CHAPTER 3. ELIGIBILITY AND CLASSIFICATION

This chapter presents findings regarding the New River study area's "eligibility" for designation as a national wild and scenic river. The chapter also presents findings about whether the river would be most appropriately classified as a "wild," "scenic," or "recreational" river under the criteria of the Wild and Scenic Rivers Act.

Background

One of the first steps in the wild and scenic river study process is to determine if the river in question is "eligible" for inclusion in the National Wild and Scenic Rivers System. For a river to be found eligible, it must meet two criteria. First, it must be "free-flowing." That is, it must be free of impoundments, diversions, or other significant modifications to the waterway. Second, the river or river corridor must possess one or more "outstandingly remarkable values."

If eligible, the river is then given a proposed classification as either a "wild," "scenic," or "recreational" river, depending on the relative degree of access, shoreline and instream modification, and water quality. A "wild" river is in natural or near-natural condition. A "scenic" river may have some access or modification but, on whole, retains its natural character. A "recreation" river can exhibit a range of in-river and shoreland development.

Table 3.1. Management implications of eligibility and classification.

Eligibility/Classification Factor:	Management Implication:
Free-flowing condition	Flows must remain sufficient to sustain or complement identified outstandingly remarkable values.
	Flow patterns, including high and low flows and flow variability, must retain at least the same degree of naturalness as existed at the time of designation.
	Proposed FERC-licensed projects and other federally assisted water resources projects that would adversely affect the free-flowing condition are prohibited (see Chapter 1, "Implications," page 6).
Outstandingly remarkable values	The specific natural, cultural, and/or recreational values identified as outstandingly remarkable values must be protected over the long-term and enhanced wherever possible.
	Proposed FERC-licensed projects and other federally assisted water resources projects that would adversely affect the identified outstandingly remarkable values are prohibited (see Chapter 1, "Implications, page 6).
Classification	The overall water and land use characteristics that made the river appropriate for a given classification (wild, scenic, or recreational) must be retained.

While eligibility and classification are critical factors in determining whether wild and scenic river designation is in fact warranted, they also have important implications concerning management if a river is designated. Drawing from the requirements of the Wild and Scenic Rivers Act, Table 3.1 summarizes the implications of a river's eligibility and classification for future management if the river is designated.

Eligibility

Criteria

The Wild and Scenic Rivers Act and associated federal guidelines define the criteria to be used in determining whether a river is eligible for inclusion in the National Wild and Scenic Rivers System. These include free-flowing condition and outstandingly remarkable resource values, as discussed below.

Free-flowing condition. The river segment must be free-flowing. Free-flowing is defined in federal guidelines as "flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion...."

"Modification of the waterway" is interpreted to include significant alterations to the river's channel or flow. Examples of channel modifications include damming, diking, re-routing, and stabilization of banks. Examples of flow modifications include significant decreases in natural flow due to water withdrawals or diversions, and significant variations in flow patterns due to the operation of upstream dams. In accordance with federal guidelines, the fact that a river segment flows between impoundments does not necessarily preclude its designation.

The determination of whether a river is free-flowing is a professional judgment on the part of the study team, based on a review of the best available flow and corridor condition data and interpretation of the Wild and Scenic Rivers Act criteria.

Outstandingly Remarkable Values. The river segment must possess one or more outstandingly remarkable values, often referred to as "ORVs." An ORV is defined as a natural, cultural, or recreation resource feature that is unique or especially significant when considered in a regional or national context. The determination of whether a river area possesses an ORV is a professional judgment on the part of the study team. To be credible, the basis for the judgment must be documented. The evaluation of ORVs for the New River study area in this chapter builds on the information presented in Chapter 2, where the river area's natural, cultural, and recreational resources are described in greater detail.

Evaluation of Free-flowing Condition

The New River study segment is free-flowing and riverine in appearance under most conditions. No dams, diversions, or other significant modifications of the waterway exist within the segment. While the New River is impounded both downstream and upstream of the study area, the effects of these impoundments on flows within the study segment are not significant enough on a continual basis to render the river ineligible for designation.

As described in Chapter 2, "Streamflow," Claytor Dam, which creates the upstream impoundment, stores and releases water to generate electricity. The federal license that governs the operation of Claytor Dam sets limits on how much water may be withheld and how much downstream releases can fluctuate. During the six-month recreation season, the dam is operated as a run-of-river project and therefore has essentially no effect on the free-flowing character of the river in the study area. If anything, it may augment flows during very low flow periods. For the other six months, releases from the dam do fluctuate frequently, resulting in fluctuations in river flows downstream. However, the dam is far enough upstream that by the time these fluctuations reach the study area, they generally have moderated to the point where they are not overly disruptive to river resources and uses. Also, low flow releases from Claytor Dam generally mirror natural low flow conditions, and therefore do not significantly detract from flow-dependent resources in the study area such as fish and recreation.

Under normal conditions the Bluestone Dam downstream does not cause water to back-up into the study area. As described in Chapter 2, "Streamflow," on page 36, parts of the study segment are subject to occasional inundation for short durations due to operation of the Bluestone Dam for downstream flood control. However, these occasional inundations do not normally persist beyond a few days or under rare conditions a few weeks. Furthermore, these inundations typically back into only the lower portions of the study segment, although flooding of parts of the upper portions of the study segment does occur during significant storm events and inundation of the entire segment is possible in an extreme event. Regardless, the river quickly returns to its normal, fully free-flowing condition after these flood events. Also, inflow into the study area historically has varied significantly – month-to-month, season-to-season, and year-to-year. As a result, the river shorelands are resilient, and the inundations caused by operation of the Bluestone Dam do not cause lasting effects. In light of these considerations, the occasional brief inundation of parts of the river within the study area is not sufficient to disqualify the river from wild and scenic river eligibility.

In summary, the river within the study area has been found to meet the Wild and Scenic River Act's requirements for free-flowing condition. This finding is based on current conditions in the study segment. These conditions would set the baseline for future management if the river were designated into the National Wild and Scenic Rivers System. In other words, modifications in upstream flow management or downstream flood control management to enhance the current free-flowing condition within the study segment would not be required as a result of designation, but modifications that required federal assistance and would degrade the current condition would be prohibited.

Evaluation of Outstandingly Remarkable Values

Each of the New River study area's natural, cultural, and recreational resources was evaluated to determine if any were unique or especially significant when considered in a regional or national context. The following resource characteristics of the study area have been found to meet the significance thresholds for outstandingly remarkable values.

Geology/Hydrology. The New River derives its geological and hydrological significance from the fact that it is the oldest river in the western hemisphere and, due to its age, is the only river that crosses the Appalachian Range from east to west. These geological and hydrological characteristics have had a significant influence on the river's natural, recreational, and cultural values, but the geologic and hydrologic history itself also constitutes an ORV.

Scenery. With the limited exception of the Route 460 Bridge and its immediate surroundings, the entire study area is in a largely natural condition, and scenic quality is high. There are a variety of near, mid, and long-range views and significant visual complexity due to vegetative cover and diverse landforms. Floodways, islands, meanders, and tributary streams all add significantly to the visual appeal. The only noteworthy visual intrusions below the Route 460 Bridge are two electric transmission lines (one that crosses high above the river at River Mile 27, and another that parallels the river on the ridgeline to the right for a short stretch between River Miles 26 and 27). While several rivers and streams in this region have notable scenery, this segment is distinguished from the others by the combination of its large size (both volume of water and corridor width) and the degree of its natural condition. This natural condition is especially important in the context of other New River segments in Virginia and West Virginia. While many of these are very scenic, none is as undeveloped.

Fish and Other Aquatic Species. This segment is considered to be one of the largest and highest quality warmwater stream fisheries in the State of West Virginia. Aquatic biodiversity is also significant as the river provides high-quality habitat for a wide range of fish and mussel species. Three species of fish and five species of mussels that are listed as S-1, S-2, or S-3 species by the West Virginia Natural Heritage Program are known to exist in the study segment, and an additional four species of fish in these categories are suspected inhabitants.

Wildlife. The New River corridor provides a unique "natural highway" between the lowlands of the eastern coastal plains and the interior of the continental United States. As such, it is one of the most significant corridors for species flow (both plant and animal) between major ecological provinces. The area provides habitat for a wide variety of both game and non-game species and contains an especially high concentration of neo-tropical migratory birds. Also, four terrestrial species listed as S-2 or S-3 species by the West Virginia Natural Heritage Program are known to exist in the study area, and at least eight additional species in these categories are suspected inhabitants. And perhaps most noteworthy is the fact that the area supports one of the highest concentrations of eastern wild turkey in the eastern United States.

Cultural Resources. As was also true historically for plants and animals, the Upper New River provided a relatively easy route for pre-historic and historic peoples to penetrate the Appalachian

¹ The Potomac River also crosses the Appalachian Mountains, but it flows west to east toward the Atlantic Ocean.

Mountains. The river also bisects one of the region's most significant north-south Native American trails. These transportation advantages, along with large floodplains suitable for agriculture and habitation, combined to make the study area the site of a significant concentration of use areas and village sites that persisted throughout human prehistory in the region. Fifty-eight prehistoric sites have been recorded within the Bluestone Lake Project Area. most but not all in the study area. These fifty-eight sites include five rock shelters, seven Late Prehistoric Village sites, four Woodland hamlets, and forty-two camp sites. This is a particularly high number and variety of sites for an area of this size in this region of the country. The fact that this area contains evidence of use from the full range of prehistoric periods from 10,500 B.C. to 1750 A.D. makes the area especially significant. While these sites have not been subjected to a formal evaluation of eligibility for listing on the National Register of Historic Places, the prevailing opinion of professional archeologists familiar with the area is that at least three village sites in the study area likely would qualify for listing on the National Register. If any one of these sites had been found to be eligible for the National Register of Historic Places, this would be sufficient justification in and of itself for an outstandingly remarkable value finding. While that automatic qualification is not available because National Register listing has not yet been pursued, the number of prehistoric sites in the study area, their variety, and the time period they span warrant an ORV finding nonetheless.

The area also is significant for historic sites dating from the mid 18th century to the late 19th century. There is documented evidence of the presence of four colonial and Revolutionary War period forts (stockade buildings) that, if definitively located, likely would qualify for National Historic Register listing. The batteau chutes through the study area's rapids are important local historic features and may, in fact, be nationally significant. At least they warrant investigation to determine National Historic Register status. The archeological remains of an architecturally and culturally significant mansion on Crump's Bottom and several other human habitation sites were removed before the Bluestone Dam went into operation. It is unknown whether any of these sites would meet the criteria for the National Historic Register. If the forts, batteau chutes, Crump's Mansion site, or other historic remnants were found to meet the criteria for National Register of Historic Places status, this would further reinforce the significance of the study area's cultural resources.

While the archeological evidence of both prehistoric and historic times is significant, based on the information that is currently available it is the high concentration of prehistoric sites dating over the entire time of North American human habitation that constitutes an outstandingly remarkable cultural value.

Recreation. The Bluestone WMA receives the highest hunting use of any WMA in southeastern West Virginia and is among the most heavily used in the state. Hunting is primarily for eastern wild turkey and white-tailed deer; though a wide range of game species are hunted, including bear, waterfowl, and upland game birds. Hunter success for wild turkey is unrivaled. The area also receives high fishing use. The area is particularly noteworthy for the opportunity to fish from a boat on a large river in an undeveloped setting. Fishing is primarily for smallmouth bass and catfish. The significance of these hunting and fishing opportunities provides the basis for an outstandingly remarkable rating. In addition, other recreation opportunities in the study area are also significant, including camping, boating, and other outdoor experiences that benefit from a

largely remote and undeveloped setting. Most boating is currently associated with fishing. This stretch of the New River also has high potential for large river canoeing and canoe camping. The study area is one of only a few areas in the southwest Virginia/southeast West Virginia region where it is possible to take a long canoe trip on a large river in a natural setting. This portion of the New River also could play a key role in the New River Blueway (see Chapter 2, "Regional Initiatives" section on page 30), which would provide opportunities for multi-day canoe trips.

Eligibility Findings

The New River study segment meets specified criteria for the Wild and Scenic Rivers Act requirement of free-flowing condition. In addition, the study area exceeds WSRA requirements for outstandingly remarkable values by possessing six categories of resources that meet the ORV threshold. In light of its free-flowing condition and array of outstanding resource values, the study area is eligible for inclusion in the National Wild and Scenic Rivers System.

Classification

Criteria

Section 2(b) of the Wild and Scenic Rivers Act and associated federal guidelines identify the criteria to be used to classify eligible river segments as wild, scenic, or recreational. The classification is important as it provides a basis for future management. Essentially, each river designated into the National Wild and Scenic Rivers System must be managed in a manner that ensures that the classification will be maintained over time.

Classification is based on the degree to which a river segment meets the following criteria:

Wild Rivers. The criteria for wild river areas include:

- 1. The river segment must be free of impoundments.
- 2. It must be generally inaccessible, except by trail.
- 3. The watersheds or shorelines should be essentially primitive.
- 4. Waters must be free of pollution.

Scenic Rivers. The criteria for scenic river areas include:

- 1. The river segment must be free of impoundments.
- 2. The shorelines should be largely undeveloped.
- 3. The river may be accessible in places by road.

Recreational Rivers. The criteria for recreational river areas include:

- 1. The river segment may be readily accessible by road or railroad.
- 2. The river may have considerable development along the shoreline.
- 3. Some impoundment or diversion may have occurred in the past.

Appendix 3.A provides additional details on each of the above criteria.

Classification Findings

The New River study area is most appropriately classified as a "scenic" river. The river is freeflowing throughout the segment with no significant alterations to the river channel that change the pattern of flow. Water quality meets acceptable standards, but is not pristine (as described in Chapter 2, "Water Quality" section on page 45). The shore lands are largely in a natural condition. Below the area immediately adjacent to the Route 460 Bridge, the only permanent developments that are visible from the river are two power lines – one that crosses high over the river, and another parallels the river on a ridgeline for a short distance. There are no buildings visible from the river. Some lands along the bottomlands are used for agriculture, but these are not intrusive. There are several unmanaged informal use sites in Virginia that are visible from the river, but none that are beyond restoration. There are three primitive campgrounds along the river in West Virginia, which are largely buffered by vegetation. Unpaved roads parallel the river in some places, and there are established vehicular access points to the river at the camping areas in West Virginia. These characteristics, along with the segment's acceptable but not pristine water quality, are the key factors indicating that the segment should be classified as "scenic" rather than "wild." The river segment significantly exceeds criteria for classification as a "recreational" river.

Summary and Conclusions

The essential finding of this chapter is that the New River study area is eligible for designation into the National Wild and Scenic Rivers System. The proposed classification is "scenic."

For ease of reference the above findings are summarized below in a series of boxes. Key considerations related to the study area's free-flowing condition are summarized in Box 3.1. Box 3.2 presents a synopsis of the study area's outstandingly remarkable values. Box 3.3 provides a summary of the reasons the river is most appropriate for classification as a "scenic" river.

Box 3.1. Findings regarding the New River study segment's free-flowing condition.

- The study segment is free-flowing and riverine in appearance under most conditions; no dams, diversions, or other significant modifications of the waterway exist within the segment.
- Flows in the segment are essentially unaffected by the operation of the Claytor Dam upstream from mid-April through mid-October, when the dam is operated on a run-of-river regime. During the rest of the year, flows in the segment are influenced by releases from Claytor Dam, but release fluctuations moderate by the time water reaches the study area and flows are sufficient to sustain important flow-dependent resources such as fish and recreation.
- Occasional inundations of parts of the study segment due to operation of Bluestone Dam for downstream flood control do not persist beyond a few days to a few weeks per year, and therefore do not preclude a free-flowing determination.

Box 3.2. Summary of outstandingly remarkable values in the New River study area.

Geology/Hydrology

• The oldest river in the western hemisphere and the only river that crosses the Appalachian Range from east to west.

Scenery

• Diverse landforms and vegetation combine with the area's predominantly natural condition to produce high scenic quality. Floodways, islands, meanders, and tributary streams add to the visual appeal.

Fish and Other Aquatic Species

- One of the largest and highest quality warmwater stream fisheries in the two-state region; provides high-quality habitat for diverse fish species, as well as several rare mussels.
- Provides habitat for a diversity of wildlife including game and non-game species, species that are rare in the two-state region, and the federally threatened bald eagle; contains an especially high concentration of neo-tropical migratory birds; supports one of the highest concentrations of wild turkey in the eastern U.S.

Cultural Resources

Significant concentration of pre-historic use sites extending over all periods of human pre-history; high likelihood that at least three river bottomland village sites are eligible for the National Register of Historic Places.

Recreation

• Regionally significant hunting and fishing; opportunities for camping and other outdoor experiences in a highly scenic and largely undisturbed natural environment; high potential for large-river canoeing and canoe camping, a recreational activity that is limited in the southwest Virginia/southeast West Virginia region.

Box 3.3. Rationale for classification as a "scenic" river.

- The river is free-flowing throughout the segment with no significant alterations to the river channel
- Shorelands are predominantly in a natural condition. The only permanent developments visible from the river below the Route 460 Bridge are two transmission lines (one that crosses high over the river and another that parallels the river on an adjacent ridgeline for short distance). No buildings are visible from the river. Three primitive camping areas in West Virginia and lands used for agriculture are not visually intrusive.
- Access is limited to established vehicular access points at the three camping areas and unpaved roads that parallel the river in some areas.

New River Wild and Scenic River Study — West Virginia and Virginia