

APPENDIX D – WILD AND SCENIC RIVERS ELIGIBILITY DETERMINATION

The 1993 Forest Plan Revision included an extensive review and evaluation of the rivers of the George Washington National Forest. Appendix D of the 1993 Forest Plan was reviewed. The information and determinations documented in Appendix D remain valid with minor changes in conditions.

Public comments did identify some additional rivers for consideration. These included Trout Run, Waites Run, Stony Creek (North of Bayse), German River, Benson Run, Stuart Run (with Buck Lick and Bolshers Run), Mill Creek (Maury River), Wilson Creek, Mill Creek (Cowpasture River), Jim Dave Run, Potts Creek, Little Back Creek, Crow Run (with Little Crow Run), and Big Mary's. A review of these streams identified no nationally or regionally outstandingly remarkable values in recreation, scenery, wildlife, geology, botany or heritage resources. Under the fisheries resource we did identify that Potts Creek and Mill Creek provide habitat for the James spinymussel. However, in both of these cases, the location of the mussel is downstream of National Forest System lands.

I. INTRODUCTION

This appendix contains evaluations of 14 rivers located in or close to the George Washington National Forest. These evaluations determine which of the 14 rivers have qualities that make them eligible for inclusion in the National Wild and Scenic River System. The evaluations also determine whether the eligible rivers should receive wild, scenic, or recreational river classification.

A determination locally that a river is eligible does not necessarily mean that it will meet suitability criteria when, in the final stages, it is evaluated from a national perspective. Eligibility evaluations are an initial step in a process that ultimately requires action by Congress to include a river in the National Wild and Scenic River System.

The Forest Service completed the eligibility and classification evaluations contained in this Appendix. Suitability evaluations for each of the eligible rivers are being performed by a combination of state and federal agencies and will be published at a later date. The suitability studies are the final step in determining whether or not a river is recommended to Congress for further consideration.

The evaluations presented here are in accord with the National Wild and Scenic Rivers Act of 1968 (the Act) and in response to the Nationwide Rivers Inventory (National Park Service, January 1982) and the concerns of the American Rivers Conservation Council.

II. THE EVALUATIONS: WILD AND SCENIC DESIGNATIONS FOR LOCAL RIVERS

Stream miles listed are approximate and were taken from maps on a scale of 1/2 inch = 1 mile.

Back Creek

For evaluation purposes, Back Creek is divided into three segments. Back Creek is described in this report from its confluence with the Jackson River, north to its headwaters. A total of 32.79 miles is considered in this evaluation. The majority of the stream corridor is in private ownership. George Washington National Forest land is on both sides of the creek for a total of 2.35 miles and on one side of the creek for an additional 1.52 miles. Both the streambanks and the stream are subject to riparian rights, since the stream is not considered navigable. This limits river access and use to property owners and guests. Back Creek is located entirely within Bath County, where officials have expressed concern about additional federal control of land in the county.

Segment A - From Lake Moomaw to State Route 39 (5.59 miles)

This 5.59-mile segment flows through Back Creek Gorge. Blowing Springs Campground at State Route 39 provides the only public access until Lake Moomaw. The Virginia Commission of Outdoor Recreation found this segment eligible for inclusion in the Virginia Scenic Rivers System. This free-flowing stream traverses 2.35 miles (both banks) and 0.01 miles (one bank) of the Forest. There is little development along this segment and little disturbance. Water quality is considered average to good. There is some canoe use along Segment A when the water is high. There are several jeep trails, but no developed roads along this segment of Back Creek.

Eligibility of Back Creek - Segment A by:

Scenic Value: There is little development along this section of Back Creek. The corridor is considered attractive where the stream passes through the gorge. Overall the stream is small-to-medium in size, with a few medium-size pools. The rate of flow is medium except during storm periods. Topography along this segment is relatively steep. The forest cover consists of hardwoods mixed with hemlock and pine. Understory species are those common to the area. Large boulders add visual variety to the streambed in several locations. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: Recreation use along Segment A consists of fishing, canoeing, and kayaking. Most of this use comes from adjacent landowners who post their property and prevent public access. During periods of high water, the segment through Back Creek Gorge from Blowing Springs to Lake Moomaw is used by both canoeists and kayakers. With Class 2 and 3 rapids present, this is an excellent white-water creek. This section is not classed as navigable. A Class A-Distinctive rating is assigned to the recreation values.

Geologic Value: This segment contains interesting geological formations, including outcroppings and high cliffs through the gorge area. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: This segment is not considered to be an outstanding fishery. Some fish do enter Back Creek from Lake Moomaw, including spawning rainbow trout. Because the adjacent private property is posted, access is limited. This corridor provides habitat for wildlife species typical of the Forest. A Class B- Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known prehistoric and historic sites along this segment that are eligible for the National Register of Historic Places. It is probable that additional prehistoric sites exist. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment A of Back Creek is eligible for designation under the Wild and Scenic Rivers Act because it is free-flowing and has outstandingly remarkable scenic, recreational, geologic, historic, and cultural values.

Classification Determination: Because Segment A of Back Creek is eligible for designation, it is necessary to determine the appropriate classification. According to the criteria in FSH 1909, Chapter 8, the entire 5.59 miles can qualify for inclusion in the system under the scenic classification. This classification is based primarily on the fact that development along the river is sparse and existing roads are inconspicuous.

Segment B - From Blowing Springs Campground to Pump Storage Lake (9.96 miles)

This 9.96-mile segment is located within Bath County. The majority of land along this segment is privately owned. Back Creek touches National Forest System land at four locations on one side for a total distance of 1.51 miles. This segment is not considered to be navigable. There are no impoundments along this segment. State Highway 39 and County Road 600 parallel the shoreline and are evident from the stream. Open farm land, houses and bridges are common features. The size of the stream is medium to small. The flow is regulated by the Back Creek Pump Storage project and is extremely low during the summer months. Most of the private property is posted. Forest and agricultural practices are evident within the stream corridor. Water quality is average to good. The segment is suitable for fish and wildlife propagation and some recreational activities.

Eligibility of Back Creek - Segment B by:

Scenic Value: Segment B of Back Creek is typical of many streams in the area. It is an attractive creek, but has no distinctive or outstanding features. The stream is shallow with small pools with a gradual gradient. The current is fairly slow with uniform flow characteristics. During storm periods and when water is released from the pump storage lake, the rate of flow increases. The gently rolling valley is bordered by steep mountain terrain and varies in width. The forest cover consists of mixed hardwoods and pine with common understory species. Open farm land borders the creek in many locations. A Class B-Common rating is assigned for scenic values.

Recreational Value: Current recreation use includes swimming, canoeing and fishing by adjacent landowners. Virginia Power has developed a trout fishery and recreation facilities along this segment and provides public access to the river along the upper mile of the segment. This segment is not considered navigable. A Class B-Common rating is assigned for recreational values.

Geologic Value: This segment has no unusual rock outcroppings or other geologic features. The corridor consists primarily of farm land and forest land typical of the area. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: This segment of Back Creek supports a trout fishery from the dam, downstream for one mile. The area provides habitat for wildlife species typical of the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known prehistoric and historic sites located along this segment. Information on these sites is documented in studies conducted by the Archaeology Laboratory at James Madison University. Additional sites probably exist. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment B of Back Creek is eligible for designation under the Wild and Scenic Rivers Act because it is free-flowing and has outstandingly remarkable historic and cultural values.

Classification Determination: Because Segment B of Back Creek is eligible for designation, it is necessary to determine the classification that would result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 9.96 miles can qualify for inclusion in the system under the recreational classification. This determination is based primarily on the fact that much of the private land adjacent to the river contains residential structures and agricultural facilities.

Segment C - Back Creek Pump Storage Project to Headwaters (17.24 miles)

The majority of this 17.24-mile segment is in Highland County; approximately 1.5 miles are located in Bath County. The portion in Highland County serves as the Forest boundary. This entire segment has been extensively channelized as a result of the floods of 1969, 1972, and 1985. This segment is not considered navigable. The stream is small with low rates of flow except during major storm events. There is no National Forest System land along this segment. State roads parallel and cross this segment in several locations. The stream is free-flowing.

Eligibility of Back Creek - Segment C by Value:

Scenic Value: Segment C of Back Creek is attractive, but has no features that rate as distinctive or outstanding. The stream is shallow with a few small pools and a gradual gradient. The current is fairly slow with uniform flow characteristics. During storm periods, the rate of flow increases considerably. The gently rolling valley is bordered by steep mountains that vary the width of the valley. The forest cover is typical mixed hardwoods and pine with common understory species. There is a lot of open farm land adjacent to the Creek. A Class C-Minimal rating is assigned for scenic values.

Recreational Value: Current recreation use is limited to swimming and fishing by adjacent landowners. This segment is not considered navigable. Public access is not available on this segment. A Class C-Minimal rating is assigned for recreational values.

Geologic Value: This segment has no unusual rock outcroppings or other geologic features. The corridor consists of farm land and forest land typical of the area. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: This segment does not support a sport fishery. The area provides habitat for wildlife species typical of the Forest. A Class C-Minimal rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are no known prehistoric or historic sites along this segment, but there is a probability that prehistoric sites do exist within the corridor. Since no systematic survey has been conducted along this section, a Class B-Common rating is assigned to the historic and cultural values.

Eligibility Determination: Segment C of Back Creek is not eligible for designation under the National Wild and Scenic Rivers Act due to the amount of disturbance to the stream channel and the lack of outstandingly remarkable values. For these reasons, this segment will not be studied further for designation under the Wild and Scenic River Act.

Bullpasture River

The Bullpasture River is divided into two sections for purposes of this evaluation. The Bullpasture is described from its confluence with the Cowpasture River north to its headwaters. There is no federal land ownership along the Bullpasture River. The lower two miles of the Bullpasture are located in Bath County with the remainder in Highland county. A total of 18 miles is studied for eligibility for the National Wild and Scenic River System.

Segment A - The Bullpasture Gorge

There is no federal ownership along this 3-mile segment of the Bullpasture River. The segment stretches from the confluence with the Cowpasture River to a ford where Route 609 departs from Route 678. The majority of this segment is in Bath County and is inside the Forest boundary. The gorge is scenic with large boulders and cliffs and presents a challenge to the white-water enthusiast. This area is stocked with trout under the state put-and-take system.

Eligibility of Bullpasture River - Segment A by:

Scenic Value: The section of the Bullpasture River in the gorge contains rock bluffs and large boulders. The stream is typically shallow and small. The rate of flow can vary greatly with periods of rain and drought. For the most part, however, it is relatively slow. There is a fairly steep gradient through this section. Forest types include mixed hardwoods and some pine and hemlock. The paved state road is adjacent to the stream and is very evident from the stream. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: This section is stocked by the VDGF with trout under the put-and-take program. According to the book Virginia White Water by H. Roger Corbett, this section offers big white-water consisting of Class 3, 4 and 5 rapids. The gorge is not navigable year-round and is considered dangerous during periods of high water. The stream is shallow with large boulders in this section. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: This section has rock bluffs and cliffs. There are large boulders in the stream. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: This section is stocked with trout by the VDGF under the put-and take program. The wildlife species of the area is typical of the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are no known prehistoric or historical sites along this section. No survey has been conducted along the Bullpasture River. A Class B-Common rating is assigned to the historic and cultural values.

Eligibility Determination: Section A of the Bullpasture River, including the Bullpasture Gorge, is eligible for designation under the National Wild and Scenic Rivers Act because it is free-flowing and has outstandingly remarkable scenic, recreational, and geologic values.

Classification Determination: Because Segment A is eligible for designation, it is necessary to determine the classification that would result from designation. According to the criteria established in FSH 1909, Chapter 8, the entire three-mile segment qualifies under the scenic classification. The determination is based on the fact that the segment has outstanding scenic values, but is bordered by paved Route 678.

Segment B - North of the Bullpasture Gorge to the headwaters

This 15-mile segment of the Bullpasture River has been heavily channelized from the Highland Wildlife Management Area to the headwaters. There are paved state roads adjacent to the stream and sections of the road have heavy limestone rip-rap for flood protection. Due to disturbances including channelization, Segment B does not qualify under the National Wild and Scenic Rivers Act.

Cacapon – Lost River

The 89-mile segment described in the Nationwide Rivers Inventory begins at the dam below Great Cacapon and ends at Baker, West Virginia. A segment of this river is a congressionally mandated study river. The study was completed by the U.S. Department of Interior, Park Service, in the summer of 1982. The Department of Interior study team found the river unsuitable because of lack of public support for designation and did not recommend inclusion in the national system.

Based on findings in the National Park System report, the Cacapon-Lost River will not be considered further.

Cedar Creek

This 25-mile evaluation segment of Cedar Creek is located in Shenandoah and Frederick counties. The section begins at the State Route 622 bridge and ends at its headwaters in the Lee District of the Forest. The majority of land along the creek is privately owned. The Forest Service owns land adjacent to the headwaters for a total of 2.65 miles. The majority of the stream is located outside the Forest boundary.

Cedar Creek is a small stream with sections in its headwaters that go dry every year. Private property within the corridor is largely undeveloped and is a mixture of agriculture and forest land. Forest and agricultural practices are evident along most of the stream. Development on the private property is starting to occur. There are houses, cabins, and two private fish hatcheries. Most private property is posted. Water quality is average. A small native brook trout population is in the extreme headwaters. The stream has been stocked with trout under the state's put-and-take program in the past, but due to littering, parking problems, and acid deposition, the program was halted. Both regular and low-water bridges cross the stream.

Eligibility of the Cedar Creek 25-mile Segment by:

Scenic Value: Cedar Creek flows over gently rolling terrain where mountains are visible in the background. There are no distinctive or outstanding features within the corridor. The stream is relatively small and shallow at the headwaters, but becomes larger with pools toward the end of the evaluation segment. The majority of the reach on the Forest goes dry during the summer. Because of the gently rolling terrain, the creek has uniform flow characteristics. During storm periods, the flow is faster and higher. The adjacent forest cover is typical mixed hardwood and pine with common understory species. A Class B-Common rating is assigned to scenic values.

Recreational Value: Current recreation use consists of fishing, canoeing, and kayaking. Fishing activity is curtailed since the stream is no longer stocked under the state's put-and-take program. There is some bass

fishing along the lower reach outside of the Forest boundary. Most of the private property along the creek is posted so there is little public access outside the Forest. The stream is not classified as navigable. A Class B-Common rating is assigned to the recreational values.

Geologic Value: There are no unusual or outstanding rock outcroppings, cliffs or other geological formations along the stream. The "Three High Heads" of Paddy Mountain are visible from Cedar Creek Valley. A Class B-Common rating is assigned to the geologic values.

Fish and Wildlife Values: The stream is no longer stocked with trout under the state's put-and-take program. Smallmouth bass, rock bass, sunfish, and some other species occur in the lower reach of the stream. There is a small population of brook trout in the headwaters. The headwaters are badly impacted by acid deposition. The area provides habitat for wildlife species typical of the Forest. A Class C-Minimal rating is assigned to the fish and wildlife values.

Historic and Cultural Values: Stevens Fort, an old iron furnace, and two tannery sites are located within the corridor and have the potential for historical significance. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: With the exception of the intermittent headwaters, Cedar Creek is eligible for designation under the National Wild and Scenic Rivers Act. The intermittent headwaters are defined as that section of the creek from its headwaters down to where the creek crosses the boundary between the Forest and private land at approximately the 1,330-foot contour. The creek is free-flowing and has outstandingly remarkable historic and cultural values.

Classification Determination: Because Cedar Creek is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter 8, a total of 20 miles qualifies for inclusion in the system under the scenic classification.

Cowpasture River

For evaluation purposes, the Cowpasture River is divided into four segments. The Cowpasture is described in this report from its confluence with the James River to its headwaters to the north. The Forest Service currently owns a total of 3.5 miles of land on one side of the river only. This 3.5 miles of riverbank land is divided among 10 tracts and is not contiguous. Forest Service ownership of the land on both sides of the river totals 4.5 miles on three tracts which are not contiguous. A total of 78.11 miles is studied for eligibility for the National Wild and Scenic River System.

The State of Virginia selected the portion of the Cowpasture River from Panta to Route 42 for further evaluation as a component of the Virginia Scenic Rivers System. Banks and stream are subject to riparian rights since the majority of the stream is not declared navigable. The Virginia Department of Game and Inland Fisheries (VDGIF) states that the section from the U.S. Route 60 bridge to the confluence with the Jackson River is declared navigable.

Citizen interest in designation of the Cowpasture River is strong. The Cowpasture Property Owners Association is a group of landowners who organized for the purpose of participating in the designation process.

Segment A - Confluence with the Jackson River to Route 42 Bridge

The majority of this 16-mile segment is within Alleghany County. National Forest System land borders the river on one side only for three miles and at three different locations. The VDGIF states that the portion between U. S. Route 60 bridge and the confluence with the Jackson River is navigable. There are no impoundments along this segment. Portions of Segment A are paralleled by roads, including State Highway (SH) 42. It is crossed by roads and/or highways four times, including Interstate 64, and by a railroad line three times. There is no developed trail access to the river. Most of the shoreline along this segment currently consists of forest and agricultural land where management of these lands is evident. There is some development along the river including cabins, houses, and a private campground. Most of the adjacent private land is posted against trespassing. This segment is suitable for fish and wildlife propagation, wading, and canoeing.

Eligibility of Cowpasture River - Segment A by:

Scenic Value: Segment A of the Cowpasture River is an attractive river that is typical of rivers within the George Washington National Forest and the surrounding area. It has no features that rate as distinctive or outstanding. The stream is shallow, medium in width with some large pools, and has a gradual gradient. The current is fairly slow with no waterfalls, cascades of significant whitewater. The valley bottom is gently rolling with steep mountain terrain bordering it on one side. Several shale bluffs are evident from the river. Forest cover along the river is mixed hardwood and pine with common understory species. A Class B-Common rating is assigned to the scenic values.

Recreational Value: Current recreation use of Segment A is limited to fishing, canoeing, tubing, and swimming by adjacent landowners. The section between the U.S. Route 60 bridge and the confluence with the Jackson River is considered navigable by the VDGIF. This segment receives high use by tubers and canoeists. Public access is limited to two locations: from the Route 42 bridge and from national forest land on the Evans Tract off State Road 633. This limited access keeps river use down. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: This segment has no unusual rock outcroppings. Two shale bluffs are visible from a short segment of the stream. The corridor consists of farm land and forest types typical of the George Washington National Forest. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: This segment supports a sport fishery of smallmouth bass and muskellunge with other species such as sunfish. Spawning muskellunge -- a rarity in the state -- are present in this segment. The area provides habitat for wildlife species typical of the Forest. A Class A-Distinctive rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known prehistoric sites on the main terraces of the river on National Forest System land. It is likely that additional prehistoric sites exist on private property along the river. Evidence of an antebellum mansion can be found on the government owned Evans (#1657) Tract. Again, there is a high probability that undiscovered and potentially significant prehistoric sites exist within this river corridor. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment A of the Cowpasture River is eligible for designation under the Wild and Scenic Rivers Act. It is free-flowing and determined to have outstandingly remarkable recreational and fish and wildlife values.

Classification Determination: Because Segment A of the Cowpasture River is eligible for wild and scenic river system, it is necessary to determine its potential classification as either wild, scenic, or recreational. According to criteria in FSH 1909, Chapter 8, the entire 16 miles qualifies for inclusion in the system under the recreational classification. This determination is based primarily on the fact that several major highways and railroad bridges cross and parallel this section of the river.

Segment B - From Route 42 Bridge to the confluence with the Bullpasture River

This 48.11-mile segment is located entirely within Bath County. National Forest System land borders on one side only for 4.33 miles and is spread out over seven locations. Forest Service lands border both sides for 4.28 miles at two locations. There is one small dam near Millboro Springs, a few low-water bridges and a few swinging foot-bridges, including one on national forest land. Portions of Segment B are paralleled by roads. Other roads provide access to the river. There is one foot-trail on National Forest System land that provides access to the river.

The shoreline is largely undeveloped and is a mixture of forested and agricultural land. The development that exists includes cabins, houses, and tilled farm land. The majority of the adjacent private land is posted. Forest and agricultural practices are evident within the stream corridor. The segment is suitable for fish and wildlife propagation, wading, canoeing, and other uses. Water quality is average. Three locations provide public access along this segment. This segment has not been declared navigable.

Eligibility of Cowpasture River - Segment B by:

Scenic Value: Segment B of the Cowpasture River is typical of many rivers in the Forest and the area. The stream is small-to-medium in width and shallow, with some large pools of water. It has a gradual gradient and no stretches of whitewater. The current is fairly slow with uniform flow characteristics. The valley bottom is gently rolling with steep mountain terrain bordering one side. No cliffs or other rock formations are evident along this segment. The forest cover is typical mixed hardwood and pine with common understory species. A Class B-Common rating is assigned to the scenic values.

Recreational Value: Current recreation use of Segment B consists of fishing, canoeing, tubing, and swimming by adjacent landowners and the general public along tracts owned by the Forest Service. Public access is limited. This river segment has not been declared navigable. Due to these factors, recreational use is limited. A Class B-Common rating is assigned to the recreational values.

Geologic Value: This segment has no unusual rock outcroppings. The corridor consists of farm land and forest typical of the George Washington National Forest. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: This segment supports a sport fishery of smallmouth bass, muskellunge, and other species such as sunfish. Spawning muskellunge--a rarity in the state--are present in this segment. The area provides habitat for wildlife species typical of the Forest. The majority of the private property along this segment is posted and severely limits fishing-and-wildlife-related access. A Class A-Distinctive rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known prehistoric archeological sites on the Forest. There is a high probability that additional prehistoric sites exist in the corridor on both private and federal lands. A known historic site exists on the Forest-Service-owned Wallace Tract. The tract includes an old brick house which may have historical value and may qualify for the National Register of Historical Places. Another historical site with potential exists on the Walton Tract. The tract contains the remains of several old homesites. Dickinson Fort is another potentially significant site located within the corridor. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment B of the Cowpasture River is eligible for designation under the National Wild and Scenic Rivers Act. It is free-flowing and has outstandingly remarkable fish and wildlife and historic and cultural values.

Classification Determination: Because Segment B of the Cowpasture River is eligible for designation, it is necessary to determine its potential classification as either wild, scenic, or recreational. According to the criteria in FSH 1909, Chapter 8, the entire 48.11-mile segment qualifies for inclusion in the system under the recreational classification. This classification is based on the fact that several roads cross the river and that concentrated development exists along the river in the area of Millboro Springs. In addition, there is a small dam on the river in the Millboro Springs area.

Segment C - Confluence with Bullpasture River to Patna

The majority of this six-mile segment is within Highland County. It is not considered navigable. The river is free-flowing, but small. Segment C is inside Forest boundaries. There is no public access and the majority of the adjacent private property is posted. Roads parallel and cross the river at several locations. Upper reaches of the river go dry during extended dry periods. Adjacent land is farm land with sections of hardwood and pine and is used for pasture, primarily. Little opportunity exists for fish propagation, wading, canoeing, and other forms of recreation. The river passes through a section of a state wildlife management area for about 1.5 miles. Of note, the section downstream from Pantata to the end of segment C and part of Segment B has been selected by the state for further evaluation as part of the Virginia Scenic Rivers System.

Eligibility of Cowpasture River - Segment C by:

Scenic Value: Segment C is typical of the upper reaches of rivers in the area. It is attractive, but has no distinctive or outstanding features. It is small-to-medium in size with low-flow except during major storm periods. The current is fairly slow with uniform flow characteristics. The topography of the valley is gently rolling with steep bordering mountains. No rock outcroppings are evident. The forest cover is typical hardwood and pine with common understory species. A state highway parallels the stream and several houses are scattered along its banks. A Class C-Minimal rating is assigned to the scenic values.

Recreational Value: Current recreation use is limited to adjacent landowners and consists of fishing and swimming. There is no public access to Segment C. The stream does not have sufficient flow for boating except during major storm periods. A Class C-Minimal rating is assigned to the recreational values.

Geologic Value: This section has no unusual rock outcroppings except near the confluence with the Bullpasture River. The corridor consists of farm land and forest types typical of the area. A Class C- Minimal rating is assigned to the geologic values.

Fish and Wildlife Value: This section does not support a sport fishery. The area provides habitat for wildlife species typical of the area. A Class C-Minimal rating is assigned to the fish and wildlife values.

Historic and Cultural Value: There are no known archeological or historical sites along this section, but there is a probability for archeological sites. Since no survey has been conducted, a Class B-Common rating is assigned.

Eligibility Determination: With no outstandingly remarkable values present, Segment C of the Cowpasture River is not eligible for designation under the National Wild and Scenic Rivers Act. Segment C will not be studied further for designation.

Segment D - Patna to the headwaters

The majority of this 8-mile segment is within Highland County. From Patna to the headwaters, the stream has been channelized in many locations. Channelization was done in response to the floods of 1969, 1972, and 1985. Segment D is not considered navigable. The river is free-flowing, but small in size. This segment is within the Forest boundary. There is no public access and the majority of adjacent private property is posted. Roads parallel and cross the river at several locations. Upper reaches of the river go dry during extended dry periods. Adjacent land is farm land that is used primarily for pasture, with sections of hardwood and pine woodlands. Little opportunity exists for fish propagation, wading, canoeing, or other forms of recreation.

Due to channelization of the river, the section from Patna to the headwaters will not qualify for wild and scenic river designation and will not be considered further.

Dry River

This stream is not on the National Rivers Inventory. In response to an appeal by the American Rivers Conservation Council, this river was reviewed on-the-ground by the Forest and American Rivers. A 22-mile segment of the Dry River was studied, including the portion from the headwaters to where the river exits the Forest boundary. This river received major damage during the floods of 1969, 1972, 1985, and several earlier floods. The river is heavily channelized. There are some impoundments on the river, including the city of Harrisonburg water supply diversion dam at Riven Rock Park and dams on the upper mainstem, Skidmore Fork, and Dry Run.

Because of the extensive channelization, Dry River is not free-flowing and is not eligible for inclusion in the wild and scenic river system.

Irish Creek

This stream is not on the National Rivers Inventory. In response to an appeal by the American Rivers Conservation Council, Irish Creek was reviewed on-the-ground by representatives of the George Washington National Forest and American Rivers. An 8.5-mile segment was studied, from the headwaters to where Irish Creek exits the Forest boundary. An on-the-ground evaluation of this stream showed that it was heavily damaged during the floods of 1969, 1972, and 1985. Extensive channelization and gabion structures dominate the entire evaluation segment. Because of the extensive channelization, Irish Creek is not free-flowing and is not eligible for inclusion in the wild and scenic river system.

Jackson River

The 42.69 miles of the Jackson River being considered here was divided into four segments for evaluation purposes. The Jackson is described in this report from its headwaters south to an area called Clearwater Park, located just north of Covington, Virginia. Forest Service ownership along the Jackson River is non-contiguous. Segments of the Jackson have been evaluated by the Virginia Commission of Outdoor Recreation and found worthy of inclusion in the Virginia Scenic River System. Citizen interest in any proposed wild and scenic river designations would be extremely high.

Segment A - U.S. Forest Service lands at the northern boundary of the Hidden Valley Tract to the headwaters

This segment is within Bath and Highland counties and contains approximately 14.3 miles. The majority of property along this segment is privately-owned and 75 percent of this segment is outside the Forest boundary. The private property is posted. This segment is not considered navigable. The portion in Highland County is outside the Forest boundary. This segment touches Forest land at two locations for an approximate distance of 0.66 miles in Bath County near Star Chapel. This segment is paralleled by State Highway 220 and is bridged by Highway 220 and county roads 607 (twice), 606, and 608. The segment was heavily channelized in several locations after the floods of 1969, 1972, and 1985. The disturbed sections are short, but scattered over the entire length.

Eligibility of Jackson River - Segment A by:

Scenic Value: Segment A of the Jackson River is typical of the rivers in this part of the state. Although attractive, it has no distinctive or outstanding features. The stream is medium-to-small and for the most part, shallow. A few pools are scattered along this reach. The current is slow, with uniform flow characteristics. The valley is gently rolling with steep mountain terrain on one side near the river. There are no rock cliffs, ledges or shale bluffs evident from the stream. The forest cover is typical mixed hardwood and pine with common understory plants. The majority of the bordering land is private farming with pasture land along the river. Many of these bordering properties are developed with houses, barns, bridges, and other structures. This segment is paralleled by State Highway 220. A Class C-Minimal rating is assigned to the scenic values.

Recreational Value: Current recreation use of Segment A is limited to fishing and swimming by adjacent landowners. This segment is not considered navigable. A Class C-Minimal rating is assigned to the recreational values.

Geologic Value: This segment has no unusual or outstanding geological features. The corridor consists of farm land and forests typical of the GWNF area. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: Parts of this segment support smallmouth bass, sunfish and other species. Fishing access is limited due to adjacent private property. The area provides habitat for wildlife species typical of the Forest. A Class C-Minimal rating is assigned to the fish and wildlife values.

Historic and Cultural Values: Although a systematic survey has not been conducted along this segment, there are known prehistoric sites located on private land adjacent to the river. Because these sites have

not been evaluated for significance, a Class B-Common rating is assigned to the historic and cultural values.

Eligibility Determination: Due to channelization and development along the river, Segment A of the Jackson River is not eligible for designation. This same conclusion was reached by the Virginia Commission of Outdoor Recreation in their study. For these reasons this segment will not be evaluated further for designation under the National Wild and Scenic Rivers Act.

Segment B - From Hidden Valley southern boundary to U.S. Forest Service lands at the northern boundary of the Hidden Valley Tract (7.06 miles)

This 7.06-mile segment is located in Bath County. A total of 6.56 miles of this segment is located on the Forest. Property along the remaining .5 miles is posted. This section is not legally declared navigable, however, the section inside the Forest is in public ownership and, therefore, is de facto navigable. Public vehicle access is available at either end. A jeep trail parallels a portion of the stream and is used by hikers and for administrative purposes by the Forest Service. Most of the shoreline is forested. One low-water bridge crosses the stream at the Warwick Mansion. A swinging foot-bridge on the Forest crosses the stream above Muddy Run. There are a few open fields and structures adjacent to or bordering this segment of the river.

Eligibility of Jackson River - Segment B by:

Scenic Value: Segment B of the Jackson River is an attractive river. Forest cover along the river is nearly continuous. Open fields border the river in several locations, adding variety to the environment. There is a variety of plant species, including large trees. The streambed is medium in width. The rate of flow is medium and there is little-to-no white-water, except during storm periods. Several structures are visible within the river corridor. The old jeep road is not highly visible from the stream. There is one low water bridge. There are flats adjacent to the stream, with some steep side slopes to add to the variety. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: Current recreation use consists of trout fishing, wading, canoeing, hunting, and hiking. Most land along this segment is public, under Forest Service management, accessible, and available for recreational use. Much of the length of this segment is a walk-in fishery, providing a somewhat unique recreation opportunity for the area. Outstanding white-water canoeing and kayaking opportunities exist along this segment in Hidden Valley. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: A few rock outcroppings are present, but most are not visible from the river. The corridor consists primarily of forest interspersed with open fields. Forest types along the river are typical of the George Washington National Forest. A Class B-Common rating is assigned to the geologic values.

Fish and Wildlife Values: This segment is stocked with trout by the Virginia Division of Game and Inland Fisheries (VDGIF) under the state's put-and-take system. This section of the river is an otter re-introduction site, one of several in Virginia. A Class A-Distinctive rating is assigned to the fish and wildlife values.

Historic and Cultural Values: This segment contains the Warwick Mansion that is on the National Register of Historic Places. A low-water bridge across the river provides access to the mansion. A rock shelter with a significant prehistoric component is located in the corridor along this segment and is on the National Register of Historic Places. There is a high probability that additional archeological sites exist within this corridor. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment B of the Jackson River is eligible for designation under the National Wild and Scenic Rivers Act because it is free-flowing and has outstandingly remarkable scenic, recreational, fish and wildlife, and historic and cultural values.

Classification Determination: Because Segment B of the Jackson River is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter

8, the entire 7.06 miles qualifies for designation under the scenic classification. The segment has outstanding scenic qualities and is bordered and accessed by paved state highways.

Segment C - Hidden Valley to McClintic Bridge (8.33 miles)

This 8.33-mile segment is bordered almost entirely by private property. The exception is 0.27 miles of Forest ownership. While there are numerous access points to the river, most are located on posted private property and are not available to the general public. Many private roads parallel the stream. A few structural improvements such as farm buildings, houses, and hunt cabins exist along the stream. Existing use along the river consists primarily of hunting camps and agriculture. The shoreline is a mixture of forest land and open fields. This segment is suitable for fish and wildlife propagation, wading, canoeing, and other uses. The water clarity ranges from average to good. This segment is not considered navigable, therefore, public access to the river is controlled by the landowners.

Eligibility of Jackson River - Segment C by:

Scenic Value: Segment C of the Jackson River is an attractive area. The size ranges from small-to-medium in width and is mostly shallow with some large pools. The rate of flow ranges from slow to fast. There are large boulders in some sections of the stream channel and cliffs are evident in some locations. Topography ranges from gently-rolling valley to steep-sided gorge. Richardson Gorge has outstanding scenery. Roads are evident along sections of this segment. The forest cover consists of hardwoods, hemlock, some pine. Understory species are those common to the GW. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: Current recreation along Segment C consists of fishing, canoeing, kayaking, and swimming by adjacent landowners and guests. There is little public land along this segment. The segment is not considered navigable and access is controlled by adjacent landowners who have posted their property. Through Richardson Gorge, the river drops 40 feet per mile for two miles, making it an excellent river for white-water enthusiasts. There is some trout fishing in this segment. A Class A-Distinctive rating is assigned to the recreational values. If access problems can be resolved, this segment has excellent potential for public recreation use.

Geologic Value: There are several rock outcroppings along this segment. Richardson Gorge has many interesting and beautiful geological formations. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: Segment C contains smallmouth bass and bluegills as well as stocked and wild trout. The area is posted and access for fishing is not available to the general public. There is evidence that the special strain of rainbow trout stocked in Lake Moomaw are beginning to make spawning runs into this section of the river. If this spawning run continues to build, this would dramatically increase the fishery value of this section. This area provides habitat for wildlife species that are typical of the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known historic and prehistoric sites along this segment. These include Fort Dinwiddie and the Hirsch Mound, both located on private land. There is a high probability that additional prehistoric sites exist. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment C of the Jackson River is eligible for designation under the National Wild and Scenic Rivers Act because it is free-flowing and has outstandingly remarkable scenic, recreational, geologic, and historic and cultural values.

Classification Determination: Because Segment C of the Jackson River is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 8.33 miles qualifies for inclusion in the system under the scenic classification. This determination is based primarily on the fact that development along the river is sparse and roads are inconspicuous.

Segment D - Gathright Dam to Clearwater Park (13.0 miles)

This segment is 13.0 miles long. It begins at Gathright Dam and ends at the bridge where State Route 687 crosses the river at Clearwater Park. The majority of the river frontage is privately owned and posted. The first 1/2-mile is bordered by public land administered by the Corps of Engineers. There is one canoe access point on Corps lands. The Forest Service administers five access points along this segment of the river. These are located on small tracts purchased by the Corps of Engineers and later transferred to the Forest Service to provide public access to the river. This segment was declared navigable by the federal courts in 1982. In contrast to the federal court's determination that this segment is navigable, adjacent landowners maintain that they own the bottom of the river. They do not permit fishing or recreation access to the river by the general public. Only two of the publicly owned access points have been developed to date.

County and private roads parallel the river and county roads 687 and 638 cross it. An abandoned railroad grade parallels the segment for its entire length. Several farms and private homes are located along this segment, including a few private subdivisions. This segment of the river is used by canoeists, kayakers, tubers, and swimmers.

Eligibility of Jackson River - Segment D by:

Scenic Value: Segment D of the Jackson River is an attractive stream. It is medium in size and the depth ranges from shallow to deep where the river pools. The rate of flow ranges from average to fast and is regulated by the discharge at Gathright Dam. In some sections, there are large boulders and rapids. Shale cliffs are evident at three or four locations. The river valley is gently rolling and bordered by steep mountains. Roads parallel the river and are visible from the river along most of this segment. Several houses are located along the river. Forest cover is typical of the area and consists of mixed hardwoods and pine, including several hemlock groves. The understory species are common to the forest type. A Class B-Common rating is assigned to the scenic values.

Recreational Value: Canoeing, kayaking, and tubing are becoming popular along this segment of the Jackson River. Fishing and swimming are popular in a few locations, but adjacent landowners discourage these uses. This segment is navigable and has six public access points. Most of the private property is posted. Bass fishing is good and the VDGIF plans to turn this segment into trout fishing waters. VDGIF maintains that this could be one of the best trout streams in the East due to Gathright Dam and Lake Moomaw and the ability to control temperature and oxygen levels of the water. This segment has good potential for river recreation use. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: At least four outstanding shale and limestone bluffs within the corridor are visible from this segment. Many users consider them outstanding geological features. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: At present, there is an outstanding fishery in this segment. The river contains smallmouth bass and panfish. A trout fishery is being developed. The river has been legally declared navigable, but adjacent landowners maintain they own the bottom of the river. Due to Lake Moomaw and Gathright Dam, water flow is regulated and the released water is typically colder than it would be without the release from the lake. The ability to release cold water into this segment provides for outstanding trout waters. The corridor provides habitat for wildlife species typical of the Forest. With the trout fishery being developed, this segment qualifies for a Class A-Distinctive rating.

Historic and Cultural Values: There are known historic and prehistoric archeological sites along this segment. There is high probability that additional prehistoric sites exist. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment D of the Jackson River is eligible for designation under the National Wild and Scenic Rivers Act because it is free-flowing and has outstandingly remarkable historical, cultural, recreational, geologic, and fish and wildlife values.

Classification Determination: Because Segment D of the Jackson River is eligible for designation, it is necessary to determine the segment's classification. According to the criteria in FSH 1909, Chapter 8, the entire 13.0 miles qualifies for inclusion in the system under the recreational classification. This determination is based primarily on the fact that this segment of the river is paralleled by roads and is developed by private landowners.

North River

This evaluation will examine a 16-mile segment of the North River from its headwaters to the point it exits the Forest approximately one mile east of the town of Stokesville, Virginia. The segment is located in Augusta County and Forest ownership of land along the river is almost complete. Private property does border the river for approximately 1.5 miles in the vicinity of Stokesville. The river is small and shallow except during major storm periods. Normally, the current is fairly slow with uniform flow characteristics. Steep mountain terrain is on both sides of the river. State and Forest roads exist in the stream corridor. Portions of the stream are stocked with trout under the state's put-and-take program. Much of the river has been heavily damaged by the floods of 1969, 1972, and 1985. Floods prior to these resulted in many gabions being installed along sections of the stream. The river is not considered navigable.

Segment A - From the headwaters to North River Campground.

The streambed and channel along the nine-mile section from the headwaters to the North River Campground show heavy flood damage and are channelized with gabions in some locations. Two dams are located within this section. Therefore, this section of the North River cannot be considered free-flowing and does not qualify for eligibility under the Act. As defined in the Act, free-flowing "means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other impoundment of the waterway."

Segment B - From North River Campground to Camp May Flather

This section is approximately 5.0 miles long. It is free-flowing and small in size. The average flow is relatively low. Flood damage along this segment is relatively absent. The adjoining property is owned entirely by the Forest Service. The shoreline is undeveloped. Some past forest management practices are evident along a short section of this stream. A Forest Service trail follows this section, part of which is an old jeep road that is used to stock trout. The surrounding forest is typical hardwood and pine with common understory species.

Eligibility of North River - Segment B by:

Scenic Value: Segment B of North River is an attractive segment with many outstanding rock formations and cliffs. The stream is typically shallow as it flows between a series of small pools. During periods of high water, usually in the spring and following moderate rains, North River provides a challenging white-water experience, including several Class 4 rapids. The stream flows over varying terrain, which adds to its attractiveness. Located in the North River gorge, this section is bordered by steep, mountainous terrain on both sides. A Forest Service trail, once a jeep trail, follows this section and crosses it at nine locations. The trail is still used by VDGIF vehicles to stock trout in the spring. There are signs of timber cutting in the corridor. The cutting was to salvage ice-damaged timber and most was on an individual tree selection basis. One small clearcut is evident. The surrounding forest cover is typical mixed hardwood and pine with common understory species. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: Current recreation use consists of hunting, fishing, hiking, and seasonal canoeing and kayaking. During high water, this section is capable of providing good white-water canoeing and kayaking. This section traverses public land and has adequate access at both ends. The North River Gorge hiking trail receives heavy use. Camping is available at the North River Campground. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: This segment through the North River Gorge contains several cliffs and outstanding rock formations. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: This segment is stocked in the spring with trout under the state's put-and-take program. It is also stocked in the fall if there is enough water to support fish. Several wildlife clearings are in the North River Gorge. For the most part, they are located away from the streambed and are not readily visible from the river. The area provides habitat for wildlife species typical of the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are no known prehistoric archeological sites along this segment. Camp May Flather dates back to the 1930s and North River Campground is an old CCC camp site. There is an old logging railroad grade in the gorge area. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: The North River Gorge area of North River is eligible for designation under the National Wild and Scenic Rivers Act. It is free-flowing and has outstandingly remarkable scenic, recreation, geologic, historic, and cultural values.

Classification Determination: Because the North River Gorge segment of North River is eligible for designation, it is necessary to determine the classification that could result from designation. According to criteria in FSH 1909, Chapter 8, a total of 5.0 miles qualifies for inclusion in the system under the scenic classification.

Segment C - From Camp May Flather to the Forest's proclamation boundary.

This 2-mile section is located below the Forest boundary and crosses private property. The streambed and channel contain extensive flood-related damage and channelization. As with Segment A, this section of the North River cannot be considered free-flowing and therefore, is not eligible under the Act.

Passage Creek

Passage Creek is divided into three segments for evaluation purposes. Passage Creek is described in this report from its headwaters north to its confluence with North Fork Shenandoah River. This evaluation covers 34.5 miles from the confluence of the North Fork of the Shenandoah River to the beginning point of perennial stream flow. Within this 34.5-mile segment, the Forest Service owns 0.9 miles of land on one side and 9.7 miles on both sides of the creek. The majority of Passage Creek is located within the ridge commonly referred to as Massanutten Mountain. It flows north through Fort Valley and into the North Fork of the Shenandoah River. It is not considered navigable. State of Virginia studies do not consider Passage Creek eligible the Virginia Scenic Rivers System.

Segment A - Headwaters to State Route 730 (6.3 miles)

This 6.3-mile segment is bordered on both sides by National Forest System land except for 0.9 miles of private property on one bank. This segment is located in Page and Shenandoah counties. Segment A is a very small stream with low flows and a slow moving current. During periods of drought, some sections of Segment A become dry. The stream is free-flowing and the shoreline is entirely wooded. Crisman Hollow Road parallels the entire segment. Hiking trails parallel and cross the creek at several locations. Forest management practices are evident along several sections of this segment. Part of this segment is stocked by the VDGIF under the Virginia's put-and-take program. Sections are suitable for wading and trout fishing. Water quality is average.

Eligibility of Passage Creek - Segment A by:

Scenic Value: Segment A of Passage Creek is a typical small mountain stream. It has no distinctive or outstanding features. The stream is small and shallow, following a gradual gradient. Sections go dry during periods of drought. The current is slow with uniform flow characteristics. Steep mountain slopes border the creek on both sides. From a visual standpoint, there are no outstanding rock formations, cliffs, or bluffs. Forest cover along the creek consists of mixed hardwood and pine. The understory consists of common species. A Class C-Minimal rating is assigned to the scenic values.

Recreational Value: Current recreation use consists of wading and trout fishing under the put-and-take program. Land based recreation activities that occur in the corridor include hiking and big and small game hunting. A Class C-Minimal rating is assigned to the recreational values.

Geologic Value: There are no outstanding geological formations within the corridor. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: This segment is stocked with trout by the VDGIF put-and-take program. The area provides habitat for wildlife species typical of the Forest. A Class C-Minimal rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are no known archeological sites in the corridor of this segment. Crisman Hollow Road is one of the many Forest roads constructed by the Civilian Conservation Corps (CCC). Camp Roosevelt is located just south of the end of this segment. A Class C-Minimal Rating is assigned to the historic and cultural values.

Eligibility Determination: Segment A of Passage Creek is not eligible for designation under the National Wild and Scenic Rivers Act. The segment does not have outstandingly remarkable values. For this reason, Segment A will not be studied further for designation under the National Wild and Scenic Rivers Act.

Segment B - From State Route 730 to Forest Boundary

This 21.3-mile segment is located in Shenandoah County. It runs the length of Fort Valley and is bordered entirely by private property. Route 678 parallels this segment of the stream for the entire length. A few roads cross the stream by means of low-water bridges. The corridor consists of agricultural and forest land with several houses and a few subdivisions. It is not considered navigable. Because most of the private property is posted, the stream is not accessible to the general public. The segment is suitable for fish and wildlife propagation, wading, and canoeing during periods of high water. Water quality is average. There are no impoundments.

Eligibility of Passage Creek - Segment B by:

Scenic Value: Segment B of Passage Creek is typical of many streams on the George Washington National Forest. It is an attractive creek, but has no features that rate as distinctive or outstanding. This is a small stream that meanders through Fort Valley. The stream is shallow with occasional small pools. There are mountains on both sides of the broad, four-mile wide valley. The valley is gently rolling and supports a number of farms and houses. The forest cover is typical mixed hardwoods and some pine, with common understory species. A Class B-Common rating is assigned to the scenic values.

Recreational Value: Current recreation use of Segment B is limited to fishing and swimming by the adjacent landowners. There is some canoeing during periods of high water. The stream is not classified as navigable and use is controlled by the landowners. This reduces the recreational use of the stream. A Class B-Common rating is assigned to the recreational values.

Fish and Wildlife Values: This segment supports smallmouth bass and sunfish populations but is not considered a significant sport fishery due to its small size. The area provides habitat for wildlife species typical of the Forest. A Class C-Minimal rating is assigned to the fish and wildlife values.

Geologic Value: This segment has no outstanding visible geological formations. This segment of Passage Creek flows through Fort Valley which is about 22 miles long by four miles wide. There are not many natural entrances into the valley. Mountains are visible on both sides. A Class B-Common rating is assigned to the geologic values.

Historic and Cultural Values: Camp Roosevelt, the site of the first Civilian Conservation Corps camp in the nation, is located at the beginning of this segment. Caroline Furnace, an old iron furnace site, is also located near the beginning of this segment. Fort Valley derives its name from and has historical significance relating back to the Revolutionary War period. There are additional known historical sites in this corridor. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment B of Passage Creek is eligible for designation under the National Wild and Scenic Rivers Act. It is free-flowing and has outstandingly remarkable historic and cultural values.

Classification Determination: Because Segment B of Passage Creek is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 21.3 miles qualifies for inclusion in the system under the recreational classification. This determination results from the relatively large number of houses and farms located along the river.

Segment C - From Forest Boundary downstream to North Fork Shenandoah

This 6.9-mile segment flows through a narrow gorge located in Shenandoah County. It is bordered by Forest lands for 4.3 miles and by private land for 2.6 miles. Adjacent National Forest System land is used primarily for recreation and timber production. State Route 678, a two-lane paved road, parallels the stream through the gorge. One small dam exists between Forest land and the state fish hatchery. Private land bordering the creek is typically used for agriculture. There are some houses and other developments in the corridor. Elizabeth Furnace Recreation Area is a relatively large developed recreation site located on the creek on Forest land. The state has a fish hatchery in the corridor outside the Forest boundary. Most of the private property is posted. The segment on the Forest is stocked with trout under the state's put-and-take program. The segment is suitable for fish and wildlife propagation, wading, and canoeing during periods of high water. Water quality is average.

Eligibility of Passage Creek - Segment C by:

Scenic Value: Segment C of Passage Creek is an attractive creek located within a narrow gorge. The gorge area is scenic and bordered by cliffs and rock formations that enhance the visual resource. The creek is shallow with occasional pools. Part of the stream has a fairly steep gradient and during storm periods, usually in the spring, the current is fast. The stream is bordered by steep mountain slopes as it passes through the gorge, then through rolling terrain before flowing into the Shenandoah River. Forest cover along the creek includes mixed hardwood and pine with common understory species. A Class-A-Distinctive rating is assigned to the scenic values.

Recreational Value: Current recreation use of Segment C consists of trout fishing under the state's put-and-take program, wading, and swimming. During periods of high water, the section in the gorge is also used for canoeing and kayaking. The stream is not considered navigable. A small dam is located just outside the Forest boundary. Adjacent private lands are posted so public access is limited to the part of the creek that crosses the Forest. Elizabeth Furnace Recreation Area is located in the corridor of this segment and offers both camping and picnicking. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: This segment contains some outstanding cliffs and rock formations in the gorge area. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: The section on National Forest System land is stocked with trout under the state's put-and-take program. The creek also supports smallmouth bass and sunfish populations. A state fish hatchery is located within the corridor just outside the Forest. The area provides habitat for wildlife species common to the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: This segment of Passage Creek and its corridor contain several potentially significant historical sites. Elizabeth Furnace, an old iron furnace, is located within the corridor. The Elizabeth Furnace recreation area was constructed by the CCC. An old log cabin from the charcoal iron furnace era, a slave cemetery, and prehistoric sites are also located within the corridor. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment C of Passage Creek is eligible for designation under the National Wild and Scenic Rivers Act. With the exception of a small dam located between the state fish hatchery and national forest land, it is free-flowing. As is stated in FSH 1909, Chapter 8.21b, "...the existence of low dams...at the time any river is proposed for inclusion...does not automatically disqualify it for designation...." Also, this segment of the creek has outstandingly remarkable scenic, recreational, geologic, historic, and cultural values.

Classification Determination: Because Segment C of Passage Creek is eligible for designation, it is necessary to determine the classification that could result. According to the criteria in FSH 1909, Chapter 8, the entire 6.9 miles qualifies for inclusion in the system under the recreational classification. This classification is for several reasons, including the presence of the Elizabeth Furnace Recreation Area and a number of houses and farms along the creek.

St. Mary's River

A total of 8.6 miles of St. Mary's River is considered in this evaluation. St. Mary's is divided into two segments for evaluation purposes. St. Mary's is described in this report from its headwaters west to its confluence with the South River. The first segment includes the headwaters down to where the river exits the St. Mary's Wilderness boundary. The second segment includes that portion from the St. Mary's Wilderness boundary to its confluence with the South River. National Forest System land along the upper reaches borders the St. Mary's on both sides for 4.60 miles and on one side for 0.50 miles. St. Mary's is a small stream with low rates of flow except during major storm events. The upper segment, all on the Forest, is currently designated as a State Scenic River. This section is also within the St. Mary's Wilderness.

The stream is not classified as navigable. The water quality is average for the Blue Ridge Mountains. There is some disturbance as a result of floods outside the Forest boundary. A road parallels most of the portion on private property and there are some private developments. There are no impoundments. This stream is suitable for normal fish and wildlife propagation. There is trout fishing and wading in the St. Mary's.

Segment A - From the headwaters to the St. Mary's Wilderness boundary (4.6 miles).

Eligibility of St. Mary's River - Segment A by:

Scenic Value: There are rock formations and small waterfalls within this segment of the St. Mary's River. The stream is designated as a State Scenic River. A Class B-Common rating is assigned to scenic values.

Recreational Value: Current recreation use consists of fishing for brook trout, wading, bathing, hiking, and camping. Recreation use along the river is high. In addition, this segment is located within St. Mary's Wilderness and, as such, offers a unique recreation opportunity not available on most of the Forest. The stream is not large enough to permit canoeing and there is no record of such use. There is an old mining railroad grade that has been developed into a trail along a portion of the stream. A Class A-Distinctive rating is assigned to recreational values.

Geologic Values: Within the wilderness area, there are rock outcrops and small waterfalls. The river also flows through a small gorge. While these features add to the geological value of the river, they are not uncommon in the Blue Ridge Mountain area. A Class B-Common rating is assigned to the geologic values.

Fish and Wildlife Values: This stream contains native brook trout and a few wild rainbow trout. Segment A of St. Mary's River is a Featured Brook Trout Stream. Acid deposition has almost completely eliminated rainbow trout and brown trout. Several minnow species have been eliminated. If acid deposition continues to destroy the fishery, the value of the river from a fisheries standpoint will be reduced. The area provides habitat for wildlife species typical of the Forest. A Class A-Distinctive rating is assigned to the fish and wildlife values.

Historic and Cultural Values: An old mining railroad grade parallels the stream. There are known archeological sites in the corridor. There is evidence of iron ore washers in the stream channel. Since no systematic survey has been conducted in this corridor, a Class B - Common rating is assigned to the historic and cultural values.

Eligibility Determination: Segment A of St. Mary's River is eligible because it is free-flowing and has outstandingly remarkable recreational and fish and wildlife values.

Classification Determination: Because St. Mary's River is eligible for designation, it is necessary to determine the classification that would result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 4.6 miles qualifies for inclusion in the system under the wild classification. This determination is based primarily on the fact that little or no man-made disturbances exist within the river corridor inside St. Mary's Wilderness.

Segment B - From the St. Mary's Wilderness Area boundary to the confluence with the South River (4 miles).

Eligibility of St. Mary's River - Segment B by:

Scenic Value: No outstanding features are present. The scenery is common for the area. There are some man-made intrusions along the stream. A Class B-Common rating is assigned to scenic values.

Recreational Value: Current recreation use consists of fishing for brook trout and some wading and bathing. The stream is not large enough to permit canoeing and there is no record of such use. A Class B-Common rating is assigned to recreational values.

Geologic Value: A Class B-Common rating is assigned to the geologic values.

Fish and Wildlife Values: This stream contains a few trout. The area provides habitat for wildlife species typical of the Forest. A Class C-Minimal rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are no known archeological sites in the corridor. However, since it is in the Blue Ridge Mountains, the potential for archeological sites is strong. A Class C-Minimal rating is assigned to the historic and cultural values.

Eligibility Determination: Segment B of St. Mary's River is not eligible for designation under the National Wild and Scenic Rivers Act because of the lack of outstandingly remarkable values. For this reason, Segment B of St. Mary's River will not be studied further for designation.

North Fork Shenandoah River

The section of the North Fork of the Shenandoah River evaluated here consists of a 39-mile segment between State Highway 55 at Strasburg and State Route 675 at the town of Edinburg. The segment is located in Shenandoah and Frederick counties. Of note, the segment of the North Fork Shenandoah River from Burnshire Bridge to the Route 55 crossing in Strasburg, Virginia, qualifies for inclusion in the state's scenic river system. Forest property borders the east side of the river at three locations for a total of 0.6 miles. Each of these sites consists of steep bluffs and, as such, is not suitable for canoe access. Most of the river lies outside the Forest.

From a structural standpoint, there are two old power dams on the river and several low water bridges. Roads cross the river in four locations and additional roads end adjacent to the river. There is no developed trail access. The town of Woodstock obtains its water from the river. Water from the river is also used for irrigation of corn west of Edinburg. The stream is shallow between pools. Overall, the river follows a gradual gradient and the flow is fairly slow with uniform flow characteristics. Development along the shoreline includes farm land, subdivisions, and vacation cabins. Forest management practices are also evident at certain points along the river. The river is suitable for fish and wildlife propagation, wading, canoeing, and other uses. Water quality is average. The segment is considered navigable. The state has marked the segment from New Market to Riverton for further study.

Eligibility of the North Fork Shenandoah River - 39-mile Segment by:

Scenic Value: The evaluation segment includes the "Seven Bends" of the Shenandoah River, an interesting and scenic area where the river makes a series of sharp bends, at times almost turning back on itself. The surrounding valley is gently rolling with the Massanutten Ridge rising steeply on the east side. There are several shale bluffs evident from the river. The adjacent forest cover is typical mixed hardwood and pine with common understory species. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: Current recreation use is limited due to the lack of public access. There is fishing, canoeing and swimming, mostly by adjacent landowners and guests. The river is considered to be navigable. A Class B-Common rating is assigned to the recreational values.

Geologic Value: This segment contains the "Seven Bends," a significant physiographic/geographic feature. A few shale bluffs are located along the river. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: This segment supports a sport fishery of smallmouth bass, sunfish, and catfish. The smallmouth bass fishing is not as well known or as good as in other rivers in the state. The area provides habitat for wildlife species typical of the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known prehistoric sites along the river. Historic sites are plentiful as the river meanders through the historic Shenandoah Valley. There are several old houses within the corridor. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: This 39-mile section of the North Fork of the Shenandoah River is eligible for designation under the National Wild and Scenic Rivers Act. It is free-flowing and has outstandingly remarkable scenic, geologic, historic, and cultural values.

Classification Determination: Because the North Fork Shenandoah River is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 39 miles qualifies for inclusion in the system under the recreational classification. This determination is based on the large number of houses and other developments located within the corridor.

South Fork Shenandoah River

This evaluation covers 36 miles of the South Fork of the Shenandoah River. Because the river and the surrounding corridor are so physically similar, the entire 36 miles will be studied as one segment. The segment begins at the Bixler Bridge located on Virginia secondary road 675, approximately 3 miles northwest of Luray. It ends at Karo Landing, approximately 6 miles south of the town of Front Royal. The evaluation segment is located within Page and Warren counties and is considered navigable. Forest property borders the west side of the river for 9.5 miles and borders both sides for 0.4 miles. Two low water bridges cross this segment. The area under consideration has good public access. Land uses along the river include agriculture, summer homes, and year-round residences. Evidence of human activity is abundant and increasing.

The river is suitable for fish and wildlife propagation, wading, canoeing, and other uses. Water quality is average. Portions of roads parallel the river and are evident from the river. A railroad is evident from the river in two locations. Page Power Company, now Potomac Edison, acquired flowage easements for a proposed dam at Overall in 1930. These easements are still in effect even though the dam has never been constructed. The state has recognized the segment of the South Fork from Goods Mill to Overall for inclusion in the Virginia Scenic Rivers System.

Eligibility of the South Fork Shenandoah River - 36-mile Segment by:

Scenic Value: The South Fork of Shenandoah River is typical of the larger rivers in and around the Forest. It is an attractive river. A couple of cliffs along the river add to the scenery. The river meanders over a gradual gradient from pool to pool. There are a few locations where the gradient increases and the flow becomes faster. The surrounding valley is gently rolling with mountains in the background. Forest cover consists of mixed hardwoods and pine with common understory species. There are numerous summer camps along the river. All in all, there are no features that rate as distinctive or outstanding. A Class B-Common rating is assigned to the scenic values.

Recreational Value: Current recreation use consists of fishing, canoeing, tubing, swimming, and hunting. There are canoe rental businesses at Bealers Ferry and Bentonville. There are also two canoe camps and a family campground at Hazard Mill that are accessible from the river. Several canoe launch sites are

available to the public and canoe use is high. The river is considered navigable. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: This river and its corridor contain no unusual rock outcroppings or other geological formations. There are a couple of small cliffs and several ledges that cross the channel. A Class B-Common rating is assigned to the geologic values.

Fish and Wildlife Values: This river supports a top quality smallmouth bass population. Catfish and sunfish are also important species in the Shenandoah River. The area provides habitat for wildlife species typical of the Forest. A Class A-Distinctive rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are several known archeological sites within the corridor. The area was settled in the 1700s and there are several old houses along the river. Additionally, the river was used to carry pig iron and farm products before the coming of the railroads. An Indian fish weir can still be seen at one location on the river. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: The South Fork of the Shenandoah River is eligible for designation under the National Wild and Scenic Rivers Act. It is free-flowing and has outstandingly remarkable recreation, fish and wildlife, and historic and cultural values.

Classification Determination: Because the South Fork of the Shenandoah River is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 36 miles qualifies for inclusion in the system under the recreational classification. This potential classification is based on the large number of houses and other developments located within the corridor.

Tye River

The Tye River is described in this evaluation from the town of Nash to its headwaters. Two segments of the Tye River, totaling 13 miles, are reviewed in this evaluation. These segments include those portions of the Tye River and the South Fork of the Tye River that are west of and within the George Washington National Forest boundary. East and south of the boundary, the Tye River was heavily disturbed by the floods of 1969, 1972, and 1985. Forest land ownership along this 13-mile segment of the river includes 1.00 mile on both sides of the stream (3 locations) and 0.2 miles on one side (4 locations). The river is not classified as navigable. The state did not find this stream worthy of inclusion in the Virginia Scenic River System.

Segment A - From Nash to Proclamation Boundary (8.3 miles)

This 8.3-mile segment is located within Nelson County. The majority of land bordering this segment is privately owned. Forest land borders both sides of the stream in two locations for approximately 0.5 miles. The river is medium in size and except during storm periods, the rate of flow is slow. There are no impoundments along this section. State Highway 56 parallels and is visible along the entire segment from Nash to the boundary. The Appalachian Trail crosses the stream via a swinging foot bridge. There are several houses located within the corridor along this section. The stream and surrounding floodplain were heavily damaged during the floods of 1969, 1972, and 1985. Channelization of the river is prevalent along this segment. Lands bordering the river include a mixture of undeveloped forest and agricultural land. Some of the adjacent private land is posted. A section of this segment is stocked with trout under the state's put-and-take program.

Eligibility of Tye River - Segment A by:

Scenic Value: Segment A of the Tye River is typical of many rivers on the George Washington National Forest. It is an attractive river but has no distinctive or outstanding features. The stream is shallow with some small pools. For the most part, it has a gradual gradient so the rate of flow is fairly slow and uniform except during storm periods. Steep mountains rise above the river on both sides. No rock bluffs are evident. The forest cover is typical mixed hardwood and pine with common understory species. This segment has been heavily channelized. State Highway 56 is adjacent to this segment and several houses exist within the river corridor. A Class B-Common rating is assigned to the scenic values.

Recreational Value: Current recreation use of Segment A consists of fishing (put-and-take) and some canoeing and kayak use during early spring. There is also some swimming by adjacent landowners. This segment is not considered navigable. Public access for recreation purposes is limited. The Appalachian Trail crosses this segment by means of a swinging foot bridge. A Class B-Common rating is assigned to the recreational values.

Geologic Value: This segment contains no unusual geological formations. The corridor consists of farm land and forest typical of the George Washington National Forest. A Class C-Minimal rating is assigned to the geologic values.

Fish and Wildlife Values: A large portion of this segment is stocked with trout under the state's put-and-take system. The segment provides habitat for wildlife species typical of the Forest. A Class B-Common Rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known prehistoric and historic sites along this segment. Since no systematic survey has been conducted along this section to determine their significance, a Class B-Common rating is assigned to the historic and cultural values.

Eligibility Determination: Segment A of the Tye River is not eligible for designation under the National Wild and Scenic Rivers Act. It has been channelized in many locations and does not have any outstandingly remarkable scenic, recreational, geologic, fish and wildlife or historic and cultural values. For these reasons, Segment A will not be studied further for designation under the National Wild and Scenic Rivers Act.

Segment B - From headwaters to Nash (4.7 miles)

This 4.7-mile segment is located within Nelson County. The majority of lands bordering this segment of the river are privately owned. Forest property touches this segment at several locations and totals approximately 0.70 miles. This segment of the river ranges in size from small to medium. The steep gradient along this segment results in small rapids, drop-offs, and cascades. Portions of the segment are paralleled by State Highway 56. The Crabtree Falls developed recreation site is located within the corridor where Crabtree Creek enters the river. The site consists of paved parking facilities, restrooms, and an observation trail to the top of Crabtree Falls.

While the majority of the shoreline is privately owned, the shoreline remains mostly undeveloped. With few exceptions, the adjacent private property is posted. Forestry and agricultural practices occur and are evident within the river corridor. The segment is suitable for fish and wildlife propagation, canoeing, and other water-based recreation uses. Water quality is average.

Eligibility of Tye River - Segment B by:

Scenic Value: Segment B of the Tye River is attractive. This segment is characterized by swift water, rapids, and cascades. The river bed is littered with large boulders that add variety to the visual resource. The upper portion of this segment flows through a gorge that contains waterfalls. The stream valley is relatively narrow and is bordered on both sides by steep mountains. Forest cover along the river consists of mixed hardwoods and pine and common understory species. A Class A-Distinctive rating is assigned to the scenic values.

Recreational Value: Current water based recreation use consists of fishing and white water canoeing when water levels are sufficient. There is an established wild trout population within this segment. Many people hike this segment to view the scenery. A Class A-Distinctive rating is assigned to the recreational values.

Geologic Value: The gorge area has some outstanding rock outcroppings. Scattered along the streambed are numerous boulders and rocks. A Class A-Distinctive rating is assigned to the geologic values.

Fish and Wildlife Values: This segment supports a wild trout fishery. The area provides habitat for wildlife species typical of the Forest. A Class B-Common rating is assigned to the fish and wildlife values.

Historic and Cultural Values: There are known archeological sites within this segment, including at least one potentially significant prehistoric site. A Class A-Distinctive rating is assigned to the historic and cultural values.

Eligibility Determination: Segment B of the Tye River is eligible for designation under the National Wild and Scenic Rivers Act. It is free-flowing and has outstandingly remarkable scenic, recreational, geologic, and historic and cultural values.

Classification Determination: Because Segment B of the Tye River is eligible for designation, it is necessary to determine the classification that could result from designation. According to the criteria in FSH 1909, Chapter 8, the entire 4.7 miles qualifies for inclusion in the system under the scenic classification.

TABLE D-1. Summary of River Eligibility Determinations

RIVER	COUNTY AND STATE	LENGTH (Miles)	ELIGIBLE	POTENTIAL CLASSIFICATION
BACK CREEK				
Segment A	Bath, VA	5.59	YES	Scenic
Segment B	Bath, VA	9.96	YES	Recreational
Segment C	Highland, VA	17.24	NO	Recreational
BULLPASTURE RIVER				
Segment A	Bath/High, VA	3.00	YES	Scenic
Segment B	Highland, VA	15.00	NO	
CEDAR CREEK	Shen/Fred, VA	25.00	YES	Scenic
COWPASTURE RIVER				
Segment A	Alleghany, VA	16.00	YES	Recreational
Segment B	Bath, VA	48.11	YES	Recreational
Segment C	Bath/High, VA	6.00	NO	
Segment D	Highland, VA	8.00	NO	
DRY RIVER	Rockingham, VA	22.00	NO	
IRISH CREEK	Rockbridge, VA	8.50	NO	
JACKSON RIVER				
Segment A	Bath/High, VA	14.30	NO	
Segment B	Bath, VA	7.06	YES	Scenic
Segment C	Bath, VA	8.33	YES	Scenic
Segment D	Alleghany, VA	13.00	YES	Recreational
NORTH RIVER				
Segment A	Augusta, VA	9.00	NO	
Segment B	Augusta, VA	5.00	YES	Scenic
Segment C	Augusta, VA	2.00	NO	
PASSAGE CREEK				
Segment A	Shenandoah, VA	6.30	NO	
Segment B	Shenandoah, VA	21.30	YES	Recreational
Segment C	Shenandoah, VA	6.90	YES	Recreational
ST. MARY'S RIVER				
Segment A	Augusta, VA	4.60	YES	Wild
Segment B	Augusta, VA	4.00	NO	
NORTH FORK SHENANDOAH	Shen/Fred, VA	39.00	YES	Recreational
SOUTH FORK SHENANDOAH	Page/Warren VA	36.00	YES	Recreational
TYE RIVER				
Segment A	Nelson, VA	8.30	NO	
Segment B	Nelson, VA	4.70	YES	Scenic

TABLE D-2. National Forest Ownership by River

RIVER	LENGTH (Miles)	ONE BANK (Miles)	BOTH BANKS (Miles)
BACK CREEK			
Segment A	5.59	0.01	2.35
Segment B	9.96	1.51	0.00
Segment C	17.24	0.00	0.00
BULLPASTURE RIVER	18.00	0.00	0.00
CEDAR CREEK	25.00	0.10	2.65
COWPASTURE RIVER			
Segment A	16.00	3.00	0.00
Segment B	48.11	4.33	4.28
Segment C	6.00	0.00	0.00
Segment D	8.00	0.00	0.00
DRY RIVER	22.00	0.00	0.00
IRISH CREEK	8.50	0.00	5.50
JACKSON RIVER			
Segment A	14.30	0.66	0.00
Segment B	7.06	0.42	6.62
Segment C	8.33	0.27	0.00
Segment D	13.00	0.25	0.00
NORTH RIVER		0.00	14.50
Segment A	9.00	To be determined	To be determined
Segment B	5.00	To be determined	To be determined
Segment C	2.00	To be determined	To be determined
PASSAGE CREEK			
Segment A	6.30	0.90	5.40
Segment B	21.30	0.00	0.00
Segment C	6.90	0.00	4.30
ST. MARY'S RIVER			
Segment A	4.60	To be determined	To be determined
Segment B	4.00	To be determined	To be determined
NORTH FORK SHENANDOAH	39.00	0.60	0.00
SOUTH FORK SHENANDOAH	36.00	9.50	0.40
TYE RIVER			
Segment A	8.30	0.00	0.50
Segment B	4.70	0.20	0.50

TABLE D-3. Lead Agency in Conducting Suitability Studies

AGENCY	RIVER SEGMENT
Virginia Department of Conservation and Recreation	Bullpasture River - Segment A Cedar Creek Cowpasture River - Segments A and B Jackson River - Segments C and D Passage Creek - Segment B South Fork Shenandoah North Fork Shenandoah Tye River - Segment B
USDA Forest Service	Jackson River - Segment B North River - Segment B St. Mary's River
USDA Forest Service/Virginia Department of Conservation and Recreation joint study	Back Creek - Segments A and B Passage Creek - Segment C

III. THE PROCESS: HOW RIVERS ARE EVALUATED FOR WILD AND SCENIC DESIGNATION

The National Wild and Scenic River designation process is a three-step process. The first step is the eligibility study. If a river is determined to be eligible, step two determines the potential classification of the river. The three potential classifications are wild, scenic, or recreational. Upon completion of steps one and two, step three assesses the suitability of the river for inclusion in the national system. The criteria associated with each step are discussed on the following pages.

Eligibility Criteria

The Wild and Scenic Rivers Act sets no specific requirements concerning the length of a river segment being considered, but states that a river segment is of sufficient length if, when managed as a wild, scenic, or recreational river area, the "outstandingly remarkable" values are protected.

The determination of whether a river or river segment contains outstandingly remarkable values is, for the most part, a judgement based on the qualities of a river relative to qualities of other rivers in the Forest and on adjoining private and state lands.

Rivers eligible for wild and scenic designation must be free-flowing and possess, with their adjoining land, one or more outstandingly remarkable values. The value categories are Scenic, Recreational, Geologic, Fish and Wildlife, Historic, Cultural.

Within each value category, rivers are rated as either:

- CLASS A - DISTINCTIVE with outstanding qualities when compared to other rivers;
- CLASS B - COMMON with qualities common to most rivers;
- CLASS C - MINIMAL with few or no outstanding qualities.

Scenic Values that are rated:

Class A-Distinctive indicate complex landforms with unusual or outstanding topographic features. Rock features, when present, stand out on the landform and are unusual or outstanding in size, color, or location. Forest cover is continuous or if broken, has a high degree of vegetative patterns and an unusual or outstanding diversity in plant species. Large or old-growth timber may be present. The stream volume ranges from medium to high with a variety of flow characteristics.

Class B-Common indicate some variety in the terrain, but landform features typical of the area. Rock features, when present, are obvious, but do not stand out and have no unusual characteristics. Forest cover is continuous with some variety in vegetative patterns and a common diversity in plant species. The stream volume ranges from medium to low with some variety in flow characteristics.

Class C-Minimal indicate terrain with little variety in slope, dissection, or features. Rock features are generally lacking. Forest cover is continuous with little diversity in the number or pattern of plant species. The stream typically has little or no variety in flow characteristics.

Recreational Values that are rated:

Class A-Distinctive indicate rivers and surrounding lands that provide both water-based and land-based activities and recreation experiences unique to a stream or to a limited number of streams, or which can occur only because of the character of the stream. The river might contain a high quality sport fishery.

Class B-Common indicate rivers and surrounding lands that provide water-oriented activities typical of most streams in the area. Activities include fishing, swimming, boating (motorized and non-motorized), and waterfowl hunting.

Class C-Minimal indicate stream size, flow or other characteristics that limit opportunities for water-based and land-based recreation.

Geological Values that are rated:

Class A-Distinctive indicate river corridors that clearly display significant or unusual geologic features. Also included are rivers that clearly expose geologic formations which are visible in few other sites. The amount of exposed rock is significant in that it provides excellent opportunities for geologic study.

Class B-Common indicate geomorphic features and formations that are typical of those commonly found in the area. There is some opportunities for geologic study.

Class C-Minimal indicate rivers with few or no exposed rock formations and no significant geologic features.

Fish and Wildlife Values that are rated:

Class A-Distinctive indicate resident fish and wildlife populations that occur only because of the character of the stream. This category includes streams identified as habitat for federally-listed threatened and endangered species.

Class B-Common indicate resident fish and wildlife populations that are common to the area.

Class C-Minimal indicate stream characteristics that limit the number and type of fish and wildlife species present. Included here are streams stocked by the states on a put-and-take basis.

Historical and Cultural Values that are rated:

Class A-Distinctive indicate river corridors that contain known sites of local, state, or national significance and meet criteria for the National Register of Historic Places.

Class B-Common indicate sites that are similar to sites in other locations and that contain limited scientific information. Some sites may have been disturbed prior to scientific investigation. Also included are known sites that have not been evaluated.

Class C-Minimal indicate sites that are not of local, state, or national significance and do not meet criteria for the National Register of Historic Places.

Classification Criteria

The Act (Section 2(b)) states that "if included (in the National Wild and Scenic Rivers System, each river) shall be classified, designated, and administered" as either a Wild, Scenic or Recreational river area. The classification selected is based on the conditions of the river and the adjacent land at the time of the evaluation. A river may be divided into segments by these classifications, based on current conditions.

The criteria to be met under each classification are: Water Resources Development, Shoreline Development, Accessibility, and Water Quality. These criteria are from the revised guidelines for Wild and Scenic Rivers developed jointly by the departments of Interior and Agriculture (Federal Register, Vol. 47, No. 173, September 7, 1982).

Classification as a WILD River requires:

Water Resources Development -- a river that is free of impoundments.

Shoreline Development -- a shoreline that is essentially primitive with little or no evidence of human activity. However, the presence of a few inconspicuous structures is acceptable. There is to be little or no evidence of past timber harvests and no ongoing timber harvests.

Accessibility -- a river area that is generally inaccessible except by trail. There are to be no roads, railroads, or other provisions for vehicular travel. However, a few existing roads leading to the boundary of the river corridor are acceptable.

Water Quality -- a river that meets or exceeds federally-approved state standards for aesthetics, propagation of fish and wildlife normally adapted to the river, and primary contact recreation.

Classification as a SCENIC River requires:

Water Resources Development -- a river that is free of impoundments.

Shoreline Development -- a shoreline that is largely primitive and undeveloped with no substantial evidence of human activity. However, the presence of small communities, dispersed dwellings or farm structures is acceptable. Evidence of past or ongoing timber harvests is acceptable if the Forest appears natural from the riverbank.

Accessibility -- a river area that may be accessible in places by roads. Roads may occasionally reach or bridge the river. The existence of short stretches of conspicuous or longer stretches of inconspicuous roads or railroads is acceptable.

Water Quality -- no criteria for water quality is prescribed in the Act. Poor water quality does not preclude classification provided a water quality improvement plan exists or is being developed.

Classification as a RECREATIONAL River requires:

Water Resources Development -- a river that may have some existing impoundments or diversions. The existence of low dams, diversions, or other modifications is acceptable if the waterway remains generally natural and riverine in appearance.

Shoreline Development -- a shoreline that may have some development with substantial evidence of human activity. The presence of extensive residential developments and a few commercial structures is acceptable. Lands may have been developed for a full range of agricultural or forestry uses and may show evidence of past or ongoing timber harvests.

Accessibility -- a river area readily accessible by roads or railroads. Parallel roads or railroads on one or both banks and bridge crossings are acceptable.

Water Quality -- no criteria for water quality is prescribed in the Act. Poor water quality does not preclude classification provided a water quality improvement plan exists or is being developed.

Suitability Criteria

Determinations of suitability for inclusion in the National Wild and Scenic Rivers System are made by state agencies, the Forest Service, and other federal agencies. Criteria that determine suitability include the following:

- the current status of land ownership and use in the area;
- the reasonably foreseeable uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National Wild and Scenic Rivers System;
- the estimated cost of acquisition of land or of an interest in the land if the river area cannot be administered as a wild and scenic river without acquisition or easement as a means of control;
- the public, state, and local government interest in and potential involvement in management and administration;
- the amount and status of outstanding minerals;
- other issues and concerns that surface during scoping for public input.

Protection under the Forest Plan

The segments of rivers within Forest Service boundaries that are determined eligible for designation are managed in a manner that protects the values that made them eligible. The land adjacent to the river segments is afforded the same protection. The protection lasts until a final suitability determination is made by the responsible agency. Direction for management is in the standards for the Wild and Scenic River Management Prescriptions.