

Criteria for Eligibility and Classification of South Carolina State Scenic Rivers

South Carolina Department of Natural Resources
Scenic Rivers Program
May 16, 2022

Introduction

The South Carolina Scenic Rivers Act (SRA), Title 49, Chapter 29 of the S.C. Code of Laws, provides for the protection of selected rivers and river segments of the state that possess unique or outstanding scenic, recreational, geologic, botanical, fish, wildlife, historic, or cultural values, with intent to preserve the state's natural heritage for the benefit and enjoyment of present and future generations.

The SRA directs the South Carolina Department of Natural Resources (SCDNR) to inventory and study all rivers of the state and identify the rivers or river segments which possess the unique or outstanding values. Rivers or river segments identified in the inventory as possessing unique or outstanding values are eligible for the State Scenic Rivers Program and may be designated as an eligible state scenic river by the SCDNR (§49-29-50).

The purpose of this document is to comply with §49-29-70 of the SRA, which directs the SCDNR to establish and publish minimum criteria for assessing a river's eligibility and classification under the State Scenic Rivers Program. The information presented here is an update and revision of criteria previously outlined by the S.C. Water Resources Commission (1991) and SCDNR (1998).

Eligibility Criteria for South Carolina State Scenic Rivers

As minimum criteria for assessing a river's eligibility for Scenic River designation, the river or river segment must be a flowing waterbody in a natural stream channel and possess one or more of the following unique or outstanding values named in §49-29-70 of the SRA:

- scenic values
- recreational values
- geologic values
- botanical values
- fish values
- wildlife values
- historic values
- cultural values.

Any of the above-named values considered in the assessment of a river's eligibility for Scenic River designation, must meet the following conditions:

- The identified value must be located within the river or on lands adjacent to the river, and
- The identified value must contribute substantially to the ecosystem functions of the river and its associated natural landscape, and/or the identified value must owe its location or existence to the presence of the river.

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Various information sources, methods, and/or standards are used by the SCDNR to assess whether certain resources are unique or outstanding. The determination that a river area contains unique or outstanding resource values is a professional judgment made by consensus among SCDNR staff utilizing objective analyses of relevant data and information.

Assessment of Scenic River Eligibility

The following sections describe the types of information and related factors considered by the SCDNR to assess conditions of a river and identify and document the presence of unique or outstanding values that determine a river's eligibility for Scenic River designation.

Streamflow

Assessing streamflow involves the consideration of several factors. First, the presence or absence of flow alterations caused by human activities, such as dams, channel modifications, and/or water diversions, is analyzed to consider whether the river is "free flowing," a term defined in §49-29-20 of the SRA as "existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway." A determination of the free-flowing character of a river is needed because the SRA (§49-29-40) states that three "types" (or classes) of rivers are eligible for the State Scenic Rivers Program and specifies the "natural rivers" class as "free flowing." If the river is not free flowing, it could be classified as a "scenic river" or "recreational river" rather than natural.

Additionally, if the river is not free-flowing and flow alterations by human activities are present, the related effects will be evaluated with respect to the presence of the following conditions:

- Minimum instream flows needed to support ecological functions and human uses of the river to include water quality standards, fish and wildlife habitats, recreational uses, and navigation of the river.
- Seasonal variations in streamflow needed to mimic a natural stream hydrograph and support ecological functions of the river and its floodplain related to periods of high flow and floodplain inundation.
- Daily and weekly stability of flow releases and relative frequency and magnitude of flow fluctuations that may have negative effects on ecological functions and recreational uses of the river.

Land Use and Ownership

Land use (including land cover) and ownership patterns affect the character and quality of rivers and present different management alternatives for the Scenic Rivers Program. Land use and ownership patterns can be important factors affecting scenic quality, wildlife habitat, water quality, and recreational opportunities. Additionally, land use conditions in the river corridor are a determining factor for how an eligible river or river segment is classified within the State Scenic Rivers Program as natural, scenic, or recreational (§49-29-40, SRA). Several approaches to assessing land use adjacent to the river may be utilized, including the following:

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- Land use and land cover types within the river corridor are measured and assessed to determine the percentages and distributions of natural land-cover types compared to intensive land uses such as urban/suburban development or cultivated cropland. The river corridor is defined by the river floodplain and adjacent upland fringe areas. (The river corridor can also be defined by a larger area such as the area within a standard distance measure on either side of the river channel or within a boundary defined by adjacent parallel roads.)
- Protected lands within the river corridor (both public and private protected lands) are identified and assessed for values related to scenic qualities, wildlife habitat, and recreational access opportunities. Additionally, ownership patterns are assessed to consider the size and distribution of land parcels along the river. The presence of larger parcels in forestry and/or agricultural land uses present potential opportunities to expand land protection in cooperation with interested property owners.
- The presence of forested riparian buffers is assessed by examining the vegetation conditions found within a specified streamside zone of at least 100-feet in width on both sides of the river. The miles of riverbank supporting a forested riparian buffer are measured and compared to the miles of riverbank where the riparian buffer is absent. Riparian buffers are lands bordering the river course that support a cover of naturally occurring vegetation consisting of trees, shrubs, grasses, and forbs. The recommended width of a riparian buffer depends on the management goal, but larger buffers (100 to 300 feet or greater) are always better for protecting water quality, providing wildlife habitat, and improving aesthetics (or scenic value) of a river corridor.
- River miles visually affected by human development are measured and assessed in comparison to river miles that remain natural. Development features, such as road and power-line crossings, buildings, paved areas, docks and piers, billboards, transmission towers, storage areas, and land clearings that can be viewed from the river are identified. The length of river channel affected by each, and all the development features is measured for comparison to the length that remains visually natural. This procedure provides a measure to assess the scenic qualities of the river.

Scenic Values

Assessing the scenic resources of a river involves consideration of factors that may create distinctive or exceptional visual features in the river landscape. The factors and features affecting scenic values include, but are not limited to, the following:

- Landforms – The visual character of the landscape within the river corridor; the presence of notable feature such as steep, irregular, and unusual formations that are visually striking.
- Vegetative Diversity – The variety of vegetation types and forms that present visual textures, seasonal variations, and patterns of vegetation across the landscape.
- Water – The aesthetic characteristics of the water, including its appearance (clear and clean), flow turbulence (visual and sound aesthetics), and water-dominated views across the landscape.

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- Color – The variety of vivid colors or pleasing contrasts in the soil, rocks, vegetation, and water in the landscape.
- Channel Character and Scale – The visual, aesthetic experience when navigating the river, particularly the near and distant views related to the physical size and character of the channel, its width and sinuosity (channel pattern).
- Special Features – Rare or highly memorable characteristics that distinguish the river from others; such features may include an unusual landform, waterfall, or consistent chance of exceptional viewing of wildlife. Special features may also include cultural features with recognized aesthetic qualities (e.g., a bridge of architectural significance, historic structure or garden/landscape).
- Human Effects – As described above (under Land Use), the favored river-landscape conditions are those with little or no visible human effects or where the human effects result in a visual enhancement, and not a negative intrusion, to the natural setting.

Recreational Values

The recreational values are assessed by considering the importance of public recreational opportunities along the river corridor and whether those opportunities may be popular enough to attract visitors from statewide or beyond or are unique within the region. Evaluations consider the significance of the following types of river-related recreation opportunities: sightseeing, wildlife observation, boating, canoeing/kayaking, fishing, hunting, camping, hiking/walking, recreation facilities, and recreation events.

Geologic Values

The geologic values of interest on scenic rivers will include features, processes, or phenomena that may be considered unique or outstanding. These features represent a rare or unusual combination of geologic features, and they may be associated with waterfalls, bluffs, unusual rock formations and outcrops, fossil-bearing rock features, boulder fields, or river features/formations such as sandbars, oxbow lakes, and braided channels. Evaluations will consider rare, unusual, or exemplary geologic features, as well as notable, distinctive physical features of the river channel, floodplain and/or bluffs.

Botanical Values

Botanical values of a river are assessed by considering the presence and extent of important plant species, communities, and habitats within the river corridor. The factors considered will include the presence and extent of the following:

- Rare plant species, including those listed as Endangered or Threatened under the Federal Endangered Species Act or considered At-Risk by the U.S. Fish and Wildlife Service, species ranked as Critically Imperiled (S1), Imperiled (S2), or Rare (S3) by the SCDNR, and species identified in the State Wildlife Action Plan.
- Important habitats that can be managed to provide critical habitat for rare plant species.

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- Notable or exceptional diversity of plant species.
- High-quality natural ecological communities of significance.

Fish and Wildlife Values

Fish and wildlife values are assessed by considering the presence and extent of important fish and wildlife species and their associated habitats within the river corridor. The factors considered include the presence and extent of the following:

- Rare animal species, including those listed as Endangered or Threatened under the Federal Endangered Species Act or considered At-Risk by the U.S. Fish and Wildlife Service, species ranked as Critically Imperiled (S1), Imperiled (S2), or Rare (S3) by the SCDNR, and species identified in the State Wildlife Action Plan.
- Important habitats that can be managed to restore and improve critical habitat for rare species.
- Areas known to provide important habitats for migratory species.
- Notable or exceptional diversity of fish or wildlife species.
- High quality habitat for fish or wildlife species of conservation concern or economic importance.

Historic and Cultural Values

The historic and cultural values of the river are assessed by considering the importance of historical and prehistorical events, uses, structures, and artifacts related to the river corridor. Evaluations consider the presence of the following:

- Archaeological and historic sites and structures of significant cultural value, such as those listed on the National Register of Historic Places or recognized by the State Historic Preservation Office and/or State Heritage Trust Program.
- Historical events, uses, and features of significance.

Water Quality

The SRA, §49-29-70 says, “The level of pollution of a river's waters must be considered in determining eligibility for qualification as a scenic river. A river with relatively polluted waters may qualify as eligible as a scenic river if other values are considered outstanding.” Therefore, water quality conditions in rivers under consideration for scenic river eligibility should meet or exceed the applicable state water quality standards. If water quality is impaired, the appropriate remediation actions should be in progress for restoring water quality conditions to meet state standards.

Classification of State Scenic Rivers

When a river is determined eligible for State Scenic River designation by SCDNR, the agency will also classify the river as natural, scenic, or recreational in accordance with §4-29-40 of the SRA. Land use and streamflow conditions of the river are evaluated to assign the class, which is based largely on the presence and extent of development along the river. One or more classes may apply to an eligible scenic river; that is, one class may apply to the whole river, or the river could be divided along its length with different river segments having a different class. The three classes of rivers and associated descriptions are as follows:

- Natural Rivers – Free flowing rivers (without impoundment, diversion, or other modification significantly altering flows in the waterway), generally inaccessible except by trail or river, with essentially undeveloped shorelines and unpolluted waters.
- Scenic Rivers – Essentially free flowing rivers with largely undeveloped shorelines and limited road access; adjacent lands are used for dispersed human activities, such as agriculture, silviculture, and others, which do not disturb substantially the natural character of the river corridor.

The term “essentially free flowing” will be understood to mean that the natural, free-flowing character of the stream may be modified because of human use or alteration of the streamflow (e.g., upstream dam control) but under the normal (non-drought) condition there is a continuous flow of water in the stream to support ecological functions and human uses of the river which includes the support of water quality standards, fish and wildlife habitats, recreational uses, and navigation of the river.

- Recreational Rivers – Rivers accessible by road with development (residential, commercial, and industrial) along shorelines and adjacent lands; these rivers provide outstanding river-related recreational opportunities.

The SRA in §49-29-40 states “recreational rivers” include “rivers with some impoundments.” Therefore, when assessing a river for eligibility, the presence of impoundments may be accepted on eligible recreational rivers and river segments provided the following related conditions are met:

- The impoundment size is small, no greater than 25 acres.
- No more than one impoundment is present per 10 miles of eligible river channel.
- Multiple impoundments are separated by at least 5 miles of natural river channel with flowing, un-impounded water.
- The impoundment is managed as a run-of-river operation, providing “essentially free flowing” conditions in the downstream river reaches.

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