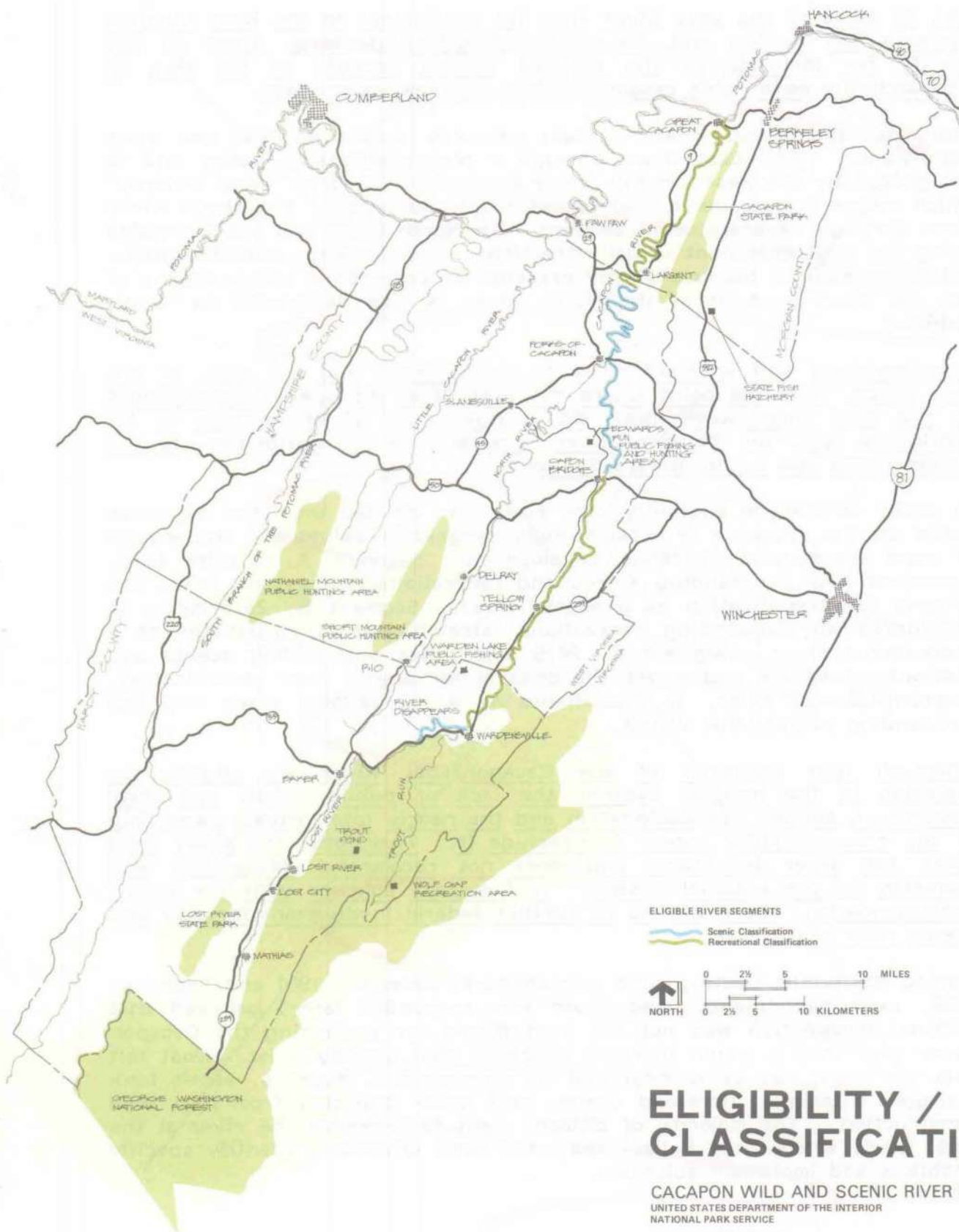
The 25-mile segment of the Lost River from its headwaters to the West Virginia Highway 259 bridge south of Wardensville and the entire 49-mile North River are ineligible for designation. While these two river segments are free flowing, they contain no outstandingly remarkable values of national or multistate significance. In addition, water flow data and field checking from the air and on the ground indicate insufficient water flow, especially during summer and fall, to support a diversity of recreational uses.

The Lost and North rivers do contain resource values of local and state significance. The headwaters of the Lost River rise in Hardy County and flow northeasterly through a pleasant valley characterized by short linear hills and low valley walls. The river flows through a mixture of forest and fields that supports a variety of wildlife. This segment of the Lost River has been designated as "trout waters" (sustains a year-round trout population) by the West Virginia Water Resources Board.

The North River flows through several scenic sections, with North River Mountain the most prominent visual attraction. The river also flows near Ice Mountain, which contains unique botanic features that result from ice accumulating in talus at the foot of the mountain; the ice persists throughout much of the year. Ice Mountain boasts the southernmost known colony of prickly rose and one of only two colonies of twin flower. A short section of the North River above Rio is designated as "trout waters." Numerous Civil War skirmishes and battles occurred near the river corridor, the biggest in the vicinity of North River Mills.

Cacapon/Lost River

The 80-mile section of the Cacapon/Lost River from the West Virginia 259 bridge south of Wardensville to the river's confluence with the Potomac



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Seventy-seven and one-half miles of the Cacapon and 2.5 miles of the Lost River, from the point where the Lost River disappears underground at the West Virginia Highway 259 bridge south of Wardensville to its confluence with the Potomac River, are eligible for designation to the National Wild and Scenic Rivers System.

In order to analyze eligibility, the river was divided into four segments based on the presence of outstandingly remarkable values and the amount of road access and shoreline development. Segment A, 5 miles long, possesses both outstanding scenic and recreational values and meets the criteria for classification as a scenic river. Segment B, 25.5 miles, is considered an outstanding recreational stretch and is classifiable as a recreational river. Segment C, 26.5 miles, has outstanding scenic and recreational values and meets the criteria for scenic river classification. Segment D, 23 miles, is classifiable as a recreational river and has outstanding recreational values.

Although four segments of the Cacapon/Lost River are eligible for inclusion in the national system, the lack of public, local, and state government support for designation and the nearly total private ownership of the river corridor appear to preclude it. Therefore, the study team finds the river unsuitable and does not recommend designation and inclusion in the national system. If Congress concurs with the team's recommendation, there will be no further federal involvement for wild and scenic river status.

During the public meetings and workshops in December 1981 and February 1982, most participants (and those who responded later) believed that national designation was not the best means for protecting the Cacapon River and that it would increase problems that already exist. Most felt that the river was being degraded by development, overuse, septic tank leakage, littering, increased usage, and water pollution from new road construction. The majority of citizens want to preserve the river at the local level, where they believe they can more effectively identify specific problems and implement solutions.

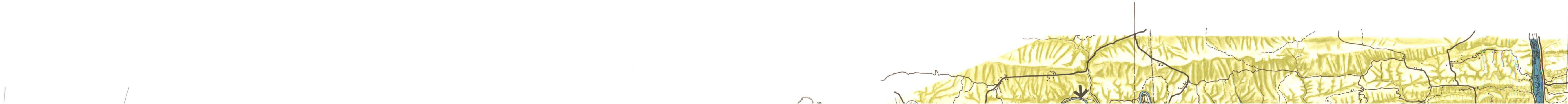
near Great Cacapon is eligible for designation. The river is free flowing throughout its course and has high water quality. It is long enough and has sufficient water volume to support a great diversity of recreational uses as well as to support various fish and wildlife species. The river is becoming increasingly popular because of its easy access from the Washington/Baltimore metropolitan areas. It was divided into four segments for study, starting at the West Virginia 259 bridge and moving north. For each segment, only those values that are considered outstandingly remarkable are addressed.

Segment A--5 Miles. The Lost River begins its dramatic and interesting transformation into the Cacapon at the West Virginia 259 bridge south of Wardensville. Here, next to the top of Sandy Ridge, the river sinks underground and for the next 2.5 miles it remains lost, with very little surface water flow except during high water runoff. The river bed winds through a heavily forested and deeply incised valley corridor. The gorge walls are from 300 to 500 feet high and are characterized by two prominent geologic features, the Pinnacles and Sandy Ridge. The river reemerges at the end of the Sandy Ridge gorge as the Cacapon River. The Cacapon continues to flow through a gorge until it opens into a relatively small valley, where it flows for approximately 2.5 miles into Wardensville.

Scenic Values--The river winds through a virtually undeveloped area that affords scenic vistas through rugged mountain passes as well as a feeling of being confined within the high valley walls. The river is generally slow flowing because of limestone sinks. In addition, rapids, sparkling riffles, and large boulders add to the colorful scenery and the dominant gorge walls. Based on these findings, the study team found this stretch outstandingly remarkable.

Recreation Values--This segment has several whitewater rapids during high-water runoff, with numerous ledges and substantial gorges that add challenge and pleasure to the canoeing experience. This stretch has become increasingly popular during high water levels for the more experienced canoeists. The river also provides good opportunities for wildlife viewing, picnicking, camping, and hiking. The scenic values of this stretch provide a high quality primitive recreational experience. With the combined factors of high quality canoeing, high levels and diversity of recreational use, and dramatic scenery, this stretch was judged to have outstanding recreational values.

Segment B--25.5 Miles. Between Wardensville and the town of Capon Bridge, the Cacapon shifts in character as it parallels Baker, Cacapon, and Dillon mountains. The river, with a few sizeable meanders, runs north-northeasterly through an open valley. Its eastern bank is hilly and has clumps of trees, but the overall character of the river corridor is one of openness. The land cover throughout this stretch is composed of a mixture of forested slopes, agricultural fields, and floodplains. In addition, there are a number of summer resort camps, vacation cottages, and permanent residences.



Recreation Values--The river is slow moving and its meanders provide excellent opportunities for fishing, swimming, floating, limited picnicking and camping, hiking, and general sightseeing. This stretch provides fine canoeing in an attractive pastoral setting. It is particularly popular because of the number of resort camps and vacation cottages and easy access via U.S. 50 and 7, and I-66 from the Washington metropolitan area. This segment was determined to have outstanding recreational values.

Segment C--26.5 Miles. From Capon Bridge to just south of Largent, the Cacapon cuts through the Pine, Bear Garden, and Leith mountains. Beyond Darby's Nose (a prominent hill), it courses through a heavily forested natural area and has cut a deeply incised valley bordered by Sideling Hill and Cacapon Mountain. Through this section, the Cacapon flows in large looping meanders around high cliffs. There is little development, and the river is generally inaccessible, particularly south of Darby's Nose.

Scenic Values--Many consider this to be the most scenic and impressive part of the river--with its heavily wooded shoreline, sheer (nearly 800-foot) walls of the main gorge, and overall rugged beauty of the river corridor. This section is a dramatic example of a "gap," created by the river cutting at right angles through the mountains. Several geological features add visual interest to the river. One, Castle Rock, resembles the ruins of an ancient castle overlooking the river; the other, Caudy's Castle, is a jagged rock rising 600 feet. The river flows swiftly over ledges and around boulders, which adds to the primitive beauty of this stretch. The combination of heavily forested slopes, interesting geological features, swiftly flowing water, and dramatic scenery are indeed outstanding.

Recreation Values--This segment is one of the better known and most heavily used stretches of the river. Canoeing is popular due to the number of whitewater rapids, which are ideal for the intermediate to advanced paddler. The isolation leads to an abundance and variety of wildlife. Bass fishing is excellent, and picnicking, hiking, and sightseeing are enjoyed. The scenic values combined with the high quality recreational opportunities available provide an outstanding recreational experience.

Segment D--23 Miles. In this segment, south of Largent to the confluence with the Potomac at Great Cacapon, the river features a gentle gradient and numerous long pools as it transcribes huge, slow-flowing loops through the mountains. Cacapon Mountain rises 1,500 feet on the east side of the river. The land cover is primarily forested slopes and floodplain terraces. This segment is the most developed and platted stretch of river, with individual residences, vacation cottages, and large subdivision developments dotting the banks. A 15-foot-high dam is located just south of Great Cacapon, but does not significantly alter the river's free-flowing quality. If the dam ~~was~~ rebuilt to generate hydroelectric power, as is being considered, the eligibility of the short segment at and below the dam would have to be reconsidered.

Recreation Values--The river flows quietly through a continuous series of meanders and pond areas, which make it ideal for float fishing. The slow-moving water and the presence of waterfowl, fish, and wildlife species provide excellent opportunities for wildlife viewing, fishing, hunting, picnicking, and camping. In addition, there are enjoyable, nonstrenuous opportunities for canoeing, floating, and hiking. These activities are enhanced by the scenery and excellent fish and wildlife values. Boaters on this stretch must portage around the left side of the dam. This segment is extremely popular because of its easy access via I-70 from the Baltimore/Washington metropolitan areas.

CLASSIFICATION

In addition to determining eligibility, the study team also determined potential classification levels for the river segments as scenic and recreational, based on criteria in the Wild and Scenic Rivers Act. These address free-flowing characteristics, accessibility, shoreline development, and water development appropriate or required for wild, scenic, and recreational classification levels. They are defined as follows:

Wild river areas--Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic river areas--Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational river areas--Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Qualifying segments and the criteria against which they were measured are presented below.

Scenic

Qualifying segments are A and C on the Eligible River Segments map. Criteria encompassed:

Flow. Free flowing; low dams, diversion works, or other minor structures that do not inundate the riverbank may not bar consideration.

Accessibility. Roads may occasionally bridge the river. Short stretches of conspicuous or well-screened roads or railroads paralleling the river area may be permitted, but certain types of road use, such as industrial and commercial traffic, need to be considered.

Shoreline. Shoreline and immediate river environs have an overall natural character. Small communities are limited to short reaches of the total area. Agricultural and timber harvest practices not adversely affecting the river area may be permitted.

Recreational

Qualifying segments are B and D on the Eligible River Segments map. Criteria were:

Flow. The river may have undergone some impoundment or diversion in the past, but the water should not have characteristics of an impoundment for any significant distance.

Accessibility. The river should be readily accessible, with likelihood of parallel roads or railroads along riverbanks and bridge crossings.

Shoreline. Some shoreline development is acceptable, including agricultural uses, small communities, or dispersed or clustered residential use.

THE RIVER ENVIRONMENT

The region surrounding the study river, within the Cacapon River drainage, that will be most affected by the results of this study includes Hardy, Hampshire, and Morgan counties.

LOCATION AND ACCESS

The Cacapon, Lost, and North rivers are located in the Potomac River basin in the northeastern panhandle of West Virginia. Several major eastern seaboard population centers, including Baltimore, Maryland, and Washington, D.C., are approximately 100 miles away. While agricultural pursuits have kept the area relatively isolated, it is becoming an increasingly inviting recreation spot for people from the densely populated metropolitan areas.

Access is by several major highways, including I-66 and 70, and U.S. 7 and 50 from the east; U.S. 11 from the north and south; and U.S. 40 and 48 from the west. The rugged mountainous terrain of northeastern West Virginia complicates construction of transportation facilities through the area; the many narrow, northeastward-trending valleys and ridges and their soil types make construction and maintenance of east/west highways especially difficult.

The primary east/west route across the Cacapon River is U.S. 50, which crosses at Capon Bridge. The river is closely paralleled to the north and west by West Virginia highways 9 and 29 and is crossed by a small feeder road near Forks of Cacapon in Hampshire County. West Virginia 259 roughly parallels the Cacapon from Yellow Springs south to Wardensville, and it and heavily traveled West Virginia 55 follow the river on the south and west.

The nearest major commercial jet service is at Washington, Baltimore, or Pittsburgh. The airports at Winchester and Martinsburg support light jet traffic and provide limited commercial passenger service. Local bus service is available.

LANDOWNERSHIP AND USE

The region supports various forms of agriculture, forestry, light industry, and residential development. Each of the three counties has slightly different land uses, as depicted in table 1.

The topography of the three-county region ranges from predominantly mountainous, to gently rolling hills, to level lands adjacent to the various river courses. This diversity has much to do with land use throughout the area. Accordingly, forest land comprises mostly a mixed evergreen/deciduous forest and accounts for approximately 79 percent of the total land area. Agricultural land of mostly crops and pasture constitutes 19 percent of the land base. The remaining uses include

Table 1: Land Use Statistics For The Three-County Region

Land Use Category	Hardy County Acreage	Hardy County Percent	Hampshire County Acreage	Hampshire County Percent	Morgan County Acreage	Morgan County Percent
Urban or Built-Up Land						
Residential	1,127	65.52	1,581	76.19	929	49.71
Commercial and Services	257	14.94	237	11.42	376	20.12
Industrial	20	1.16	0		208	11.13
Transportation, Communications, and Utilities	60	3.49	148	7.13	159	8.45
Industrial and Commercial Complexes	0		0		0	
Mixed Urban or Built-Up Land	256	14.88	40	1.93	10	0.54
Other Urban or Built-Up Land	0		69	3.33	188	10.06
TOTAL	1,720	100	2,075	100	1,869	100
PROPORTION OF COUNTY		.46		.50		17.21
Agricultural Land						
Cropland and Pasture	74,755	99.71	74,764	91.62	25,383	99.88
Orchards, Groves, Vineyards, Nurseries, and Ornamental Horticultural Areas	128	0.17	6,840	8.38	0	
Confined Feeding Operations	30	0.04	0		0	
Other Agricultural Land	59	0.08	30	0.04	30	0.12
TOTAL	74,972	100	81,634	100	25,413	100
PROPORTION OF COUNTY		19.98		11.77		17.21
Forest Land						
Deciduous	56,893	19.06	69,743	21.34	68,399	57.34
Evergreen	6,899	2.31	4,448	1.36	2,916	2.44
Mixed	234,701	78.63	252,581	77.30	47,978	40.22
TOTAL	298,493	100	326,772	100	119,293	100
PROPORTION OF COUNTY		79.54		79.12		80.79
Water						
Streams and Canals	0		2,352	96.75	722	91.28
Lakes	0		0		10	1.26
Reservoirs	99	100.00	79	3.25	59	7.46
Bays and Estuaries	0		0		0	
TOTAL	99	100	2,431	100	791	100
PROPORTION OF COUNTY		0.03		0.59		0.54
Barren Land						
Bare Exposed Rock			0		0	
Strip Mines, Quarries, and Gravel Pits			30	42.85	247	86.06
Transitional Areas			40	57.14	40	13.94
TOTAL	0		70	100	287	100
PROPORTION OF COUNTY				0.02		0.19
TOTAL ACREAGE	375,284		412,982		147,653	

Source: Land Use Statistics for West Virginia, Part 2, West Virginia Geological and Economic Survey, 1980

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urban land, barren land, and water. The primary urban land uses consist of residential, commercial, and limited industrial development, all of which occur mostly within municipalities. In addition, increasing numbers of vacation homes and summer cottages are being constructed in forest, agricultural, and river areas. This trend is more pronounced in Morgan and Hampshire counties.

As depicted in table 2, the Cacapon River corridor has a land use breakdown of forest, agricultural, and urban lands similar to the three counties. Forests predominate; large agricultural lands are concentrated between Wardensville and Capon Bridge. The communities of Wardensville, Yellow Spring, Capon Bridge, Largent, and Great Cacapon comprise most of the urban land along the river. The trend toward more development will continue, and the amount of development will nearly double by the year 2000. Much of this new development will take place in Morgan and Hampshire counties in the form of vacation cabins and summer cottages. Most of the people occupying these seasonal second homes are from the Washington/Baltimore metropolitan areas. In Morgan County alone, more than 50 percent of the land along the river has been platted for subdivision development. However, only a small percentage of this land is presently developed.

There is a much greater percentage of private land along the river than countywide. The only riverfront public land is located in the Wardensville area in several small parcels of the George Washington National Forest. There are also small amounts of county and town lands along the river.

POPULATION AND ECONOMY

Since 1960 the three-county region has experienced economic growth. After recording a population low of 8,855 in 1970, Hardy County grew to 10,030 in 1980, and the projected year 2000 population is 11,594--an overall population increase of 15 percent. The county's primary products are livestock, grain, and poultry.

Hampshire County grew slowly through the 1960s to a 1970 population of 11,710 and at an increasing rate through the seventies to a population of 14,867 in 1980. The projected population for Hampshire County for the year 2000 is 21,900, a 47 percent increase. The principal sources of income are fruit production, farming, lumber production, manufacturing, and tourism.

Morgan County, which experienced a low population point of 8,276 in 1950, has had a slow but steady growth to 10,711 in 1980. The population is projected to increase by 11 percent to approximately 11,829 by the year 2000. The topography of Morgan County is suitable for various types of industry. Tourism has long played an economic role in this county, with its hot springs; state park; and associated hotels, motels, lodges, and resorts. The primary mineral product is glass sand; manufactured products include electrical equipment, clothing, wood products, and processed fruit. Fruit growing is the main agricultural pursuit, with dairying, livestock raising, vegetables, and grain filling lesser roles.

Table 2: Land Use Statistics and Projections, Cacapon and Lost River Drainages

Land Use Category	Cacapon River Drainage (155,500 acres)				Lost River Drainage (117,200 acres)			
	1979	Percent	2000	Percent	1979	Percent	2000	Percent
Urban or Built-up Land	2,857	1.8	4,965	3.2	1,296	1.1	1,410	1.2
Residential, Commerical and Industrial	1,500		3,540		500		600	
Transportation and Utilities	1,357		1,425		796		810	
Agricultural Land	26,187	16.8	23,853	15.3	24,348	21.0	23,598	20.2
Cropland & Pasture	20,175		18,321		23,100		22,350	
Hayland	3,755		3,350		250		250	
Orchards	1,100		1,025		0		0	
Other Agricultural Land	1,157		1,157		998		998	
Forest Land	122,195	78.5	120,588	77.5	90,988	77.43	91,632	78.12
Deciduous, Evergreen and Mixed								
Water	1,401	1.0	1,401	1.0	358	0.3	358	0.3
Wetlands								
Forested & Nonforested	440	0.3	438	0.28	50	0.04	41	0.03
Barren Land	2,420	<u>1.6</u>	4,255	<u>2.72</u>	160	<u>0.13</u>	1380	<u>0.15</u>
Total Land Area (%)		100.0		100.0		100.0		100.0

Source: West Virginia Agricultural Water Quality Management Plan, West Virginia State Conservation Committee and Department of Natural Resources, June 1979

The economic growth of these counties has both positive and negative aspects. Pressure on the farmers along the Cacapon to sell their land for development is increasing as more people seek recreation in the West Virginia mountains. This development activity is rapidly increasing the value of farmlands beyond what is economically feasible for agriculture. Thus, while the basic economy of the area is rising because of growing second-home investment and recreational activities, the amount of land occupied by agricultural pursuits is steadily decreasing. Development is threatening to dominate the pastoral countryside that differentiates rural areas and populated suburbs.

NATURAL RESOURCES

Physiography/Geology

The Cacapon River is located in the northeastern panhandle of West Virginia in the Valley and Ridge province, a physiographic unit of the Appalachian Highlands. Elevation ranges from 500 to 3,000 feet above sea level. The area is characterized by long, narrow, parallel northeast/southwest-trending ridges and valleys that resulted from the erosion of tilted and folded Paleozoic sedimentary beds. The Valley and Ridge province consists of one great syncline with numerous alternating anticlines and synclines dating from the Cambrian, Ordovician, Silurian, Devonian, and Mississippian ages.

The three-county region is divided into three general areas, a southeastern part of parallel ranges of mountains drained by the Cacapon River and its tributaries, a northwestern part drained by the south branch of the Potomac, and an intermediate area drained by the Little Cacapon.

Resistant shale and sandstone form the ridges, while limestone, dolomite, and calcareous shale underlie the valleys. The surface rocks are sedimentary, laid down in water, and consist of sandstones, shales, and limestones of great variety in composition and appearance.

Soils

The soils in Hardy, Hampshire, and Morgan counties were formed from the weathering sedimentary rocks. Some were weathered in place, some were transported by water, and some were moved downward by gravity.

Soil associations range from the nearly level and gently sloping soils of the floodplains and river terraces to very steep soils. The river area is generally gently sloping to moderately steep, with soils formed from sandstone, siltstone, and shale. The Cacapon River flows primarily through the Berles-Weikert-Laidig-Dekalb association, which is a moderately deep, well-drained, and moderately textured soil. The river also flows through several sections with very steep soils that are deep, moderately well drained, and coarse to fine textured. Finally, the lowest

portion of the river contains soils that are deep, well drained, and medium- to fine-textured materials of the floodplains, shale uplands, and river terraces.

Climate

The climate of the region is termed "humid continental," due to marked seasonal differences in temperature and precipitation. Temperatures vary greatly from the mountain ridges to the valley floors. The mountains and minor ridges act as barriers to storms and even to cold and hot waves. They also aid in better circulation, which results in cool summer night breezes even after very hot days.

The mean annual temperature is 53°F. Summers are generally warm, with a seasonal average of 73°F; however, temperatures in the valley occasionally exceed 100°F. Winters are rigorous but not severe, with a seasonal mean of 40°F. In general, there is plenty of sunshine and an exceptionally long frost-free growing season. The region is subjected to thunderstorms, hailstorms, icestorms, and occasional tornadoes. Annual precipitation occurs mostly during the spring and summer. The higher mountains and ridges receive more than 100 inches annually, while the lower elevations average 20 to 40 inches annually.

Water Resources

The Cacapon is the fourth largest tributary to the Potomac River, which drains the eastern slopes of the Appalachian Mountains. Its source is in the southeastern corner of Hardy County, and it follows a northeasterly course across the eastern portion of Hampshire County to the Potomac River at Great Cacapon in Morgan County. The Cacapon drains 682 square miles and falls an average 11.8 feet/mile over its length. Its upper reaches have a steep gradient with some falls and rapids, while the lower third is more sluggish and meanders.

Flow Characteristics. The quantity of both surface and subsurface water varies considerably throughout the year. Surface water quantity depends upon precipitation, since most is derived from runoff. The river is normally highest in the late spring and early summer, with flow gradually decreasing to its lowest point in late fall. Variations in subsurface water depend on the water-bearing capacity of the underground aquifer. Over the last 56 years, the Cacapon's average annual streamflow has been 586 cubic feet per second (cfs), while runoff averages nearly 12 inches per year. Maximum flows occurred during the flood of March 1936--an incredible 87,600 cfs, while the minimum flow of 26 cfs was recorded in September 1966. The Lost River's average annual flow for an eight-year period is 188 cfs, with an average runoff of 16 inches per year. Maximum recorded flows occurred in June 1972 (14,600 cfs), while minimum flows were recorded in July 1977 with 1.8 cfs.

The North River rises on the east side of South Branch Mountain and flows in a general northeasterly direction along North River Mountain and Ice Mountain to Forks of Cacapon where it joins the Cacapon River.

Table 3: Comparison of Water Flows
Stream Flow Characteristics* (Expressed in Cubic Feet Per Second)

	<u>Cacapon River (Near Great Cacapon at Rock Ford Gauging Station)</u>	<u>Lost River (Ineligible segment at McCauley near Baker)</u>
<u>1980</u>		
October 9	73	**
July 1	145	**
April 8	866	**
February 19	263	**
<u>1979</u>		
November 19	514	**
July 21	142	35
May 15	2,050	630
February 20	530	40
<u>1978</u>		
September 19	170	23
July 30	381	22
May 2	342	69
February 7	487	60
<u>1977</u>		
November 1	201	44
August 3	56	24
May 4	220	34
January 24	227	16
<u>1976</u>		
November 3	969	217
August 3	77	3.6
May 4	259	47
February 3	894	143
<u>1972</u>		
November 5	514	148
July 15	698	75
May 5	5,940	364
January 10	521	75

*There is no stream flow data available for the North River; it is likely that its flows would be similar to the Lost River.

**No data available.

Source: Water Resource Data for West Virginia, U.S. Geological Survey

There are no streamflow records available for this river; however, the North River probably exhibits similar flow characteristics to the Lost River.

Water Quality. The quality of surface water in the Potomac River basin varies from stream to stream and within a given stream because of both man-made and natural factors. Most water quality problems in the basin are the result of coal mining, inadequate treatment of industrial and municipal wastes, and nonpoint sources of pollution primarily from agricultural activities. Nonpoint sources of pollution include sediments, fertilizers, insecticides and pesticides, herbicides, and animal wastes which directly or indirectly enter the water.

Approximately 50 percent of the land in the basin contains groundwater of unsatisfactory quality for domestic uses. The quality and chemical character of the groundwater largely reflects the mineral content of the aquifers.

Despite concerns about water quality degradation, water quality is excellent in the Cacapon, which is listed as a high quality stream by the West Virginia Department of Natural Resources. It has not been troubled by many of the factors that degrade water quality in rivers of other parts of the state (i.e., mining, chemical manufacturing, and dense population). According to state law, high quality waters must be maintained at their existing quality unless the state decides after public hearings to allow limited degradation as a result of necessary and justifiable economic and social development. The river's excellent water quality is reflected by the following chemical data collected quarterly, for the period of May 4, 1976, through October 9, 1980:

Like many of the streams in the Eastern Panhandle of West Virginia that are unaffected by mine drainage, the Cacapon has an excellent pH with an average of 7.7. The average acidity (3.5 mg/l), alkalinity (55.5 mg/l), and hardness (90.5 mg/l) values also are indicative of high water quality.

Dissolved oxygen values are excellent, with an average of 10.4 mg/l, and at no time approach the state standard of 7.0 mg/l. The five-year average for percent saturation dissolved oxygen is 98.9 percent. Oxygen problems on the Cacapon are virtually unknown.

Routine evaluations of data collected statewide have shown phenolics and bacterial violations to be fairly common. However, during the period evaluated, the 1 ug/l standard for phenolics was exceeded only five times and then only slightly. The present phenolics standard of 5 ug/l has not been exceeded. Only one instance was recorded of the fecal coliform standard being violated during the period.

The following parameters for which the state has standards never exceeded the acceptable limit: chloride, hexavalent chromium, fluoride, temperature, ammonia, manganese, arsenic, mercury, and selenium. However, state standards for copper, iron, lead, silver, and cyanide were occasionally exceeded.

In summary, the Cacapon River is one of West Virginia's highest quality larger streams; it has excellent water quality and adequate flow to complement the river's values.

Vegetation

The major vegetative associations in the region and the river study area are a result of geology, soils, climate, topography, and past and present land uses. The original forests of this area were dominated by oak and chestnut; however, the best oaks have been cut down and the chestnut has been nearly eliminated by blight. Hickories, especially mockernut, red hickory, and pignut hickory, are abundant, and white pine has extended its original range by moving into areas where trees were removed. Dry rocky slopes support a growth of gnarly chestnut oak, with an undergrowth of mountain laurel, pink azalea, great laurel, and deerberry, along with other shrubs such as witch hazel and dockmackie. Dogwood is also abundant.

Forest predominates along the river, with a smaller proportion of agricultural lands. The majority of the river corridor is characterized by the upland forests of oak, hickory, Virginia pine, pitch pine, yellow poplar, white ash, and beech. On the bluffs and steep mountain slopes, mature forest growth is less prominent, with numerous shrubs providing undergrowth. Along the river floodplain, sycamore, box elder, silver maple, American elm, cottonwood, and river beech occur. In the river and along its bank, sedges are abundant, their roots forming soils which help control erosion. In the shallower slow-moving stretches, cowlily, arrowhead, water-plantain, burreed, and water-willow grow. Large masses of algae are found in deep pools, as well as hanging suspended in clear quiet water. Bladderwort has been found in at least one pool.

There are no federally listed threatened or endangered plant species in the river study area. However, three plant species, Trifolium virginicum (Kate's Mountain Clover), Senecio antennarifolius (Ragwort), and Pseudotaenidia montana (Mountain Pimpernel) are proposed for federal status. There are also a number of plant species of state scientific interest.

Fish and Wildlife

The Cacapon River supports an excellent fishery due to its diverse river habitats and high water quality. Major fish species include the American eel, trout, chain pickerel, rock bass, sunfish, smallmouth bass, and largemouth bass.

Due to the abundance of water and diversity of vegetative covers, there is a great variety of wildlife along the Cacapon River. Wildlife include whitetailed deer, fox, gray squirrel, raccoon, cottontail rabbit, wild turkey, and ruffed grouse. Migratory bird species include the mourning dove, mallard, and woodcock. The river area is considered excellent for hunting deer, raccoon, wild turkey, ruffed grouse, and waterfowl.

No federally listed or proposed rare or endangered fish and wildlife species exist in the Cacapon River drainage. There are a number of species of state scientific interest.

RECREATION RESOURCES

Recreational opportunities in the three-county region are provided by town, county, state, and federal levels of government, as well as by the private sector. Activities are numerous and diverse because of the abundance of high quality water and the region's terrain, which provide a beautiful setting for hunting, fishing, camping, golfing, picnicking, hiking, sightseeing, boating, swimming, and relaxing. Additionally, the region is within a three-hour drive from the Washington/Baltimore metropolitan areas.

The George Washington National Forest, which is used for a variety of purposes including recreation, encompasses approximately 100,500 acres of public land. It should be noted that most of these lands are outside the river corridor. The two most popular areas are Wolf Gap Recreation Area and Trout Pond.

The state of West Virginia manages almost 50,000 acres of land including state parks, public hunting and fishing areas, public fishing lakes and ponds, and river access sites. Short Mountain, Nathaniel Mountain, Edward's Run, and Warden Lake offer public hunting and fishing. In addition, the state operates the Ridge Trout Hatchery south of Berkeley Springs and the Berkeley Springs State Park spa.

Local levels of government provide nearly 200 acres of land for recreational pursuits. About half of this land is intensively developed with playgrounds, sports fields and courts, swimming pools, tennis courts, and picnic sites. Hampshire High Park is provided at the county level; Romney, Moorefield, and Wardensville parks are administered by town governments.

The nonpublic recreation sector also provides a wide variety of opportunities; the private sector exerts a major influence on the economic well being of West Virginia through its travel and tourism industry.

The Cacapon River itself provides a large number of water-based recreational opportunities. Since the river is primarily in private ownership, there is relatively little public development. The main public access to the river is provided and maintained by the Wildlife Resources Division of West Virginia. There are 12 river access sites used for fishing and for launching boats and canoes.

Most recreation development along the river is provided by the private sector. A number of vacation camps offer everything from horseback riding to fishing, boating, and swimming. In addition, there are many vacation cabins, cottages, and homesites for those who wish to reside in the area on a seasonal basis.

People of all ages and experience levels can enjoy the relatively calm waters of the Cacapon river. According to the West Virginia Division of Wildlife Resources, the Cacapon is considered one of the better rivers for bass fishing in the state because of high water quality and diversity of fish habitats. The Cacapon is a popular canoeing stream that has several scenic stretches and some challenging white water for intermediate paddlers.

Demand for recreational opportunities on the Cacapon River is expected to increase in coming years. This conclusion is based on the increasing recreational use experienced in the last five to ten years, the river's close proximity and easy access to the Washington/Baltimore metropolitan areas, and the projected population growth along and near the river. All types of recreational activities that are offered in the region are increasingly in demand both regionally and statewide.

CULTURAL RESOURCES

Prehistory

The prehistoric record of West Virginia represents a microcosm of the larger cultural history of the Eastern Woodlands. Little is known about prehistoric occupation of the Cacapon Valley; however, limited evidence points to the earliest occupation by Paleo-Indians between 12,000 and 8,000 B.C. Next the valley was apparently occupied by the Archaic peoples, between 8000 and 1000 B.C. Several Archaic sites have been identified. The Woodland people range from ca. A.D. 1,000 to contact and the Mississippian, ca. A.D. 700 to contact. A late Prehistoric Period ca. A.D. 1,000 to contact is also recognized. Their gradual development was interrupted by the intrusion of the Susquehannocks and the arrival of European trade goods and merchants in the early 17th century. The last Indian occupants of the area were the Shawnees, who may have arrived in historic times and moved westward around 1738, soon after the first white farmers moved to the area. Evidence points to a historic period Indian village near Romney.

History

During the French and Indian War a ragged line of small log forts protected settlers from Indians (eight have been documented). Fort Cacapon at the Forks of the Cacapon guarded the remnants of a small settlement at the east end of Bloomery Gap and the road to Winchester. Fort Edward protected another line of communication at Capon Bridge. George Washington commanded the wilderness frontier and supported the isolated forts (strongly built log houses) in the Cacapon Valley. Despite these fortifications, Indians killed settlers as far east as the Forks, leading to a radical reduction of population. The area acted as a tension or border zone between the older Virginia settlements and Indian groups to the west.

Following the French and Indian War, settlers returned to the area. Early road construction began in the late 1780s when a new trace linked Winchester via Capon Bridge and Romney; it became the northwestern turnpike linking Washington to the Ohio Valley and, eventually, today's U.S. 50. Other roads, stage lines, and railroads reduced regional isolation in the mid-19th century.

From the 18th century to the present, Berkeley Springs in Morgan County has been known as a health spa with popular hot springs that seemingly possess curative properties. George Washington made many visits to this area in peace and during war. Like Morgan County, Hampshire County also possessed a noteworthy health spa. Many famous 19th century citizens visited the resort, including Robert E. Lee.

Local industrial production began at Bloomery Gap just east of the Forks. Local entrepreneurs started a series of enterprises such as grist mills, lime kilns, sawmills, and woolen mills, stone mills, distilleries, tanneries, and an iron furnace complex that started around 1833. Several mines were opened in Hardy County to supply the iron furnace. Large quantities of crude iron were made and shipped down the Cacapon to the Potomac on rafts and flatboats. Despite changes of ownership, these furnaces operated until the 1880s.

During the Civil War, the Cacapon Valley witnessed numerous skirmishes; four small battles were fought at Wardensville (1862-64) and one at Lost Gap. Opposing forces occupied Romney 56 times. Confederate troops held the Shenandoah Valley to the east, while the Federal troops possessed the Baltimore and Ohio rail line in the northern part of the county. The war left destroyed bridges, highways in need of repair, uncultivated fields, property in ruins, and a depleted population.

Since those dark times, prosperity has returned. Coal mining became important after 1900. Lumbering was important but has since declined. Salt mining played a minor role. Farms and recreational pursuits provide the principal employment opportunities.

According to the West Virginia state historic preservation officer and the West Virginia Archeological Survey, there have been no professional surveys in the river corridor. The Mid-Atlantic Region contracted with the West Virginia Department of Culture and History for "An Archeological and Historical Overview of the Cacapon Drainage System" (1982). Their report indicated that local informants have reported numerous cultural sites along the river corridor. Approximately 240 sites have been recorded in the three counties, 55 adjacent to the Cacapon River. None of these have been evaluated for National Register of Historic Places significance, but they include surface evidence of projectile points, burial sites, rock shelters, hunting camps/base camps, and lithic scatter on river terraces. The study area also contains a number of residences, commercial structures, mills, and farm dwellings that should be surveyed and recorded on a more formal basis. Some of these may qualify for National Register nomination for their local historical or architectural significance. The site of the Bloomery industrial complex with its iron furnace ruins may well be the most significant cultural resource in the study area.

RIVER PRESERVATION APPROACHES

As previously stated, the Cacapon and a short segment of the Lost River are eligible but not suitable for inclusion in the National Wild and Scenic Rivers System. Normally the study ^{process} report would have been terminated and a report setting forth the findings prepared and sent to Congress. However, during public meetings and workshops, study team members were requested to offer guidance that could be used to initiate an effective local river preservation effort. In response to this public need, the following Management Options and River Management Plan Guidelines were prepared. It is suggested that the two actions be implemented by local and/or state governments in the order they are presented. This approach allows for the formation of a management entity that would be responsible for preparing and implementing a river management plan and for providing guidance for implementing appropriate preservation techniques (example as described in Appendix A).

A number of existing and proposed river preservation techniques and strategies were analyzed and those that may be applicable to the Cacapon River have been incorporated into the "options and guidelines." Existing plans studied included the Upper Mississippi River Management Plan (Minnesota), the Housatonic River Management Plan (Connecticut), the Blackfoot River Conservation and Recreation Management Plan (Montana), the New Jersey Pinelands legislation and comprehensive management plan, and the Weems Creek Draft Study Report (Maryland). In addition, a number of publications that discussed less-than-fee acquisition techniques for the protection of open space areas were reviewed (refer to bibliography).

MANAGEMENT OPTIONS

Preservation of the river and its related resources could be accomplished while still allowing for orderly development along the river corridor and for economic growth. A local effort to implement these goals could include a mix of entities such as private landowners; Morgan, Hampshire, and Hardy county governments; town governments along the river; concerned local interest groups; Eastern Panhandle Regional Planning and Development Council--Region IX; Region VIII Planning and Development Council; and the state of West Virginia. The ideal situation would be coordination and cooperation among all these entities. The following options discuss a number of ways these varied groups could work together. These strategies are not mutually exclusive, but can be combined and changed to suit the particular situation. They are designed to stimulate more ideas on how to best plan and manage the river corridor.

Option 1: Continuation of Local and State Efforts

Under this option, planning, development and management of the Cacapon River and its associated resources would continue under the direction of landowners, local/state planning and regulatory programs, and public land

managing agencies. Although state, local, and private programs can provide some protection for the river, subdivision development and increased visitor use and their associated impacts will continue. The following discussion summarizes existing programs that hold the highest potential for preserving the Cacapon River's resources.

Private Initiatives. A number of landowners express deep pride in the Cacapon River and volunteer their time to keep portions of the river attractive. Groups such as the Boy Scouts of America also engage in river cleanup activities. Several of the larger subdivisions have covenants designed to ensure that future development will be environmentally compatible. The developers of these subdivisions have also set aside some park land near the river for use by the lot owners. In addition, several homeowner associations attempt to police development activities in existing developments. It would be desirable for existing associations to tighten their covenants and for new associations to be formed. The examples cited are generally the exceptions rather than the norm for development and maintenance of the river corridor.

Local Programs. Currently there are few programs at the town, county, or regional government levels that ensure protection of the Cacapon River's resources. However, the West Virginia Code, chapter 8, article 24, provides the legal basis for county and municipal planning, as well as land use controls such as subdivision zoning ordinances and regulations. These measures, when enforced, could provide a large degree of control over incompatible development.

To date, only Hardy County has a zoning ordinance, which was adopted in 1973. The county has an established planning commission and a building code permit system, but there is no planning commission staff, no comprehensive plan to guide growth, no approved subdivision regulations, and little enforcement. While Morgan County has no zoning ordinance, it does have a planning commission and staff. In addition there is a draft comprehensive plan, and subdivision regulations have been drafted for approval. Hampshire County presently has no planning commission, comprehensive plans, approved zoning ordinance, or subdivision regulations. The towns of Great Cacapon, Largent, Forks of Cacapon, Capon Bridge, Bubbling Spring, Yellow Spring, Capon Lake, Intermont, and Wardensville have no formalized planning or zoning programs.

The Cacapon River lies within boundaries of the Regions VIII and IX planning and development councils. These regional councils were created to plan for orderly growth and development, as well as facilitate intergovernmental cooperation. According to the West Virginia Code, chapter 8, article 25, they are authorized to provide comprehensive planning and technical assistance and advice to counties and towns but not directly control land use.

State Programs. The state of West Virginia has a number of laws and programs that provide some protection for the Cacapon River. First, it is unlawful to deposit any litter into or within 100 yards of a river or in a location where drainage conditions will cause any runoff of litter into a river. The "Water Pollution Control Act" authorizes the state to maintain

and enforce reasonable standards of purity and quality of water consistent with public health and enjoyment and the propagation and protection of animal, bird, fish, aquatic, and plant life. The Division of Water Resources enforces a permit system to ensure that any development that discharges effluent into a river does not pollute the river above acceptable standards; water quality is monitored, and offenders are penalized according to the severity of their infraction.

The "Natural Streams Preservation Act" protects designated streams by prohibiting activities that will materially affect or alter the free-flowing characteristics of the stream. The Cacapon River would be eligible but has not been nominated to be a part of the West Virginia Natural Streams Preservation System. Local officials and citizens could request from their state legislators enabling legislation to declare the Cacapon/Lost River a part of this system. Finally, the Division of Wildlife Resources has responsibility for developing, maintaining, and policing the 12 river access sites on the Cacapon, as well as protecting fish and wildlife resources.

Option 2: Tri-County Agreement

A tri-county agreement could be negotiated, since the Cacapon flows through Hardy, Hampshire, and Morgan counties. The counties, and possibly the towns mentioned earlier, could jointly design parallel regulations and controls, taking into account each jurisdiction's own development goals and needs, existing land use, and natural and scenic features deserving special attention. This would create uniform standards for the preservation, management, development, and use of the river corridor. No new state enabling legislation would be necessary since each county would enforce its regulations and controls individually. The counties could receive technical assistance from both the regional planning and development councils and the state of West Virginia.

Three actions are important to this effort: The first is approval of zoning and subdivision regulations. Second, is that the state legislature sponsor legislation designating the Cacapon to the Natural Streams Preservation Program. Finally, those involved in the tri-county agreement could prepare a river management plan that is discussed later. It would also be important that the counties have both the ability and the commitment to enforce regulations, apply to the state legislature for designation, and prepare the plan.

Zoning and subdivision regulations could be targeted toward protecting floodplains, special natural features and scenic areas from incompatible development; concentrating on protecting the shoreline and waterway from erosion, runoff, and pollution; and retaining a vegetative buffer along the shoreline. Better design solutions could be incorporated into the subdivision regulations to ensure that contiguous tracts of open space are retained, building heights do not intrude upon open scenic vistas, and buildings are set back from the river to preserve the river's scenic character. A more in-depth discussion of zoning is contained in the appendix. Designation into the Natural Streams Preservation System would protect the Cacapon from the construction of dams that would alter the river's free-flowing characteristics. Those making up the tri-county

area could request the state legislature to sponsor legislation to make the Cacapon/Lost River a part of this system.

Option 3: River Corridor Commission

A river commission could be comprised of representatives from the three counties, the towns along the river, representative private landowners, local interest groups, the state of West Virginia and the two regional planning and development councils. The Cacapon River corridor would have to be authorized and designated as a special protection district by the state legislature. Currently there is no state enabling legislation to create a special protection district.

The commission could jointly administer the district and be empowered to adopt, prepare, and implement a river management plan; establish a planning and zoning commission; levy taxes and/or user fees; enter into contracts and agreements and accept all funds; acquire, dispose of and encumber real and personal property; participate in federal/state loan and grant programs; operate and maintain areas and facilities to serve the purposes of the commission; appoint citizen advisory committees; control erosion and water pollution; approve, implement and enforce land use controls such as zoning ordinances, and subdivision regulations; and hire and retain employees and consultants.

Once the commission was formed, goals and objectives agreed upon, and bylaws established, its staff could prepare a comprehensive river management plan. This plan would guide future actions regarding management, development, preservation, and use of the river. Zoning and subdivision regulations could be drafted in response to recommendations made in the plan. As a part of the planning effort, the commission could explore and develop less-than-fee techniques for preserving cultural, natural, and scenic areas (refer to Appendix A). In addition, the commission could request the state legislature to sponsor legislation for Natural Streams Preservation System status for the Cacapon River.

PREPARATION OF A RIVER MANAGEMENT PLAN

Introduction

Once the management responsibility is established, the key to preservation of the Cacapon River is the preparation and implementation of a comprehensive river management plan. The plan would serve as a guide for protecting the river's natural, scenic, cultural, and recreational resources while providing for compatible economic development. The adoption of such a plan means that there will be an entity or combination of entities formally committed to keeping the river environment in a high-quality condition and a planned course of action to attain that goal.

The study suggests that a management plan be the responsibility of local government agencies identified in options 1 through 3 and that it be prepared with assistance from the regional planning agencies and the

state of West Virginia. The plan should be tailored to the powers granted to the management entity and be prepared in concert with the counties, towns, Regions VIII and IX Planning and Development Councils, local interest groups, and private citizens who will be affected by the plan.

The river management plan requires a level of detail and knowledge of the local environment beyond the scope of this study. The following guidelines are intended to serve as a conceptual framework for the development of the plan.

Management Objectives

A river management plan for the Cacapon River should be developed with specific objectives in mind. The Wild and Scenic Rivers Act addresses the management plan by stating that "primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."

In order to ensure the Cacapon's preservation, the following objectives are suggested for preparation and implementation of the management plan.

- preserve the free-flowing condition of the river

- maintain and enhance high water quality

- protect the natural and scenic features along the river

- protect and interpret archeological and historical values

- preserve critical ecological areas, including the maintenance and enhancement of fish and wildlife habitats

- preserve agricultural lands and floodplains along the river

- allow compatible activities along the river environment, while providing the public with adequate and appropriate recreational opportunities

Inventory and Analysis of Critical Resource Values

The inventory is the "fact finding" stage of the management planning process, in which essential information regarding natural, scenic, cultural, and recreational resources is assembled. This information base should develop a clear picture of current river conditions, identify critical areas, and identify political actions affecting the river. The inventory should be conducted through careful study, mapping, fieldwork, and consultation with knowledgeable parties.

Critical areas are specific sites within the river corridor requiring special attention and protection for their ecological, cultural, recreational, and economic values. Generally these critical areas should include habitats of rare and endangered species, potential archeological sites, fragile ecological areas, potential sites of incompatible land uses, historical sites, public use areas, pollution sources, and areas of special interest. Several of these sites have been identified and included in the study report.

Attention should be given to local attitudes and land use practices; state, county, and town laws and policies; state and regional planning policies; recreational trends and activity patterns; industrial, commercial and mining interests; and regional growth and development trends.

Establishing a River Corridor

The river corridor consists of land on either side of the river, the river itself, and any islands that require protection to preserve natural, scenic, cultural, and recreational values. Specific boundaries should be mapped to document the major jurisdictional area of the plan. Some problems outside of this corridor could be addressed in the management plan, but most of the management strategies should be focused within the boundaries.

The most common means of boundary delineation is inclusion of all land that can be seen from viewpoints on and along the river. Where topography and distance permit, this boundary is formed by the ridge line, based on line of sight from and near the river. In those flat to gently sloping areas where the line of sight is a great distance from the river, other boundary criteria should be considered, such as topography, jurisdictional or property lines, a quarter-mile setback from the river, and the inclusion of critical resource areas.

Within this boundary, an inner and outer corridor could be established. The inner corridor would encompass the river and adjacent lands that require a high degree of protection. This corridor could include the river, its banks, floodplain, unstable soils, and other lands critical to protection of its ecological function. Management strategies should prohibit new development; protect agricultural lands, forest lands, and other compatible land uses; and encourage the maintenance and enhancement of natural conditions. The outer corridor should prohibit visual intrusions and water-, air-, or noise-pollution activities, protect and enhance agricultural lands, and provide visual and ecological guidelines for new development.

Finally, along with the general boundary and the inner/outer corridor, the river could be delineated according to scenic and recreational segments. Generally, development activities would be more restrictive in the scenic segments, while allowing more compatible development in the recreational segments.

Land Use Management

A land use management program should be designed to protect the land within the river corridor from activities that would alter its visual, ecological, and cultural values. Special attention should be given to maintaining natural conditions in the inner corridor, protecting critical areas from degradation, and preventing visual intrusions in the outer corridor. Management strategies for critical areas should protect their special values, prohibit overuse and degradation of the environment, and provide guidelines to maintain and enhance their natural condition. In addition, strategies for solving problems should call upon state, regional, and local decision makers to coordinate their activities with respect to the ecological and cultural values of the river corridor.

There are several legal and administrative tools that could be incorporated in this program to effectively protect and guide land use activities in the river corridor. Many of these tools are described in the options and in the appendix dealing with river preservation techniques.

Plan Implementation

Implementation is the final phase of the planning process and involves formation of a tricounty agreement or a river corridor commission to execute the programs of the river management plan. The typical structure of an agreement or commission is generally described in options 2 and 3.

The major responsibilities in executing the plan should be provision of coordination, leadership, and enforcement and evaluation, revision, and updating as necessary.

APPENDIX: A RIVER PRESERVATION TECHNIQUES

This section describes a number of ways to protect the river's natural values while providing for residential, agricultural, and recreational uses. Methods selected will depend on the capabilities of local and/or state government; the natural, scenic, recreational, and cultural values of the river area; and the degree of impact of proposed development within the river area. It is suggested that a variety of the following preservation techniques could be implemented by individual owners, land trusts, foundations, and local and state government.

LAND TRUST

A land trust is a nongovernmental, nonprofit, tax-exempt, private corporation organized and operated for the benefit of the general public. A trust can purchase, manage, accept gifts, sale or lease of property. It is administered by private citizens whose interest in this instance would be river preservation. Generally a foundation is supported by donations, grants, gifts, loans, fund-raising efforts, and membership fees. The foundation could work closely with the counties, the state, the Nature Conservancy, and/or an established river commission.

Factors to be Considered

A land trust could offer permanent protection to selective areas along the river by performing the following functions: accept gifts of land (fee-simple) or rights in land; through the Internal Revenue Service and tax codes offer tax benefits to those who donate land or rights in land; render technical assistance to landowners by helping them develop long-range plans for the conservation of part or all of their property; accept gifts of land or rights in land, and then transfer them to a public managing agency (county or state government, river commission, etc.); use gifts for matching purposes in obtaining grants; and set up a revolving fund whereby the foundation purchases land, holds it for a time, and then sells it to another party with certain restrictions, preferably at a profit. In addition, it can act quickly without excess red tape and can work quietly behind the scenes to coordinate complicated transactions. A land trust can help local landowners decide what types of land preservation would be most workable.

EASEMENTS

An easement is a limited or "less than fee" interest in property created by a conveyance. It can be acquired by purchase or donation. If one used the analogy that owning land is similar to holding a bundle of sticks, use of an easement would be setting aside or giving up some of the sticks. Easements do not affect basic ownership of the land--the owner may sell or lease land with an easement at any time, subject to the terms of the easement. Depending upon the type of easement, no changes in right of access necessarily occur. Examples of easements are

giving up the right to build structures taller than a given height or the right to put structures closer than a given distance to the water.

Factors to be Considered

An easement can be extremely flexible--it may be written to particular specifications; reduce tax burdens; greatly increase the probability of long-term preservation of current use or preservation of open space; keep land under private control; and allow land to be sold, leased, or inherited and used in any manner consistent with the terms of the easement. Although an easement may restrict intense future development, it may also increase the marketability of the tract by preserving its natural and scenic values if other adjacent tracts are also protected.

DONATIONS

Types

An outright donation occurs when the owner gives the land in fee-simple to a nonprofit organization or governmental agency to use as it sees fit. Easements can also be donated outright.

A donation by the execution of a standard deed with the reservation of life estate allows the owner or members of his or her family to occupy and use the property during their lifetime with possession passing to the organization or governmental agency at a later date.

The owner can donate land, money, or other valuables to the organization in his will.

Factors to be Considered

Donation offers potential for preserving land in a desired condition, when a donor no longer has the individual means to do so. This can be a tool for realizing substantial tax benefits. However, restrictions on the donation can limit the extent of the tax benefits. Donations can reduce estate taxes and provide significant savings if they qualify for deductions from taxable income.

BARGAIN SALE OF LAND

A bargain sale combines the advantages of a gift and a sale. Because the land is sold in fee-simple at a reduced price, the difference between the fair market value and the actual selling price to a charity or public agency represents a charitable contribution.

Factors to be Considered

A bargain sale may allow the seller to realize a charitable tax deduction in addition to a cash return. Like donations, bargain sales can reduce

estate taxes and provide other tax benefits. Restrictions written in the transaction, however, can limit the extent of the tax benefits.

ZONING

Zoning is a method of controlling the use and development of land so as to yield the greatest benefits to the people in a community. Its aim is to protect the community from haphazard and careless development that may destroy land values. A variety of zoning techniques includes traditional zoning, subdivision ordinances, trailer park zoning districts, cluster zoning, performance standards, special natural area districts, and scenic view districts.

Types

Traditional zoning and subdivision regulations are described in option 2.

Trailer park regulations dealing with design criteria/minimum and maximum density requirements and encouraging innovative site layouts could encourage development that would be beneficial to property values and the general welfare.

River-edge setback requirements could be useful for reducing damage from flooding and storm water runoff, as well as for providing a buffer zone from development along the river's edge. These setbacks would also ensure a certain amount of open space.

Cluster zoning is a variation of traditional zoning regulations that assigns a fixed number of dwelling units per acre in a particular land use classification. Through clustering, the same number of units is maintained, but the minimum lot and yard requirements are reduced and sometimes eliminated; this leads to placement of lots in a way that will maximize open space. The resulting open space is generally owned and shared by the homeowners. One type of clustering is the farm colony concept, intended to keep land in farming while using some for residential purposes.

Performance standards are another way to guide land use activity in environmentally sensitive areas along the river's edge and throughout the jurisdiction or watershed. They permit land use activities up to the point at which they interfere with or begin to inhibit the functions of the natural process. Development of performance standards requires selection of natural resource areas and description of their key functions related to the public health, safety, and welfare. This approach offers greater flexibility to the landowner or developer, as long as the standards are met.

Special natural area districts could be delineated in conjunction with already established zoning. They would protect and conserve high-value natural lands such as wetlands, woodlands, floodplains, and old fields along the river edge. These districts could focus on a specific natural resource such as wetlands in a Wetland Conservancy District. The use of

these areas would be regulated through ordinance, in addition to existing zoning, and would focus on the unique qualities and functions of that resource. Uses compatible with the functions of the special area could be permitted, and density transfers (see next section) would allow landowners to shift their development rights from the special resource area to a less environmentally sensitive part of their land.

A buffer zone is an area that provides space between a natural resource, such as a river and nearby development.

Factors to be Considered

These zoning regulations are locally decided and administered, can be designed to meet local needs, and are widely known and used. However, they require consensus in development and establishment, can sometimes be rigid and inflexible, and can be used to promote undesired development if not properly administered. Zoning and subdivision regulations could be very useful in managing land along the river and would be a good basis for further development of more complicated land management techniques.

TRANSFER OF DEVELOPMENT RIGHTS

Transfer of development rights (TDR) is based on the same idea as easements--that landownership is a bundle of separable rights. Thus it is possible to separate development rights from any given parcel of land and apply them to another parcel of land. Under TDR regulations, the piece that has had its development rights transferred away will remain "undeveloped," while the piece receiving the development rights becomes eligible for higher density development than it would have been without those extra rights. This transfer is noted in the deeds to the respective parcels of land.

Factors to be Considered

A TDR offers the potential for preserving open space in desired areas while allowing higher density development in more suitable areas, thereby producing benefits for everyone--the open space is protected, the landowner receives compensation for his loss of potential development, and the potential for expanded growth is allowed in another area. A TDR, however, is a rather complex concept to put into practice and requires strong public planning and zoning powers as well as a firm commitment by local officials to the objectives of the transaction. Also, a TDR may be more useful at a later stage of planning after some basic land management mechanisms are already functioning.

AGRICULTURAL DISTRICT

An agricultural district, often a state-approved program, involves the creation of locally initiated districts designed to encourage agricultural

operations and to discourage intensive nonfarm development, regulations hampering agriculture, and prohibitive taxation. It is designed to preserve and protect viable agricultural land by providing special tax relief to farmers. Agricultural districts are created in response to local initiative, whereby individual landowners who collectively own substantial acreage of agricultural land submit an application to the county legislative body for approval of the district.

Factors to be Considered

Usually, an agricultural district limits nuisance ordinances that affect the right to farm, keep property taxes low, limit special service tax assessments, and restrict public funds for nonfarm development. It must be locally initiated and supported and would require an initial enabling act by state legislature and time and effort to pursue through necessary steps. Agricultural districts could help preserve farmland in large sections by reducing development pressures.

PUBLIC EDUCATION AND INFORMATION

Different methods such as the following, can facilitate intelligent land use and make alternative land use preservation techniques widely known to the public

- more informative signing concerning littering, trail use, and identifying private lands

- local land use workshops featuring topics that affect everyone

- technical assistance consisting of advice to landowners about the value of natural, scenic, and/or cultural resources, and sound management and construction practices

- registration program leading to formal recognition of natural or historic landmarks to encourage voluntary protection

- cooperative agreements consisting of formal or informal contracts for cooperation in management, maintenance, or operation of valuable resources.

APPENDIX B: OFFICIAL COMMENTS



U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

REGION THREE
31 Hopkins Plaza
Baltimore, Maryland 21201

August 16, 1982

IN REPLY REFER TO:
HEP-03.2

Mr. G. Ray Arnett
Assistant Secretary for Fish
and Wildlife and Parks
Department of the Interior
Washington, DC 20240

Dear Mr. Arnett:

Your July 7, 1982 letter to Secretary of Transportation
Drew Lewis has been referred to this office for reply.

Both this office and the West Virginia Division Office of the
Federal Highway Administration have reviewed the "Draft-Wild
and Scenic River Study-Cacapon River-West Virginia."

We have no major comments to offer; however, the second sen-
tence of the fifth full paragraph on page 5 should read:
"Three routes (alternate A, B, D) would cross and impact the
Cacapon River near Wardensville, while the other two (alter-
nate C, E) would cross at Capon Bridge."

Thank you for the opportunity to review this study.

Sincerely yours,

Vincent Ciletti
Associate Regional Administrator for
Planning and Program Development



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

6TH AND WALNUT STREETS
PHILADELPHIA, PENNSYLVANIA 19106

AUG 9 1982

Mr. G. Ray Arnett
Assistant Secretary for
Fish, Wildlife & Parks
U.S. Department of the Interior
Office of the Secretary
Washington, DC 20240

Re: Cacapon River: Wild & Scenic River Study

Dear Mr. Arnett:

We concur with the decision of the study team, consultants, and local public that the Cacapon and a segment of the Lost River should be preserved in their present condition. The manner of preservation and management should be the decision of the study team, as the public, local, and state government do not want Federal involvement.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "William J. Hoffman", is written over a horizontal line.

William J. Hoffman
Acting Chief
EIS & Wetlands Review Section



Department of Energy
Washington, D.C. 20565

AUG 20 1982

Mr. G. Ray Arnett
Assistant Secretary for Fish
and Wildlife and Parks
U.S. Department of the Interior
Washington, D.C. 20240

Dear Mr. Arnett:

In response to your July 7, 1982, letter to Secretary Edwards,
we have reviewed the draft Wild and Scenic River Study for the
Cacapon River in West Virginia.

We note that the river is not being recommended for designation
and inclusion in the National Wild and Scenic River System.
Consequently, energy resources will not be affected.

William A. Vaughan
Assistant Secretary
Environmental Protection, Safety,
and Emergency Preparedness



DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20250

August 24 1982

Honorable James G. Watt
Secretary of the Interior
Washington, D.C. 20240

Dear Mr. Secretary:

Thank you for the opportunity to comment on your proposed report for the Cacapon River, Morgan, Hampshire and Hardy counties, West Virginia.

Although the study found that segments of the Cacapon River are eligible for inclusion in the national system, we agree with your conclusion that the river should not be recommended for designation. In view of the lack of support for designation of the river from the public, and units of the local and State governments, a major Federal role in protecting or administering the river area would not be economically or socially feasible. We agree with the study finding that the Cacapon River is worthy of protection and such protection and management can be achieved more appropriately through local initiative.

Sincerely,

A handwritten signature in black ink that reads "John R. Block". The signature is fluid and cursive, with the first name "John" and last name "Block" clearly legible.

John R. Block
Secretary

DEPARTMENT OF ARMY

STATE OF WEST VIRGINIA

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STUDY TEAM AND CONSULTANTS

STUDY TEAM

Michael J. Spratt, Outdoor Recreation Planner, Team Captain, National Park Service (NPS), Denver Service Center (DSC)

Donald L. Bock, Outdoor Recreation Planner, River Coordinator, NPS, DSC

Dave Sherman, Land Use Coordinator, NPS, National Capital Region

Anna Whitfield Watkins, Community Planner, NPS, DSC

Ronald W. Johnson, Cultural Resource Specialist, NPS, DSC

Ed Hamrick, West Virginia Department of Natural Resources

CONSULTANTS

John Parsons, Associate Regional Director, Land Use Coordination, NPS, National Capital Region

John Haubert, River Coordinator, Rivers and Trails Division, NPS, Washington Office

Steven M. Hunt, Outdoor Recreation Planner, NPS, DSC

Steven M. Bracken, Geologist, NPS, DSC

Susan Freyburger, Remote Sensing Specialist, NPS, DSC

George Nez, Resource Economist, NPS, DSC

John Coleman, U.S. Forest Service, Lee Ranger District

Frank Pelurie, West Virginia Department of Natural Resources

Richard Hawvermale, Executive Director, Region IX, West Virginia Planning and Development Council

Kenneth Dyche, Executive Director, Region VIII, West Virginia Planning and Development Council

Bill Miller, Coordinator, Morgan County

COORDINATION

As a part of the Cacapon Wild and Scenic River Study, representatives from the National Park Service have consulted with and/or gathered information from the following individuals, organizations, and agencies:

Morgan County Commissioners

Hampshire County Commissioners

Hardy County Commissioners

Pat Munoz, American Rivers Conservation Council

Interstate Commission on the Potomac River Basin

Department of the Interior

U.S. Fish and Wildlife Service, Elkins, W. VA.

U.S. Geological Survey, Reston, VA.

Department of Agriculture

U.S. Forest Service, Supervisor's and Lee Ranger District offices

George Washington National Forest

Soil Conservation Service, Morgantown, W. VA.

State of West Virginia

Department of Natural Resources

Division of Water Resources

Division of Wildlife Resources

Division of Parks and Recreation

Governor's Office of Economic and Community Development

Geological and Economic Survey

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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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