

# Wilson Creek National Wild and Scenic River Comprehensive River Management Plan

Nantahala-Pisgah Land and Resource Management Plan Amendment 18



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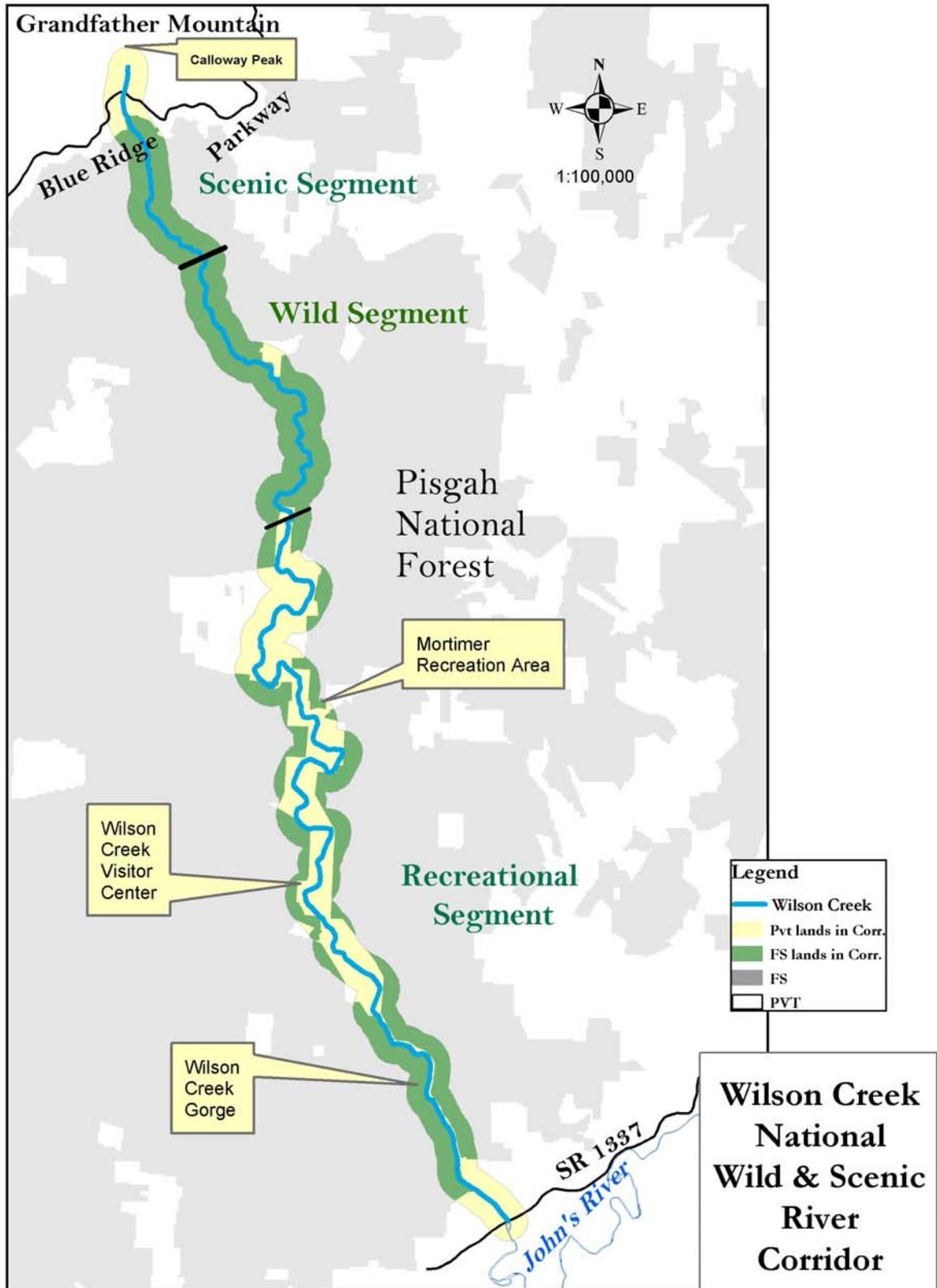
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## **I. Introduction**

The Wild and Scenic Rivers Act (WSRA) was passed in 1968 to “select rivers of the Nation which, with their immediate environments, possess Outstandingly Remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar value, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.” The intent of this law was to preserve the character of a river and keep it in a free-flowing condition, not to halt development or use of a river.

On August 18, 2000, Public Law 106-261 added the 23.3-mile Wilson Creek, from its headwaters below Calloway Peak in Avery County to the confluence with Johns River in Caldwell County, NC, to the National Wild and Scenic River System.

### **Purpose of the Comprehensive River Management Plan**

Section 3(d)(1) of the Wild and Scenic Rivers Act states “the federal agency charged with the administration of each component of the National Wild and Scenic Rivers System shall prepare a Comprehensive River Management Plan ... to provide for the protection of river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be prepared, after consultation with State and local governments and the interested public within three full fiscal years after the designation.” Under the Act, designation neither gives nor implies government control of private lands within the river corridor.

This Comprehensive River Management Plan (CRMP) for the Wilson Creek Wild and Scenic River is being developed by the USDA Forest Service and establishes programmatic management direction for the river corridor for the next decade. This includes:

- guiding all development, management and restoration activities on public lands within the river corridor.
- establishing management and development goals and objectives for Wilson Creek.
- defining desired characteristics of specific river segments and setting standards and guidelines for activities within these segments, as well as for the corridor as a whole.
- outlining a monitoring program and related probable actions.

The goals, standards, and guidelines are a statement of the Plan's management direction; however, the projected activities and rates of implementation are estimates and depend on site-specific analysis and the budgeting process.

### **Description Of The Wilson Creek Corridor**

Wilson Creek begins on the upper southeastern slopes of Calloway Peak on Grandfather Mountain in Avery County, North Carolina, and flows in a southerly direction for 23.3 miles where it joins the Johns River in Caldwell County, North Carolina. It is within the Proclamation Boundary of the Pisgah National Forest, except for a 2.1-mile segment between Johns River and State Road 1335 in Caldwell County and a 0.6-mile segment within the boundary of the Blue Ridge Parkway in Avery County.

The Wilson Creek Wild and Scenic River Corridor includes the area extending the length of the creek and approximately ¼ mile in width from each bank of the creek. The area within the corridor totals approximately 7,460 acres of which approximately 5,090 acres (68%) are national forest lands, and the remaining 2,370 acres are either private property or managed by the National Park Service (NPS). This plan only outlines management direction for the National Forest lands within the corridor.

For Blue Ridge Parkway (NPS) lands within the Wilson Creek corridor, direction complementary with the goals of the CRMP will be included in the Blue Ridge Parkway General Management Plan that is now being developed.

The entire Wilson Creek watershed located in both Avery and Caldwell counties drains about 68.75 square miles (approximately 44,000 acres). Major tributaries flowing into Wilson Creek include Gragg Prong, Lost Cove Creek, and Harper Creek. Most of the watershed is national forest lands.

Appendix A contains a more detailed description of the Wilson Creek Corridor.

### **Land Ownership and Land-Use**

There are 23.3 miles of Wilson Creek in the corridor of which 9.9 miles flow through National Forest System (NFS) lands, 0.6 miles flow through National Park Service lands and the remaining 12.8 miles flow through private lands (58 percent of the river miles).

The river segments on private lands can be further broken down as follows:

Johns River to NFS boundary below Wilson Creek gorge----- 2.6 miles  
NFS boundary above gorge to NFS boundary above Edgemont----- 0.9 miles  
Headwaters above NPS boundary-----0.3 miles

There is evidence of human development and activity throughout much of the river corridor. The southern most section of the corridor is a mixture of agricultural and undeveloped forest lands. The upper section is totally undeveloped forest land, the majority of which is in federal ownership. This area, from Calloway Peak to the NC Highway 45, has the least evidence of human modification, except for four road crossings. The middle section is the most developed with diverse ownership patterns.

Developments on National Forest lands include a paralleling road and two crossings, a district work center and a developed recreation area with camping and picnicking. Developments on private lands are concentrated in the area between the gorge and Edgemont and include roads, numerous residences (both permanent and vacation homes), three community stores, and a church. Brown Mountain Beach, a large campground/resort, is on private lands just below the gorge. Power and telephone lines support all of this development. A section of the corridor also contains portions of Lost Cove and Harper Creek Wilderness Study Areas.

### **Navigability and Riparian Rights**

The Forest Service retains authority to regulate the use of Wilson Creek and National Forest lands on the shoreline whether segments are determined navigable or non-navigable. This jurisdiction may be concurrent with other state and federal agencies.

### **Free-Flowing Condition**

The WSRA requires that, to be eligible for inclusion in the National System, a river or river segment must be free-flowing and, with its immediate environment, must possess one or more “Outstandingly Remarkable” scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values (i.e., it must have at least one resource important to the nation).

Free-flowing, as defined in Section 16(b) of the WSRA, is applied to “any river or section of a river,” and means:

“...existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, or other minor structures...shall not automatically bar its consideration for inclusion...”

The entire length of Wilson Creek, which contains no dams, diversion structures, significant channeling or other modifications, or excessive rip-rapping, is free-flowing.

### **Outstandingly Remarkable Values**

The second criteria that a river must meet to be eligible for inclusion in the National System, in addition to being free-flowing, is that it must possess one or more Outstandingly Remarkable Values important to the region or nation.

Specific criteria were developed for the three categories for each of the values listed in the Wild and Scenic Rivers Act, Sections 1(b) and 2(b) to evaluate Wilson Creek prior to its designation (See Appendix B for a description of the criteria).

### **Description of Outstandingly Remarkable Values for Wilson Creek**

The diversity and distribution of Outstandingly Remarkable Values throughout the Wilson Creek corridor and its high water quality create an overall high quality river

environment of local and regional significance. In order for a value to be considered “Outstandingly Remarkable,” it must meet the criteria for the Class A—Distinctive category (See Appendix B). The following values are those considered Outstandingly Remarkable for Wilson Creek:

**Scenic:** The stream and surrounding corridor has common characteristics except for the section through Wilson Creek Gorge and the headwaters on private lands. The river through the gorge has a moderate to steep gradient and rapid/pool flow characteristics with many cascades and small waterfalls. The gorge is steep and narrow with extensive exposed bedrock. The streambed is rocky with numerous large boulders. The Grandfather Mountain section of the river corridor is steep with huge rock outcrops.

**Recreational:** Current recreational use in the area of the stream includes fishing, hiking, primitive camping, hunting and viewing scenery. The 15.4-mile section from below Mortimer Campground to Johns River is a canoe/kayak run with a range of Class I-V rapids. The most difficult section with Class III-V rapids occurs in the gorge. Water levels are generally sufficient for paddling after rain events. Upper reaches of Wilson Creek are also paddled after rain events.

**Geologic:** Wilson Creek exposes formations of the Grandfather Mountain Window, a significant geologic structural feature. Rocks exposed in this “window” are among the oldest exposed in the Appalachian Mountains. Rock exposure is extensive in the headwaters and in the lower river segment through Wilson Creek Gorge.

**Fish and Wildlife:** Wilson Creek is classified as B-Tr-ORW by the North Carolina Department of Environment and Natural Resources, Division of Water Quality (NCDWQ) from its source downstream to the confluence with the Johns River. In this classification system, B refers to the system’s suitability for primary and secondary recreation, aquatic life propagation and survival, fishing, wildlife, and agriculture. The Tr refers to the systems suitability for natural trout propagation and maintenance of stocked trout populations. Wilson Creek has been classified as Outstanding Resource Waters (ORW) by the NCDWQ, which indicates that the system is unique and special waters of exceptional state or national recreational or ecological significance, requiring special protection to maintain existing uses.

**Botanical:** Twenty-six natural communities are present along Wilson Creek due to the great elevation span of the river corridor and its occurrence in both the Blue Ridge and Piedmont physiographic regions. The streamside communities in the upper portions of the river are in excellent condition. The section of corridor between Calloway Peak and U.S. Highway 221 is part of North Carolina’s registered Grandfather Mountain Natural Heritage Area. The varied-mineral composition of the rock outcrops and the high elevation climate of this segment has created a complex vegetation mosaic that includes 20 rare plant species.

**Historic and Cultural:** Many of the historical values of the corridor are centered around the Mortimer-Edgemont area. Mortimer had a population of approximately 800 at the turn of the century and was the center of county activity with motels, summer homes and industry. The Mortimer Recreation Area was the site of the Camp Grandfather Mountain Civilian Conservation Corps (CCC) Camp from 1933 to 1942. The historic settlement and logging of the area, generally concentrated above the

gorge, was closely tied to the river. The Carolina and Northwestern Railroad spur line provided access to these communities. Much of the development was destroyed by flooding in the 1940s and was not rebuilt. Sections of the river corridor have a high probability for archeological sites. Upper Wilson Creek (above the gorge) was part of a major prehistoric thoroughfare connecting the Upper Piedmont and high mountains. The old CCC camp at Mortimer is eligible for listing on the National Register of Historic Places.

### **Wild and Scenic River Classifications**

There are three classifications of rivers, or river segments, in the National Wild and Scenic Rivers System—Wild, Scenic, and Recreational. Classification is based on the condition of the river and the adjacent lands at the time of designation. Wilson Creek qualifies for all three classifications:

**1. Wild River.** The river should be free of impoundments. The shoreline should be essentially primitive with little or no evidence of human activity; however, the presence of a few inconspicuous structures is acceptable. There should be little or no evidence of past timber harvest and no ongoing timber harvest. The river area should be generally inaccessible except by trail. There should be no roads, railroads or other provision for vehicular travel; however, a few existing roads leading to the boundary of the river area are acceptable. Water quality meets or exceeds criteria of federally approved State standards for aesthetics, propagation of fish and wildlife normally adapted to the river, and primary contact recreation.

**Wilson Creek Wild Classification** begins at Little Wilson Creek downstream to the confluence of Crusher Branch (4.6 miles). This segment of river flows through a predominately undisturbed hardwood forest and is essentially primitive with little evidence of human activity. Wilson Creek is accessible only by hiker trail, (Wilson Creek, #258), from Forest Road 192 to the intersection of the river with Forest Road 45. Forest Road 4001 and the Bill Crump Trail, #257, provide access to an old abandoned farm on private property about midway along the wild segment.

**2. Scenic River.** The river should be free of impoundments. The shoreline should be 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 harvest is acceptable if the forest appears natural from the riverbank. The river area may be accessible in places by roads and 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. No criteria for water quality is prescribed in the Wild and Scenic Rivers Act. Poor water quality does not preclude classification provided a water quality improvement plan exists or is being developed.

**Wilson Creek Scenic Classification** begins at the headwaters below Galloway Peak (elevation 5,920 feet) downstream to the confluence of Little Wilson Creek (2.9 miles). This section contains a 1.1 mile portion of the Blue Ridge Parkway. Two Forest Roads cross this section. Otherwise, this section is a relatively undisturbed mixed conifer and hardwood forest. This segment of the creek contains many large boulders, steep drops, and other distinct scenic features.

**3. Recreational River.** The river 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 harvest. The river area may be readily accessible by roads or railroads. The existence of parallel roads or railroads on one or both banks and bridge crossings is acceptable. 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.

**Wilson Creek Recreational Classification** begins at Crusher Branch downstream to the confluence of Johns River (15.8 miles). The majority of this section is accessible by road. Portions of three single-lane gravel roads (State Road 1328, NC Highway 90 and Forest Road 45) parallel the creek for approximately 14.5 miles from Johns River to 1.5 miles above Edgemont. It provides access to the public and private lands within this section and the communities of Mortimer and Edgemont. The road crosses the river four times in this section. In addition, State Road 1335, a two-lane, paved highway, crosses the creek approximately two miles above the confluence with Johns River.

Approximately 12.5 miles of this section of river is in private land ownership. The shoreline along the lower section of the river is a mixture of agricultural and undeveloped forestland. The National Forest land begins approximately 0.5 mile north of the intersection of State Road 1328 with State Road 1335. Within this 2.3 mile section is Wilson Creek Gorge, which receives the heaviest recreation use. This section is popular for fishing, swimming, picnicking, sunbathing and whitewater boating. Forest Service developments along this section include six developed parking areas, numerous pull-offs and a boater's put-in/take-out area. The gorge area is managed under a Forest Supervisor's Order that restricts parking to designated areas and prohibits alcoholic beverages.

Private ownership above the gorge to Edgemont generally precludes public use. Forest Service developments are located at Mortimer, the site of the CCC camp, which now contains a Forest Service campground, picnic area, access to the Schoolhouse Ridge trail and a district work center. Private land surrounds the Mortimer Recreation area, and contains residential development, both permanent and seasonal, three community stores, and a church. Below the gorge, there are currently no Forest Service developments and those on private lands include Brown Mountain Beach, a large campground, and Playmore Beach Campground, located south of State Road 1335.



## **II. Planning Context**

This section presents the existing federal, state, and local plans and regulations that need to be taken into consideration when developing Wilson Creek's Comprehensive River Management Plan (CRMP).

### **Nantahala-Pisgah Forest Plan**

The National Forest Management Act of 1976 required the preparation of Forest Plans to direct management of each National Forest. The CRMP for the Wilson Creek Corridor will be incorporated as an amendment to the current Nantahala-Pisgah Land and Resource Management Plan (FLRMP or Forest Plan) . It is a programmatic document that adds specific direction for the Wilson Creek National Wild and Scenic River Corridor.

### **Relationship To Other Federal Governmental Regulations and Plans**

The waters and lands within the river corridor receive protection from federal programs, apart from the WSRA. For example, the U.S. Army Corps of Engineers (ACOE) is charged with regulating waters of the United States. By definition these waters include coastal and navigable inland waters, lakes, rivers and streams; other intrastate lakes, rivers and streams (including intermittent streams); mudflats; sand flats; wetlands; sloughs; wet meadows; and certain impoundments.

The National Park Service manages a 0.6 mile section of the Blue Ridge Parkway in the Scenic segment of the Wilson Creek corridor. Management direction for this portion of the corridor is contained in the General Management Plan for the Blue Ridge Parkway and is compatible with the goals of the CRMP.

Under the Endangered Species Act, the federal government must develop restoration plans for listed species and must take no actions to further endanger these species. This should preclude any federal actions which could harm these outstandingly remarkable resources, and should provide for further habitat protection, which is consistent with wild and scenic river designation. A list of applicable laws, regulations, and plans is contained in Appendix C.

### **Adequacy of Existing Regulations and Plans**

At present, with the inclusion of this CRMP, Wilson Creek will have sufficient mechanisms in place to protect water quality, free-flowing character, and to protect and enhance the Outstandingly Remarkable Values found within the federally owned segments of the river. As the river-administering agency, the USDA Forest Service has the responsibility of ensuring that requirements of the Wild and Scenic Rivers Act are met within the river corridor regardless of jurisdiction. The Forest Service has no direct authority over other agencies, but must work with federal, state, and county authorities to provide adequate protections for the corridor. The Forest Service will coordinate with other agencies, as appropriate, to provide adequate corridor protection.

The Forest will be the lead agency for WSRA Section 7 Determinations of the impacts of water resource projects in the corridor as described in Appendix C.

### **How This Plan Will Be Implemented**

As technologies, information, and conditions change, the plan must be flexible enough to be effective. For that reason, the CRMP is a programmatic document that provides overall goals, objectives, standards, and monitoring guidance that ensure protection or enhancement of the Outstandingly Remarkable Values of the Wilson Creek Corridor regardless of changing circumstances. The criteria for implementation priorities related to the corridor is described in Chapter IV. The list of implementation priorities is located in Appendix D and can be updated periodically as appropriate. Some of the implementation actions may require site-specific environmental analysis once the details are known.

This CRMP will be incorporated as part of the Nantahala-Pisgah Land and Resource Management Plan (FLRMP or Forest Plan) and can be revised or amended the same way the Forest Plan can be revised or amended.



### **III. Management Direction**

Management Direction for the Wilson Creek National Wild and Scenic River Corridor consists of the National Wild and Scenic Rivers Act, the designation legislation for Wilson Creek, the Nantahala-Pisgah Forest Plan, the Wilson Creek Comprehensive River Management Plan (CRMP), and all other applicable federal, state, and local laws, regulations, and plans. The Wilson Creek CRMP consists of goals, objectives, and standards intended to guide the overall management of the national forest portion of the Wilson Creek National Wild and Scenic River Corridor. Management of the 0.6 mile National Park Service section will be guided by the Blue Ridge Parkway General Management Plan.

#### **Goals**

##### *Wild Segment*

Management of the wild segment of the river corridor will be focused on protecting and preserving natural processes with minimal human influences. Recreation management will be designed to provide the most primitive, natural, and remote setting possible. Access to the area is limited to roads outside of the corridor.

##### *Scenic Segment*

Management of the scenic segment of the river corridor will be focused on maintaining and enhancing the near-natural environment. The riverbanks will be largely undeveloped and primitive, but may be accessible in places by roads. Recreation management will be designed to provide a natural-appearing setting with limited improvements.

##### *Recreational Segment*

Management of the recreational segment of the river corridor will be focused on providing river-oriented recreation in natural-appearing or culturally-influenced settings. The river may be readily accessible by roads and trails. Recreational improvements such as trailheads and river access points will be available in some locations.

### All Segments

A variety of non-motorized recreation opportunities will be provided throughout the watershed. These activities will be dispersed as much as possible in order to alleviate potential overcrowding or use conflicts. Access points such as trailheads and parking lots will be strategically located in the corridor and watershed to aid in the dispersal of recreation use. Interpretation of the Outstandingly Remarkable Values of Wilson Creek will be available in various forms to the public from low-key, off-site interpretive materials and technologies to interpretive displays at appropriate locations. The Forest Service will continue to work closely with state and local governments and private landowners to protect and enhance the Outstandingly Remarkable Values of the Wilson Creek corridor. No motorized watercraft will be allowed on the river. Use of watercraft other than canoes, kayaks, inflatable kayaks and rafts will be evaluated on a case-by-case basis.

## General Direction and Standards

<b>Direction for Wilson Creek National Wild and Scenic River</b>		
General direction and standards shown for this management area are only those additional to or more specific than forest-wide direction, MA 15, MA 18, and/or MA 6. Refer to forest-wide direction, MA 15, MA 18, or MA 6 for all activities and practices not addressed here.		
<b>ACTIVITIES</b>	<b>GENERAL DIRECTION</b>	<b>STANDARDS</b>
<b>General</b>	1. Protect and enhance all Outstandingly Remarkable Values for the Wilson Creek Corridor.	a. Manage for the following classifications: Scenic (headwaters to the confluence of Little Wilson Creek); Wild (Little Wilson Creek to the confluence of Crusher Branch); and Recreational (remainder of corridor).
	2. Manage the Wilson Creek corridor according to experience classifications.	
	3. Evaluate the effect of water resources projects on the river's free-flowing condition, water quality, and Outstandingly Remarkable Values. Refer to agency policy for evaluation procedures (under WSRA Section 7 authority).	
<b>Visual Resource Management</b>	1. Manage to maintain the unique characteristics and scenic values of the river corridor.	a. Meet a Visual Quality Objective (VQO) of Preservation in Wild Segments. Meet a VQO of Retention in Scenic Segments. In Recreational Segments, meet a VQO of Retention in Variety Class A landscapes and meet a VQO of Partial Retention in Variety Class B or C landscapes.
	2. Provide opportunities to view the scenic features without detracting from the visual quality of the feature.	a. Maintain existing vistas, and consider opening new vistas where appropriate.
<b>Dispersed Recreation Management</b>	1. Emphasize river oriented non-motorized recreation opportunities favoring hiking, fishing, boating, viewing wildlife and scenery, and nature observation.	a. Manage for the following experiences in each river segment: <i>Scenic:</i> Roaded Natural 2 (RN2); <i>Wild:</i> Semi-Primitive Non-Motorized (SPNM); <i>Recreation:</i> Roaded Natural 1 (RN1) and RN2.
		b. Provide for hunting and fishing consistent with established game laws and river values.
	2. Provide no opportunities for Off-Highway Vehicles apart from those allowed on system roads.	c. No motorized watercraft will be allowed on all sections.

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<b>ACTIVITIES</b>	<b>GENERAL DIRECTION</b>	<b>STANDARDS</b>
	3. Provide facilities as needed for public safety, resource protection, and enhancement of the recreational experience.	
	4. Allow primitive camping at designated areas only.	a. Allow evidence of use to be noticeable but not dominant.
	5. Manage use to provide a level of contact among visitors and impacts to the Outstandingly Remarkable Values that is consistent with the river classification. Use the Limits of Acceptable Change (LAC) concept to monitor levels of use within the river corridor.	a. Conduct a site condition inventory to determine use patterns, site conditions, and their specified limits to be monitored.
		b. Rehabilitate degraded sites and if necessary, relocate or restrict use at those sites.
		c. Prioritize rehabilitation of impacted sites with over 200 square feet of exposed soil in the Recreation Segment, and over 100 square feet of exposed soil in the Scenic and Wild Segments.
<b>Developed Recreation Management</b>	1. Expansion or renovation of existing facilities will be considered before development of new facilities.	
	2. New facilities will be developed only if use levels indicate additional developed site capacity is needed and facilities are compatible with management area objectives.	
	3. New development will be designed to minimize disturbance of wildlife and move use away from sensitive riparian areas to the extent possible while still providing access to the river at designated locations.	
	4. Barrier-free facilities will be provided in accordance with applicable federal, state, and local laws and regulations.	
<b>Cultural Resource Management</b>	1. Manage historic and prehistoric sites consistent with forest-wide standards.	a. Consult with the Forest/Zone Archeologist prior to implementing any ground disturbing activities.
	2. Identify areas with highest potential for interpretation and enhancement.	
	3. Stabilize and protect existing sites.	
	4. Allow research if all Outstandingly Remarkable Values are protected.	

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<b>ACTIVITIES</b>	<b>GENERAL DIRECTION</b>	<b>STANDARDS</b>
<b>Trails Management</b>	1. Manage for a variety of trail uses compatible with the Outstandingly Remarkable Values of the corridor.	a. Permit bicycles, horses, and llamas on designated trails only. b. No off-road or off-trail, cross country travel by bicycles, horses or llamas will be allowed on public lands within the river corridor.
	2. Manage and construct trails for a variety of difficulty levels dependent on the desired recreation experience.	a. Manage trails for the following difficulty levels: Recreational Segment: "Easiest" to "Moderate" Wild and Scenic Segments: "Easiest" to "Most Difficult"
	3. Provide access for use and enjoyment of the rivers consistent with the river classification.	a. Favor access that provides viewing opportunities in scenic sections. Design trails for resource protection and some user comfort.
		b. Manage for more concentrated use in recreation sections. Provide for user comfort, safety, and resource protection.
		c. Rehabilitate or relocate degraded access trails and steps.
4. Maintain and construct trails consistent with river classification.	a. Maintain trails to the following standards in each river segment: <i>Wild</i> – Maintenance Levels 1-3 <i>Scenic</i> – Maintenance Levels 2-3 <i>Recreational</i> – Maintenance Levels 3-5.	
<b>Wildlife and Fish Resource Management</b>	1. Manage streams for self-sustaining fish populations where conditions are favorable. Provide conditions for the large group of game and non-game animals that are dependent on aquatic and riparian systems. Emphasize habitat for specific Management Indicator Species which represent this group.	a. Manage habitat primarily for raccoon, pileated woodpecker, trout, and smallmouth bass.
	2. Manage streams for wild trout where conditions are favorable. Identify trout streams using designations by the North Carolina Wildlife Resources Commission or where population inventories indicate self sustaining populations.	a. Improve habitat of wild trout streams as a first priority. b. Improve stability of stream banks and native riparian vegetation.
	3. Retain suitable cavity trees, well dispersed throughout the area.	
	4. Manage to enhance and interpret the Outstandingly Remarkable Fish and Wildlife Values of Wilson Creek.	

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<b>ACTIVITIES</b>	<b>GENERAL DIRECTION</b>	<b>STANDARDS</b>
	5. Maintain appropriate stream temperatures and stream environment, and protect stream banks.	
<b>Land Adjustment and Rights-of-Way</b>	1. Pursue opportunities for acquisition of private lands within river corridors whenever made available to protect and enhance the Outstandingly Remarkable Values of the corridor.	a. Consider scenic or conservation easements to protect river values only when acquisition of fee simple title is improbable.
<b>Transportation System Management</b>	1. Manage existing roads as necessary to maintain or enhance the Outstandingly Remarkable Values of the corridor.	a. Decommission roads, if necessary, to maintain or enhance the Outstandingly Remarkable Values of the corridor.
	2. Provide parking where possible to support an appropriate level of river corridor use. Avoid over-concentration of parking areas.	
<b>Road Planning, Construction and Maintenance</b>	1. Allow no new road construction which would be open to public motorized vehicles except to access facilities such as put-in/take-out areas, developed recreation sites, or other similar recreation facilities.	
<b>Wildfire Management</b>	1. Suppress wildfires using techniques which will have the least impact on special features in the corridor.	a. Emphasize hand tool construction of fire lines. Permit machine use only when a fire line constructed with hand tools would be ineffective for fire control.
<b>Prescribed Burning</b>	1. Use prescribed burning as necessary to maintain or enhance the unique resource values of the area.	
	2. Use only prescribed fire that does not kill the shade provided by a forest canopy or expose mineral soil by consuming the duff and humus layers.	

**Direction for Wilson Creek National Wild and Scenic River**

General direction and standards shown for this management area are only those additional to or more specific than forest-wide direction, MA 15, MA 18, and/or MA 6. Refer to forest-wide direction, MA 15, MA 18, or MA 6 for all activities and practices not addressed here.

ACTIVITIES	GENERAL DIRECTION	STANDARDS
<b>Interpretation and Education</b>	1. Interpretive programs will be designed to improve public awareness and understanding of the Outstandingly Remarkable Values of Wilson Creek and the National Wild and Scenic River System, including emphasizing Leave No Trace principles. The size and type of program may vary with the recreational setting of each segment.	a. Provide cooperative interpretive opportunities with other agencies and organizations as appropriate. Incorporate river stewardship as the unifying educational message.
		b. Wildlife interpretation will focus on habitat protection, species that wildlife viewers will have a high likelihood of seeing, and educating the public in the importance of wetlands, meadows, snags, and other unique habitats.
<b>Vegetation Management</b>	1. Manage corridor as not suitable for timber production.	a. Refer to Forest-wide Direction for a list of tree cutting practices appropriate to land not selected for timber production.
	2. Generally allow natural processes to determine the composition and distribution of plant species.	
	3. Use native plant species where possible when restoring impacted sites.	
	4. Allow for vegetation management in order to treat noxious weeds, insects and disease, infested trees, and/or for salvage operations.	a. Minimize the use of mechanical equipment that would disturb the stream environment.  b. Use of herbicides/pesticides would only be allowed after proper environmental analysis has occurred and only those chemicals suitable for the river environment.
<b>Minerals Management</b>	1. Allow no new commercial mineral activities.	
	2. Allow mineral permits in existence prior to August 2000 to continue operation until the permit expires. Once the permit expires, the site will be rehabilitated and no new permits will be issued for the site.	

**Direction for Wilson Creek National Wild and Scenic River**

General direction and standards shown for this management area are only those additional to or more specific than forest-wide direction, MA 15, MA 18, and/or MA 6. Refer to forest-wide direction, MA 15, MA 18, or MA 6 for all activities and practices not addressed here.

ACTIVITIES	GENERAL DIRECTION	STANDARDS
<p><b>Special Uses</b></p>	<p>1. Issue permits for new special uses only when compatible with special values of the area.</p>	<p>a. Allow no more than two commercial, non-instructional boating outfitter permits within the Recreational section of the River.</p> <p>Allow no more than 120 commercial boaters per day (not including guides), in groups of 6-15 from the date the CRMP is signed. Groups of 5 or less (not including guides) are not included in the 120 boater limit.</p> <p>No commercial, non-instructional boating outfitter permits will be issued in either the Wild or Scenic sections.</p> <p>b. Limit commercial guided angling permits, instructional boating permits or other water-based activity permit not already mentioned to groups of five or less (not including guides), from the date the CRMP is signed. Existing permits will be amended upon renewal.</p> <p>c. Limit land-based permits to groups of no more than 15 (not including guides) from the date the CRMP is signed. Existing permits will be amended upon renewal.</p> <p>d. Stipulate in every commercial permit provisions for adequate dispersal of use throughout the day and season to prevent overcrowding. Commercial boating launch intervals will be specified in outfitter permits.</p> <p>e. Allow camping by commercially outfitted groups, or other groups under permit, only in designated areas.</p>
	<p>2. Issue permits for research activities only when compatible with the Outstandingly Remarkable Values of Wilson Creek.</p>	<p>a. Mark test plots in a temporary and inconspicuous manner not visually evident to the casual observer.</p>

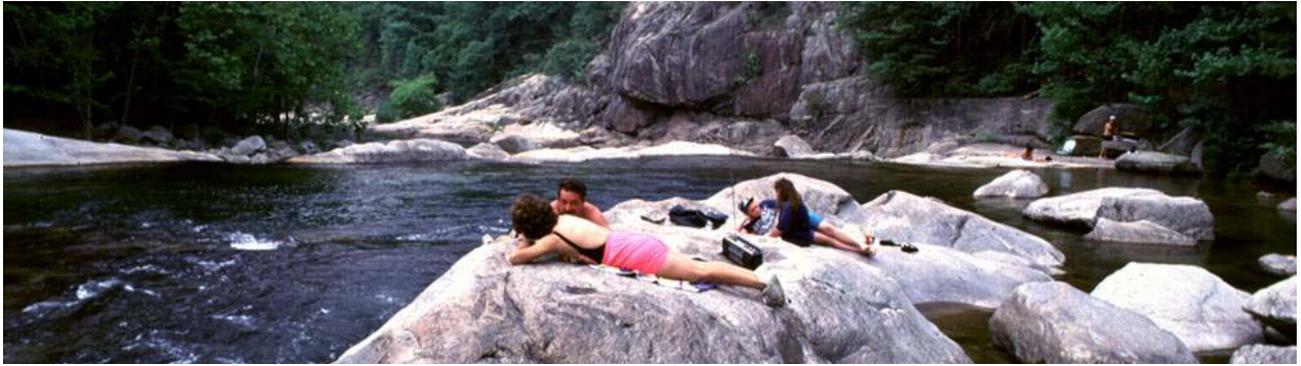
<b>Direction for Wilson Creek National Wild and Scenic River</b>		
General direction and standards shown for this management area are only those additional to or more specific than forest-wide direction, MA 15, MA 18, and/or MA 6. Refer to forest-wide direction, MA 15, MA 18, or MA 6 for all activities and practices not addressed here.		
<b>ACTIVITIES</b>	<b>GENERAL DIRECTION</b>	<b>STANDARDS</b>
	3. Educational programs which promote understanding of river ecosystems will be given preference when issuing new special use permits.	
<b>Soil and Water</b>	1. Maintain soils in a natural undisturbed state except for trail construction and maintenance, watershed restoration projects, wildlife improvement measures, wildfire suppression measures, recreation and site rehabilitation projects.	a. Stabilize dispersed recreation sites within the riparian area that have exposed and/or highly compacted erodible mineral soil.
	2. Continue to cooperate with and encourage enforcement of State water quality standards and environmental protection regulations on private lands within the Wilson Creek watershed.	
<b>Gathering Forest Products</b>	1. Issue no permits for the commercial removal of forest products.	
	2. Allow collection of plant products (nuts, berries, cones) for personal use.	
	3. Allow collection of specimen plants for research only with Forest Supervisor approval. This requires a special use permit.	
<b>Private Lands</b>	1. Work with landowners to increase or improve existing streamside vegetation to reduce stream temperatures and provide high quality fisheries habitat through the reduction of runoff and sedimentation and the introduction of organic matter.	
	2. Work with landowners to assure compliance with applicable federal, state, and county clean water laws.	a. Any structures that could affect the flow of water, i.e. bridges, bank improvements or docks, require an Army Corp of Engineer permit and potentially a Section 7 evaluation by U.S. Forest Service.
	3. Work with landowners to accomplish fuel reduction around homes.	
	4. Work with National Forest visitors to increase awareness of private land along the corridor to reduce trespass and resource damage caused by such trespass.	
	5. Work with landowners to increase public access points to National Forest lands.	

<b>Direction for Wilson Creek National Wild and Scenic River</b>		
General direction and standards shown for this management area are only those additional to or more specific than forest-wide direction, MA 15, MA 18, and/or MA 6. Refer to forest-wide direction, MA 15, MA 18, or MA 6 for all activities and practices not addressed here.		
<b>ACTIVITIES</b>	<b>GENERAL DIRECTION</b>	<b>STANDARDS</b>
	6. Work with landowners to prevent the spread of noxious weeds and non-native species onto Forest Lands.	
	7. Develop awareness among government and private agencies and develop stewardship roles and responsibilities.	

**Wilson Creek Corridor Boundary**

The Wilson Creek National Wild and Scenic River Corridor Boundary consists of the lands within approximately ¼ mile on either side of the banks of Wilson Creek. It contains an average of less than 320 acres per mile including both public and private land. The surveyed boundary will be fully described in the map of record.

The USDA Forest Service has responsibility for administering the Wilson Creek Corridor under the Wild and Scenic Rivers Act to ensure protection of water quality, free-flowing character, and protection and enhancement of the outstandingly remarkable values. However, the Forest Service does not have authority over private lands within the corridor boundary. Only the existing laws and regulations affecting private lands apply.



#### **IV. Criteria for Implementation Priorities**

This section contains the criteria to guide subsequent site-specific agency decisions and a description of the types of probable management actions, including the objectives/intent of an action, that may occur within the Wilson Creek corridor

Because the amounts and types of funds are not always predictable and it be necessary to adjust priorities from year to year, it is not possible to set rigorous priorities for expenditures over the long term.

Guidelines have been established to help determine prioritization and allocation of funding and staff time. Priority of actions will be addressed in the following order:

- Public safety considerations
- Actions required by the Wild and Scenic Rivers Act such as protection of the Outstandingly Remarkable Values (including WSRA Section 7 Determinations)
- Improvements or actions within the corridor that meet the direction of the CRMP
- Improvements or actions within the Watershed that enhance the corridor and meet the direction of the CRMP

Priority actions are listed in Appendix D. Priorities will be determined in cooperation with state and local government. The list can be updated as needed without amending the Comprehensive River Management Plan.

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## V. Monitoring

This section has three purposes: to determine the extent to which the plan is being implemented; to help the USDA Forest Service understand how management of the river corridor is affecting Outstandingly Remarkable Values; and to help identify conditions needing corrective actions to protect and enhance river values. Monitoring will be defined on two scales -- long-term trends and effectiveness of specific activities.

Monitoring and evaluation criteria are based upon the Limits of Acceptable Change framework (LAC) which follows the premise that change to the ecological and social conditions of an area will occur as a result of natural and human factors. The goal of management is to keep the character and rate of change due to human factors within acceptable levels that are consistent with plan standards. These limits tie closely with protection and enhancement of Wilson Creek's Outstandingly Remarkable Values.

The LAC system places its primary emphasis on the desired resource condition, rather than solely on how much use an area can tolerate. The management challenge with this approach is one of deciding what changes should occur, how much change will be allowed, what management actions are needed to guide and control it, and how managers will know when the established limits are being reached. Therefore, this emphasis does not aim to prevent all human-caused change in the corridors, but rather it focuses on specific indicators that reflect the carrying capacity in more practical terms.

For each river value to be monitored, one or more key indicators are selected that will allow managers to keep attuned to changes in the ecosystem or social setting. For each key indicator, a threshold is set. This is the value that determines the amount of change that is either desired or that will be accepted before river management objectives are no longer being met. In this manner, indicators and thresholds provide managers with information to determine if the resource values and opportunities they are managing are actually being provided. The standards serve as triggers that cause predetermined management actions to be implemented when the limit is being reached.

For each indicator and standard, an "Actions if Not Met" column lists the likely action that would be triggered if a particular threshold is reached. Sampling methods provide an example of how the indicator might be measured, but these sample methods can and should be changed as better means become available. Additional monitoring is identified in this section that provides resource inventories or baseline data that is necessary to establish thresholds. The CRMP implementation will include the final development of these thresholds where none yet exist.

Monitoring Indicators, Standards, and Actions				
Value	Key Indicator (s)	Standard (s) to Meet	Action (s) if Not Met	Sample Method (s)
Scenic	Projects, activities, modifications which alter landform, vegetation, water or site character within the river corridor	Meet established VQO.	Proposed actions modified to meet established VQOs or proposed actions would be rejected. Prioritize actions to improve pre-existing non-conforming conditions.	Individual projects analyzed on case-by-case basis.
Recreation	Quality of Experience including Site Integrity and Capacity	Meet ROS setting parameters for minimization of user conflicts and crowding, including commercial recreational uses. Meet ROS and VQO setting parameters to minimize site degradation such as erosion or vandalism. Prioritize rehabilitation of sites with over 200 square feet of exposed soil in the Recreation segment, and over 100 square feet of exposed soil in the Scenic and Wild segments. Use may be noticeable but not dominant.	Increase indirect actions such as education, information, and signing efforts. Increase direct actions such as enforcement. Rehabilitate and/or close impacted sites. Establish use restrictions as last option.	Periodic user satisfaction sampling at least every 10 years. Conduct site condition surveys as needed to establish trends of impact and effectiveness of rehabilitation.
Geologic	Site Integrity	No commercial mineral extraction. Protection from surface degradation by meeting established VQO.	Rehabilitation of degraded sites.	Annual visual monitoring.

Monitoring Indicators, Standards, and Actions				
Value	Key Indicator (s)	Standard (s) to Meet	Action (s) if Not Met	Sample Method (s)
Fish and Wildlife	Water Quantity	Meet flow required to support State designated beneficial uses.	Undertake water rights adjudication.	1) Install and operate a stream flow gauge on Wilson Creek 2) Monitor upstream appropriations
	Water Quality	Meet EPA and State standards required to support beneficial uses.	Develop and implement a Watershed Management Plan with State.	Water quality baseline monitoring, including: macro-invertebrates, water temperature, dissolved oxygen, pH, total dissolved solids, fecal coliform.
	Fisheries Resource Condition	Meet LRMP direction for maintenance of viable populations of management indicator species and other state, federal, and local regulations pertaining to the viability of aquatic species.	Restoration of native species, including, but not limited to, freshwater mussels and trout.	Long-term fish population monitoring and freshwater mussel population monitoring.
Historic and Cultural	Cultural Site Integrity	All historic structures and resource sites to remain in a safe and stable condition. Land disturbing activities and use areas must comply with Sections 106 and 110 of the National Historic Preservation Act.	Protect and stabilize sites.	Annual monitoring.
Botanical	Integrity of Plant Communities/Rare Species Viability	Maintain Rare Species Populations and Plant Community Diversity.	Prevent unacceptable level of disturbance on national forest lands. Restore Habitats, Rare Plant Populations and Communities.	Annual Monitoring of Rare Plant Populations. Inventory, map, and monitor Plant Communities in the Watershed.

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## **Appendix A: Detailed Resource Descriptions for the Wilson Creek Corridor**

### **Physiography**

The corridor lies within two physiographic provinces. The stream begins in the Blue Ridge Mountains and the lower two miles flow into the upper Piedmont. This creates an elevation span ranging from 5,920 feet at Calloway Peak on Grandfather Mountain to 1,020 feet at the confluence with the Johns River. This 4,000-foot plus elevation difference is the greatest relief found anywhere along the Blue Ridge Front.

Wilson Creek is bounded by steep, rugged slopes throughout its length, except for the piedmont segment. The flood plains are narrow from the headwaters to Crusher Branch. From here they become wider and gentler down to the gorge where they again become narrow and steep. The floodplain becomes very wide and gentle once the stream enters the piedmont.

### **Geology And Minerals**

Wilson Creek is within the Blue Ridge terrane. The area is composed largely of sedimentary rocks that were highly metamorphosed and injected with granitic material during the Grenville Orogeny about one billion years ago. These rocks include Wilson Creek Gneiss, Blowing Rock Gneiss and Brown Mountain Granite.

The Grandfather Mountain Window is the most significant geological feature and is exposed in the Wilson Creek drainage. A geologic “window” is an exposure of (usually) older rock formations surrounded by younger rock formations. Faulting, uplifting or erosion can cause geologic windows. The Grandfather Mountain Window was formed by thrust faulting and probably occurred during the Devonian period of the Paleozoic era.

The rocks exposed in the Grandfather Mountain Window are among the oldest exposed in the Appalachian Mountains. Many of the formations are estimated at over one billion years in age. The primary formation in the area is Wilson Creek Gneiss. Overlying much of these rocks is metasedimentary arkosic sandstone that has a green hue due to the presence of the mineral chlorite.

Several mineral commodities have been produced or have been the object of prospecting in the area. The most common activity has been removal of the greenish-grey Grandfather Stone found at higher elevations for building materials. One small

quarry is active on National Forest lands within the upper Wilson Creek corridor. It is located on Forest Service Road 192, but cannot be seen from the stream.

During the 1950s and 1970s considerable prospecting for uranium took place, centered around North Harpers Creek drainage. Exploration showed the presence of uranium, but not in sufficient quantities or quality to warrant development. There are no active uranium prospecting permits in Wilson Creek.

There has been some prospecting for titanium, gold and silver, but no economically viable deposits have been found.

A seismic profile of the Appalachians done in 1979 indicated that an eastern Overthrust Belt underlies the Blue Ridge formations. This probability of hydrocarbon-bearing sedimentary rocks stimulated an interest in the early 1980s for leasing National Forest lands for oil and gas exploration. Although leases were issued that included portions of the Wilson Creek drainage, no exploration has taken place to verify if oil or gas actually exists under the Forest. There are no active oil and gas leases in the Wilson Creek area.

There are no reserved or outstanding mineral rights on NFS lands except for approximately 20 acres on one tract northeast of Brown Mountain Beach. There are no known mineral activities on private lands.

## **Soils**

The Wilson Creek corridor spans three soil taxonomic temperature regimes. A majority of the corridor has soils of the mesic temperature regime as most typically occur throughout the low to intermediate mountains of the Southern Blue Ridge, with the exception of the lowermost two miles before the Johns River where thermic soils of the Piedmont exist (average annual temperature at 20-inch depth is greater than 59 degrees F) and approximately three-quarters of a mile within its extreme headwaters where frigid soils occur at the higher elevation (average annual temperature at 20-inch depth is less than 47 degrees F). Between miles 18 and 20 (in the general area from Bucks Timber Creek to Andrews Creek) there is a transition from downstream soils that were formed in materials weathered by acid crystalline rocks (biotite granitic gneiss), to soils derived from metasedimentary rocks (metagraywacke), as occur upstream.

Within the lower two miles starting at Johns River (mile 0 to mile 1.9), the most common soils are the moderately well drained Congaree on relatively broad flood plains (smaller acreages of the somewhat poorly drained Chewacla and poorly drained Wehadkee), with the very sandy excessively drained Buncombe soils commonly occurring on the small islands and natural levees. Well drained soils of the Pacolet series occur on most of the Piedmont uplands within this section; Pacolet soils have red clay subsoils and depth to bedrock greater than 60 inches.

***Note:*** *Some soils described in the Caldwell County portion of the corridor from mile 3 to mile 14.7 are at variance with that survey's legend. Such differences reflect changes that are likely to occur during the pending update of that survey as a result of several newer series having been established since the major field work in Caldwell County (1982), map unit design differences (slope breaks, etc.), and differences inherent to scale – all of which have since been adopted for use*

*in most mountain counties and are supported by the correlation of the adjoining Avery County soil survey.*

Continuing upstream into the Blue Ridge to about mile 3 (just past Brown Mountain Beach), the flood plains become somewhat narrower than in the first two miles and are predominately Buncombe soils (as described above), with lesser areas of Chewacla. All of the upland soils are well drained. Evard soils are on most of the upland side slopes and ridgetops; they have red clay loam subsoils and depth to bedrock greater than 60 inches. Hayesville soils occur on some of the broader ridges; these soils have red clay subsoils and depth to bedrock greater than 60 inches. The moderately deep Chestnut, deep Buladean, and very deep Edneyville soils are on the steeper slopes and more broken areas; they are coarse-loamy soils with brown or yellowish brown subsoils. Chestnut soils are moderately deep (20 to 40 inches) to soft bedrock.

Most of the next four miles of the corridor to mile 6.9, above the confluence of Craig Creek, is characterized by steep to very steep side slopes, and narrow ridges; generally there is no alluvial flood plain, or the flood plain is very narrow and discontinuous (not mappable). The lower portion (~60%) of this stretch is largely Ashe and Cleveland soils, with some significant areas of rock outcrop. Ashe soils are 20 to 40 inches deep to hard bedrock; Cleveland soils have hard bedrock at a depth of less than 20 inches. The upstream portion (~40%) is predominantly Chestnut, Buladean, and Edneyville soils on steep to very steep slopes and narrow ridges.

Continuing upstream, flood plains are mappable along most of the stretch between mile 7 and mile 18. Flood plains are mostly Buncombe soils in the lower third of the stretch (below Mortimer) and Ostin soils in the upstream portion. Small acreages of other flood plain soils occur. The upland side slopes and ridges are predominantly Chestnut and Buladean soils (moderately deep and deep, respectively, to soft bedrock) and, in the uppermost portion, Ashe soils (moderately deep to hard bedrock). Notably, an extensive area of Ashe-Cleveland-Rock outcrop abuts the eastern edge of the Ostin flood plain for a distance of more than one and a quarter miles downstream from the confluence of Turkey Branch/Little Laurel Creek. Ashe and Cleveland soils are 20 to 40 inches and <20 inches deep, respectively, to hard bedrock.

Between mile 18 and the Wilson Creek-Little Wilson Creek confluence (about mile 19.8), the mapped soils reflect a difference in geology. Downstream from here, soils derived from acid crystalline rocks (Chestnut, Ashe, etc.) occur on the uplands; Upstream, soils derived from metasedimentary rocks (Soco, Ditney, etc.) are on the upland slopes and ridges. Both Chestnut-Ashe and Soco-Ditney occur within this stretch. As mapped, the acid crystallines extend farther upstream to the southwest of Wilson Creek up to and into the Andrews Creek drainage, while the metasedimentaries extend farther downstream to the northeast of the stream. Ostin soils are on the flood plains throughout most of this stretch.

***Note regarding flood plains:*** *Within the corridor, the area near the Wilson Creek-Little Wilson Creek confluence is the uppermost limit where a flood plain can form. Soils such as Ostin – with its very high content of sand, gravel, and cobbles -- form on flood plains of narrow, fast flowing streams where the stream gradient and/or transport energy decreases to such extent that the heavier*

*materials drop out (in this case, where the gradient decreases from >600'/mile above the confluence to ~185'/mile just below). Ostin soils are "strung out" for some distance downstream. However, soils of the alluvial flood plains downstream from Mortimer generally do not have the very high gravel and cobble content, as is characteristic of Ostin, the main stream having deposited most of such load by that point.*

Within the next three miles above the Wilson Creek-Little Wilson Creek confluence, extremely stony or extremely bouldery Northcove, Maymead, and (in the upper mile), Spivey soils are along the drainageways and on toe slopes. All are very deep colluvial soils; Northcove and Spivey soils have a very high content of rock fragments throughout the profile. Soco and Ditney, and (in the lower mile) Stecoah soils are on the side slopes. Soco and Stecoah soils are moderately deep or deep, respectively, to weathered rock; Ditney soils are moderately deep to hard bedrock.

At the headwaters, where elevations of 4500 feet to above 5900 feet occur, Burton and Craggey soils and rock outcrop are on the side slope and ridge positions. Balsam soils are in the extremely bouldery or rubbly colluvial positions. Burton and Craggey soils are moderately deep and shallow, respectively, to hard bedrock. Balsam soils are very deep and have a very high content of rock fragments throughout the profile. All of these frigid (temperature regime) soils are characterized by thick, dark surfaces with high organic matter contents; all are mapped as "windswept" phases, indicating a high potential for icing, tree-breakage, etc.

### **Stream-flow and Water Quality**

The entire length of Wilson Creek is free-flowing with no artificial dams, channel diversions or other flow regulating structures. There are several small impoundments on tributaries on private lands, but they do not significantly affect stream-flow in Wilson Creek.

Because the entire Wilson Creek watershed is free flowing, stream-flow can fluctuate significantly with seasonal rainfall. A devastating flood in 1940 caused much destruction to developments in level areas adjacent to the stream and its tributaries. Other less damaging floods occurred in 1989 and 2004.

There is no current or historic stream-flow data available. Information that is available shows the following estimated characteristics:

50 year flood	20,600 cfs
7 day 10 year min. flow	21 cfs
Average flow	140 cfs
Drainage area	44,000 acres
Average Discharge	28 inches/year
50 year design storm rainfall	4 inches in 3 hours

*cfs=cubic feet per second*

Wilson Creek is classified as “B-Tr-ORW” by the North Carolina Department of Environment and Natural Resources, Division of Water Quality (NCDWQ) from its headwaters downstream to the confluence with the Johns River. In this classification system, B refers to the system’s suitability for primary and secondary recreation, aquatic life propagation and survival, fishing, wildlife, and agriculture. The Tr refers to the systems suitability for natural trout propagation and maintenance of stocked trout populations. Wilson Creek has been classified as Outstanding Resource Waters (ORW) by the NCDWQ, which indicates that the system is unique and special waters of exceptional state or national recreational or ecological significance, requiring special protection to maintain existing uses.

The water quality of Wilson Creek is excellent, biologically, and is considered adequate for all present and expected future uses. The predominant use of water in Wilson Creek is for primary contact recreation. The lower end is heavily used during the summer for fishing and swimming. The residences in the area depend on wells or springs for domestic water supplies. There are no known industrial users on Wilson Creek.

### **Fish And Wildlife**

The Pisgah National Forest, in general, provides habitat for approximately 645 species of vertebrates, including fish species. Game and non-game species are managed in cooperation with the North Carolina Wildlife Resource Commission (NCWRC). In general the Forest Service manages habitat and the NCWRC manages population levels, including hunting and fishing regulations. Big game animals present include bear and deer. Small game animals include squirrel, dove, raccoon, grouse, rabbit, bobcat, red and gray fox, opossum, and migratory species including waterfowl and woodcock.

Fish populations within Wilson Creek are managed under several fishing regulations by the North Carolina Wildlife Resources Commission (NCWRC) to ensure the continued high quality of the aquatic environment and associated recreation. Specifically, Wilson Creek is managed under the wild trout regulations from its source downstream to the confluence with Phillips Branch. This means that anglers may use only a single hook or artificial lures, and can keep no more than four trout that are 7 inches long or greater. This is intended to protect the reproductive efforts of wild trout populations, thereby

ensuring the future trout fishery in upper Wilson Creek. This fishery is open to angling year-round.

From the confluence of Phillips Branch downstream to the confluence with the Johns River, Wilson Creek is managed under the hatchery supported trout regulations. This means that hatchery-raised trout are periodically stocked to augment wild trout populations in areas where habitat is less suitable for biological or physical reasons (primarily summer water temperatures). Under this regulation, anglers may use bait (as well as all types of artificial lures), and keep up to seven trout per angler per day. There is no minimum size limit and the legal fishing season is determined by the NCWRC.

In addition, lower reaches of Wilson Creek support native freshwater mussel populations which are critical to the maintenance of aquatic biodiversity across the Forest.

### **Vegetation**

Twenty-six natural communities are present along Wilson Creek within the corridor. This is attributed to the significant elevation span of this corridor and its occurrence in both the Blue Ridge and Piedmont physiographic regions. The upper slopes are predominantly Northern Hardwood Forest, Chestnut Oak Forest and Acidic Cove Forest. The lower slopes are covered with oak forests of various types including lower mountain and upper piedmont types. Some oak forest classifications that are clearly defined in the piedmont are not well defined in the Piedmont-Mountain transition zone.

Piedmont/Low Mountain Levee Forest and Piedmont/Low Mountain Alluvial Forest are both present along Wilson Creek at the lower elevations and grade into Montane Alluvial Forest. Distinctions between the community types are blurred by disturbance and destruction along the lower portions of the stream. The lower parts of Wilson Creek outside of NFS lands have largely lost all integrity of natural communities. This is in contrast to the upper portions, where the streamside communities are in excellent condition.

The corridor between Calloway Peak and U.S. Highway 221 is a part of the Grandfather Mountain Natural Heritage Area registered with the State of North Carolina. The State Natural Heritage Program focuses on natural features that are biologically exemplary, unique, or endangered on a statewide or national basis. Grandfather Mountain is a 2,000-acre private nature preserve managed for public recreation use. The top of the mountain is dominated by second-growth spruce and fir forest intermixed with successional communities, heath balds and pioneer species on rock ledges and crags. The varied mineral composition of the rock outcrops that form the crest of the mountain and the high elevation climate has created a complex vegetational mosaic that includes 20 rare plant species and 16 species of salamanders. The 4,000-foot elevation difference between the mountain top and adjacent Piedmont to the east is the greatest relief found anywhere along the Blue Ridge Front.

## **Threatened And Endangered Species**

PETS (proposed, endangered, threatened and sensitive species) are managed cooperatively with the North Carolina Natural Heritage Program, the North Carolina Wildlife Resources Commission and the U.S. Department of Interior Fish and Wildlife Service. There are five known PETS species within the area. All are vascular plants and occur in the upper end of the river corridor between Calloway Peak and State Road 1514. One occurs on national forest lands and the remainder are on Blue Ridge Parkway or private lands. None are federally listed, but three are candidates for listing. All have protected status. The following lists the species, their listing status and rank.

Scientific Name (Global)	Common Name	Status			Rank	
		NFNC	Fed	NC	NC	Global
Carex misery	Wretched Sedge	S	--	SR	S3	G3
Cardamine clematitis	Mountain Bittercress	S	C2	C	S2	G2
Geum geniculatum	Bent Avens	S	C2	T	S1	G1
Plagiochila sullivanii var.	A Liverwort	S	C2	C	S	G2T2
Robinia hispida var. fertilis	Fruitful Locust	S	--	C	S1	G5T2

The following explains the status and rank codes used in the above list.

Status: NFNC (Forest): S = Sensitive

Federal: C2 = Candidate, insufficient data to support listing

NC (State): T = Threatened, C = Candidate, SR = Significantly Rare

Rank: NC (State): S1 = Critically imperiled in NC due to extreme rarity

S2 = Imperiled in NC because of rarity

S3 = Rare or uncommon in NC

Global: G1 = Critically imperiled globally due to extreme rarity

G2 = Imperiled globally because of rarity

G3 = Either very rare and local throughout its range, or found locally in restricted range

G2T2 = Species (G2) and subspecies (T2) imperiled globally because of rarity

G5T2 = Species (G5) demonstrably secure globally, Subspecies (T2) imperiled globally because of rarity

## **Scenery**

Wilson Creek contains sections of outstanding scenery, especially the 2.75-mile section through Wilson Creek Gorge. Here the stream has a moderate to steep gradient and rapid/pool flow characteristics with many cascades and small waterfalls. The sides of the gorge are steep and narrow with extensive exposed bedrock and areas of large

boulders. The stream is bordered by a near-natural appearing mixed hardwood and pine forest. The water quality is excellent.

Between the gorge and Crusher Branch, Wilson Creek flows through private lands, which have been modified primarily with year-round and summer residences. A heavily used gravel road parallels this entire section, crossing back and forth with a series of bridges.

Above Crusher Branch, Wilson Creek is an outstanding scenic mountain stream flowing through relatively undisturbed hardwood forest. Above U.S. Highway 221 huge boulders dot the landscape and the forest cover includes more evergreens.

Grandfather Mountain is dominated by second-growth spruce and fir forests intermixed with successional communities, heath balds and pioneer species on rock ledges and crags. The varied mineral composition of the rock outcrops and the high elevation climate has created this complex vegetation mosaic, which encompasses 5 percent of the river corridor.

### **Human Modifications**

Human modifications in the stream channel vary from bridges to small docks and foundations. The entire length of Wilson Creek is free flowing with no artificial dams, channel diversions or other flow regulating structures.

A trail along the crest of Grandfather Mountain crosses Galloway Peak, the upper boundary of the river corridor. The Tanawha Trail, that parallels the Blue Ridge Parkway for 13.5 miles between Beacon Heights and Julian Price Park, traverses the headwaters of Wilson Creek. Wilson Creek Trail, #258, begins at Forest Road 192 and provides river access for the next six miles along the river. Wilson Creek passes under the Blue Ridge Parkway, U.S. Highway 221, State Road 1514 and Forest Road 192 in this segment. Access is provided to the river at these locations, otherwise, no substantial evidence of human activity is observed along the riverbanks.

An up-to-date inventory of in-stream structures will be compiled upon implementation of this CRMP and maintained thereafter. Existing cultural features are described in general terms in this document. The inventory of cultural and historic features on federal lands in the Wilson Creek Corridor will be updated over time.

### **Access**

The majority of the river corridor is accessible by road. Portions of three single-lane gravel road (State Road 1328, N.C Highway 90 and Forest Service Road 45) parallels about 14.5 miles of Wilson Creek from Johns River to a point about 1.5 miles above Edgemont. It provides primary access to public and private lands within the river corridor and the communities of Mortimer and Edgemont. The road crosses the creek four times on a variety of concrete bridges. Forest Service Road 982 intersects the main road at Craig Creek and provides access into the corridor from the west.

In addition to the paralleling road, five other roads cross Wilson Creek. State Road 1335, a two-laned, paved highway, crosses the creek about 2 miles above Johns River. The upper four miles are crossed by the Blue Ridge Parkway and U.S. Highway 221, both two-laned paved highways, and two single-laned gravel roads - Watauga Turnpike (SR 1514) and Roseboro Gragg Road (FS 192). All are primary travel routes.

Upper Wilson Creek, between FS Roads 192 and 45, is accessible only by hiker trail. The 6-mile long Wilson Creek Trail (FS 258) follows the creek along this segment. The 0.8-mile long White Rocks Trail (FS 264) connects this main trail with another point along FS Road 45. FS Road 4001 and Bill Crump Trail (FS 257) provide access to the privately-owned Bill Crump property, an old abandoned farm about midway along this stream segment. The Tanawha Trail, that parallels the Blue Ridge Parkway for 13.5 miles between Beacon Heights and Julian Price Park, traverses the headwaters of Wilson Creek. A trail along the crest of Grandfather Mountain crosses Calloway Peak, the upper boundary of the river corridor.

### **Recreational Activities**

Fishing, hiking, backpacking, and hunting are the primary recreational uses in the upper river corridor above Edgemont. Private ownership along the river from Edgemont downstream to the gorge generally precludes public recreation use. Much of this private land is developed with permanent and seasonal residences. The owners use the creek for fishing and swimming. Mortimer, a Forest Service campground and picnic area, provides the only developed public recreation facilities along this river segment.

Wilson Creek Gorge receives the heaviest recreation use. This 2.3-mile river segment is popular for fishing, swimming, picnicking, sunbathing, and whitewater boating. In response to crowded summer conditions and a long history of law enforcement problems, the gorge is managed under a Forest Supervisor's Order that restricts parking to designated areas and prohibits alcoholic beverages, campfires and camping.

The section through the gorge is the most popular for whitewater paddling with a series of rapids (Class III-V) that wind through boulder gardens and drop over ledges into small pools. Boating use is generally light and moderate due to natural stream-flow fluctuations, the skill level required to paddle the gorge, and its short length. The heavy use by other recreationists tends to discourage some boaters. The lack of public launch areas also discourages use. Upper sections of Wilson Creek offer opportunities for high-skill creek boating when the water level is adequate. Other sections of Wilson Creek provide opportunities for Class II-III Whitewater.

### **Historic And Cultural Resources**

There are 15 recorded cultural resource sites in the area. They include 12 prehistoric sites and 3 historic sites. The prehistoric sites are Archaic period sites. The Archaic period spanned roughly 7,000 years (8000-1000 BC). Formerly a hunting-gathering lifestyle, people began to settle down and cultivate or "manage" plants toward the end of this period. All of the known sites occur along the main boundary ridge or on other ridges in the corridor. One site is rated Class II, potentially eligible for listing on the

National Register; the others are Class III, not eligible for listing. The wider, gentler floodplains in the corridor have a high probability for additional sites. Most of these flat areas occur on private lands. The narrow, steep floodplains in the headwaters and gorge have a low probability for sites.

The historic sites include the Edgemont cotton mill site and the Civilian Conservation Corps (CCC) Camp at Mortimer. By the late 1800s, the town of Mortimer had a population of 800. The Mortimer-Edgemont area was a center of activity for Caldwell County, with motels, summer homes and industries. Much of this growth was related to the easy access provided by the Carolina and Northwestern Railroad spur line into the community. Industries included a bandsaw and planing mill and the Edgemont cotton mill. Both were destroyed by flooding in 1940 and were not rebuilt. The ruins of the cotton mill are still standing. It is a Class II site, eligible for federal listing.

Camp Grandfather Mountain CCC Camp was established on Thorps Creek in 1933 and operated until 1942. Mortimer Recreation Area, a Forest Service campground and picnic area, presently occupies the site of the camp. The district work center adjacent to this area is the only remaining building built by the CCC. This building is a Class II site, potentially eligible for federal listing. The portion of the CCC camp that is now Mortimer Campground is a Class III site, not eligible for listing.

The steel pratt and pin bridge #272, located at the first crossing of Wilson Creek traveling north on State Road 1328, was a Class II site. The bridge has been dismantled and stored by the State to allow for road improvements.

The sites of old railroads, dams and bridges are also known to be located along the length of Wilson Creek. The area was also used for summer hunting by the Cherokee Indians. The site of one hunt camp is located on private land about ¼ mile below Brown Mountain Beach.



## Appendix B: Evaluation Criteria For Outstandingly Remarkable Values

This criteria was used to determine which, if any, Outstandingly Remarkable Values exist for Wilson Creek. In all categories, the following values were rated as Class A-Distinctive for Wilson Creek.

### Scenic

**Class A - Distinctive.** The landform is complex with steep, dissected slopes and sharp exposed ridges. The stream may flow through a gorge with steep or narrow walls. Rock features stand out on the landform and are unusual or outstanding in size, color, or location. Forest cover is continuous or broken with a high degree of patterns and an unusual or outstanding diversity in plant species; large or old-growth timber may be present. The streambed has a significant gradient with numerous or unusual flow characteristics including falls, cascades, rapids, pools and meanders. The stream width and volume ranges from large to medium.

**Class B - Common.** Slopes are moderately steep and generally uniform with some dissection. Rock features are obvious, but do not stand out; boulders and outcrops may be common, but have no unusual or outstanding characteristics. Forest cover is continuous with interspersed patterns and common diversity in plant species. The streambed has a gradual to moderate gradient with small riffles, rapids, and cascades. The stream width and volume ranges from medium to small.

**Class C - Minimal.** The terrain has 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 is generally small with low volume and a gradual gradient. There is little or no variety in flow characteristics although some riffles and small rapids may be present.

### Recreational

**Class A - Distinctive.** The river provides opportunities for water-oriented activities and recreation experiences which are unique to that stream or a limited number of streams or which can occur only because of the character of the stream. There are significant or numerous Class II-IV rapids for whitewater boating and outstanding opportunities for passive viewing of scenery. The river provides a high quality sport fishing experience. It

is accessible for fishing, the surroundings are scenic, fishing is relatively successful, and it can be waded for traditional fly-fishing.

**Class B - Common.** The river provides opportunities for water-oriented activities typical of most mountain streams including fishing, wading, and tubing. It may have some Class I-II rapids for whitewater boating.

**Class C - Minimal.** Stream size, flow or other characteristics limit opportunities or attractiveness for water-oriented recreation activities.

### **Geologic**

**Class A - Distinctive.** The river and valley clearly display significant or unusual geomorphic or structural features. It also includes those rivers clearly exposing geologic formations, which are visible in few or no other sites. The amount of exposed rock is significant which provides excellent opportunities for geologic study.

**Class B - Common.** The amount of exposed rock is limited; features and formations are typical of those commonly found in the Appalachian Mountains. There is some opportunity for geologic study.

**Class C - Minimal.** The river provides few or no exposed rock formations and no significant geologic features.

### **Fish And Wildlife**

**Class A - Distinctive.** Resident aquatic and wildlife populations, including known populations of proposed endangered, threatened and sensitive species (PETS), occur only because of the quality and character of the stream or riparian area. This category includes streams classified as “wild trout waters” which sustain wild trout populations and streams or riparian areas identified as habitat for PETS.

**Class B - Common.** Resident fish and wildlife populations are common to most mountain streams. This category includes streams classed as “hatchery supported waters” which do not sustain reproducing trout populations.

**Class C - Minimal.** Stream characteristics limit the number and type of species present. Populations of game fish species are largely absent. The fish community may be dominated by more pollution tolerant species. The total number of fish species is less than in comparable, higher quality streams.

### **Botanical**

**Class A - Distinctive.** Characteristics of the river have enhanced the variety of plant communities and species to an exceptional level. The integrity of the natural communities present is largely intact. There are proposed, threatened, endangered or sensitive (PETS) species present because of the character of the river corridor.

**Class B - Common.** An expected or typical variety of plant species is present. The natural communities show some evidence of human disturbance. PETS species are unlikely to occur because of the character of the river corridor.

**Class C - Minimal.** There is an unusually or unexpectedly small variety *Class B - Common.* Resident fish and wildlife populations are common to most mountain streams.

This category includes streams classed as “hatchery supported waters” which do not sustain reproducing trout populations.

### **Historical And Cultural**

***Class A - Distinctive.*** The river corridor has a high probability for archeological sites. It contains known sites which meet the criteria for listing or are listed in the National Register of Historic Places or sites exist that may not be unique in character or content, but are in a unique state of preservation. In addition, these sites are located in or along the riverbed or are integrally associated with the river.

***Class B - Common.*** The river corridor has a moderate probability for archeological sites. Known sites are similar to other known sites and contain limited information; some sites may have been disturbed prior to scientific investigation. Some sites may meet the criteria for listing or are listed in the National Register of Historic Places, but are not located in or along the riverbed and are not integrally associated with the river.

***Class C - Minimal.*** The river corridor has a low probability for archeological sites. Known sites do not meet the criteria for listing in the National Register of Historic Places and are not integrally associated with the river.



## **Appendix C: Applicable Laws, Regulations, and Plans**

This is a summary of most applicable laws, regulations, and plans that affect the management of the Wilson Creek National Wild and Scenic River Corridor. These may change over time or some direction may be added or eliminated.

### **Statutes and Regulations Common to All Lands**

American Indian Religious Freedom Act

Antiquities Act

Archaeological Resource Protection Act

Bald and Golden Eagle Protection Act

Clean Water Act

Clean Air Act

Electric Consumers Protection Act

Endangered Species Act

Federal Power Act

Fish and Wildlife Coordination Act

Historic Sites Act

NC Sediment and Pollution Control Act

Historic Preservation Act

Land and Water Conservation Fund Act

Migratory Bird Treaty Act

Migratory Bird Conservation Act

Mineral Leasing Act

Mining Law

Mining and Minerals Policy Act

National Environmental Policy Act

Sikes Act

Soil and Water Resources Conservation Act

Wild and Scenic Rivers Act

### **Section 7 of the Wild & Scenic Rivers Act**

Section 7 is one of the most important and powerful parts of the 1968 Wild and Scenic Rivers Act (WSRA). This key provision directs federal agencies to protect the free-flowing condition and other values of designated rivers and congressionally authorized study rivers. Through the language of Section 7 of the WSRA, Congress expressed the clear intent to protect river values from the harmful effects of federal water resources projects.

More specifically, the WSRA prohibits the Federal Energy Regulatory Commission (FERC) from licensing the construction of hydroelectric facilities on rivers that have been designated as components of the National System. Further, the WSRA prohibits other federal agencies from assisting in the construction of any water resources project that would have a direct and adverse effect on a designated river. The WSRA also includes a standard that governs federal water resources projects below or above a designated river. Determinations under Section 7(a) or 7(b) of the WSRA as to the severity of the impacts of federal water resource projects are made by the river-administering agency; in the case of the Wilson Creek, the administering agency is the US Forest Service (USFS).

The USFS has developed definitions for “water resources projects” that are accepted by the other wild and scenic river administering agencies. Water resources projects include any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the federal Power Act, or other construction of developments, which would affect the free-flowing characteristics of a wild and scenic river. In addition to projects licensed by the FERC, water resources projects may also include: dams; water diversion projects; fisheries habitat and watershed restoration or enhancement projects; bridges and other roadway construction or reconstruction projects; bank stabilization projects; channelization projects; levee construction; recreation facilities such as boat ramps and fishing piers; and, activities that require a 404 permit from the ACOE. It is important to note that Section 7 review is limited solely to federal water resources projects.

### **Section 10 of the Rivers & Harbors Act, Section 404 of the Clean Water Act**

The Secretary of the Department of Army, acting through the Chief of Engineers of the Army Corps Of Engineers (ACOE), is authorized to issue permits for specified activities on the waters of the United States through Section 10 of the Rivers and Harbors Act and Section 404 of the Federal Water Pollution Control Act (Clean Water Act). These permits are issued only after notice and opportunity for public hearings (to evaluate the

impact of the proposed work on the public interest). Typical activities that would require permitting by the ACOE include:

- Construction of structures such as piers, wharves, docks, dock houses, boat hoists, boat houses, floats, marinas, boat ramps, marine railways, and bulkheads;
- Construction of revetments, groins, breakwaters, levees, darns, dikes, berms, weirs and outfall structures;
- Placement of wires, cables or pipes in/above the water, including intake/outfall pipes;
- Dredging, excavation and depositing of fill and dredged material: and
- Construction of fill roads and placement of riprap.

Section 10 of the Rivers and Harbors Act of 1899 gave authority to the ACOE to regulate obstructions (both structures and activities) to navigable waters of the United States. “Navigable waters” under Section 10 include those subject to the ebb and flow of the tide and those used for interstate commerce in the past, in the present, or (potentially) in the future. Dredging and disposal, filling, placement of in-water structures, and bank stabilization are regulated in navigable waters up to the ordinary high water line. These activities would require a permit from the ACOE. The ACOE has determined that Wilson Creek is non-navigable, therefore Section 10 does not apply.

Section 404 of the Clean Water Act requires the ACOE to regulate disposal of dredged or fill material in “waters of the United States”—a much broader term than the “navigable waters” of Section 10 jurisdiction. Section 404 covers traditionally navigable waters, tributary streams, and wetlands. Most major activities on these lands would require a permit from the ACOE. As defined by the river-administering agencies, ACOE permits are considered to be “federal assistance” under Section 7 of the WSRA. As such, ACOE permit applications for activities in wild and scenic rivers are subject to the provisions of Section 7. A permit from the ACOE will require a Section 7 determination by the river-administering agency when the proposal occurs in a designated river and is a water resources project, i.e., affects the river’s free-flowing condition. The ACOE process requires a written determination from the river-administering agency for such projects.

Most major actions within the river corridor that could alter the free-flowing character of the river, or negatively impact the Outstandingly Remarkable Values, would require a permit from the ACOE, which would trigger a review by the river-administering agency for compliance with Section 7 of the WSRA.

### **Nationwide Permits and Wild and Scenic Rivers**

It is critical to note that certain types of activities are typically exempted from requiring Section 404 permits. Normal farming, forestry, and ranching activities, structure maintenance, and other actions with minimal adverse effects may be exempted under the 1977 amendments to the Clean Water Act.

In addition to activities exempted by the 1977 amendments, other minor activities, including fills placed at minor stream crossings, utility line crossings, or limited bank

protection are often covered by what is known as a Nationwide Permit, provided certain standard conditions are met. These activities may have significant impact on a wild and scenic river, or cumulatively impact the character of the river. To accommodate this very real possibility, ACOE rules (61 FR 4772647728, September 10, 1996; Nationwide Permit Conditions; General Conditions, Subsection 7) provide that:

*No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status: unless the appropriate federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely effect the Wild and Scenic River designation, or study status.*

This allows the administering agency the opportunity to evaluate the impacts of an activity before the activity is authorized under the Nationwide Permit.

### **Section 10 and Section 404 Permits and Fish and Wildlife**

While the ACOE is ultimately responsible for issuance of permits under Section 10 and Section 404, the Fish and Wildlife Coordination Act requires that the ACOE consult with the US Fish and Wildlife Service (USFWS) and state fish and wildlife agencies about possible adverse impacts to aquatic life from waterway development. The National Marine Fisheries Service (NMFS) is also involved in this permit review, to ensure that fish and wildlife are considered equally with other factors when determining the suitability of waterway projects. The USFWS also makes broad-ranging recommendations on mitigation needed to compensate for unavoidable adverse impacts. While recommendations of these agencies have significant influence on permit decisions, the ACOE has final authority.

The ACOE is also required to consult with the USFWS if an endangered species may be impacted by an activity. The USFWS prepares a separate biological opinion, and the activity may not be authorized unless it is determined that the project is not likely to jeopardize the continued existence of the species or result in the destruction of the habitat of the species.

### **Endangered Species Act**

As mentioned in the threatened and endangered species section, PETS (proposed, endangered, threatened and sensitive species) are managed cooperatively with the North Carolina Natural Heritage Program, the North Carolina Wildlife Resources Commission and the U.S. Department of Interior, Fish and Wildlife Service.

Under the Endangered Species Act, the federal government must develop restoration plans for listed species and must take no actions to further endanger these species. This, in theory, should preclude federal actions, which would harm these Outstandingly Remarkable resources, and should provide for further habitat protection, which is consistent with wild and scenic river designation.

## **North Carolina Surface Freshwater Classifications**

Surface Water Classifications are designations applied to surface water bodies, such as streams, rivers and lakes, which define the best uses to be protected within these waters (for example swimming, fishing, drinking water supply) and carry with them an associated set of water quality standards to protect those uses. Surface water classifications are one tool that state and federal agencies use to manage and protect all streams, rivers, lakes, and other surface waters in North Carolina. Classifications and their associated protection rules may be designed to protect water quality, fish and wildlife, the free flowing nature of a stream or river, or other special characteristics. The North Carolina Division of Water Quality (DWQ) classifies all surface waters. A water body's classification may change at the request of local government or citizens.

Wilson Creek is classified by the DWQ as “**B TR ORW**”. Waters are classified *B* if used for primary recreation and other uses suitable for Class C. Primary recreation activities include swimming, skin diving, water skiing, and similar uses involving human body contact. There are no restrictions on watershed development activities. Discharges must meet treatment reliability requirements such as backup power supplies and dual train design.

Trout Waters, *TR*, is a supplemental classification intended to protect freshwaters for natural trout propagation and survival of stocked trout. This affects wastewater discharges but there are no watershed development restrictions except stream buffer zone requirements of NC Division of Land Resources. DWQ's classification is not the same as the NC Wildlife Resources Commission's Designated Public Mountain Trout Waters classification.

Outstanding Resource Waters, *ORW*, is a supplemental classification intended to protect unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance. To qualify, waters must be rated Excellent by DWQ and have one of the following resource values:

- Outstanding fish habitat or fisheries,
- Unusually high level of water based recreation,
- Some special designation such as Wild and Scenic River
- Important component of state or national park or forest,
- Special ecological or scientific significance (rare or endangered species habitat, research or educational areas).

No new or expanded wastewater discharges are allowed and there are associated watershed storm-water controls enforced by DWQ.

## **North Carolina Sedimentation Pollution Control Act (SPCA)**

Under the SPCA, no land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse. Waters that have been classified as trout waters (*TR*) by the DWQ will have an undisturbed zone of 25 feet or of sufficient width to confine visible siltation within twenty-five feet or 25 percent of the buffer zone nearest the land-disturbing activity, whichever is greater.

The 1973 SPCA provided a blanket exemption for agricultural and forestry activities. The act was amended in 1990 to maintain the forestry exemption but only on the condition that site-disturbing forestry activities are conducted in accordance with Forest Practice Guidelines Related to Water Quality. Forest Practice guidelines requires a “best management practices” buffer near rivers in order to qualify for cost-share assistance in reforestation. Issues addressed by these mandatory standards include prohibition of debris entering streams, access roads and skid trail stream crossings, access road entrances, prohibition of waste entering streams, water bodies and groundwater, pesticide application, fertilizer application, stream temperature and rehabilitation of project sites.

### **Caldwell County Ordinances**

Caldwell County has zoning and flood ordinances in effect that promote the orderly development of the county to prevent overcrowding, traffic congestion, and healthy conditions. Current ordinances and any proposed amendments are posted on the Caldwell County website.

Caldwell County government and Chamber of Commerce are also interested in cooperating in providing recreation opportunities in the Wilson Creek area that are sustainable and provide safe access to visitors.



## **Appendix D: List Of Implementation Priorities**

Section IV of this CRMP establishes the criteria used to guide subsequent site-specific agency projects within the corridor. This appendix identifies an initial list of potential projects. Because the amounts and types of funds are not always predictable, it is not possible to set rigorous priorities for expenditures over the long term and it is necessary to adjust priorities from year to year. This initial list of actions can be updated as needed without amending the CRMP.

### **Guidelines**

Priority of Actions will be addressed in the following order:

- Public safety Considerations
- Actions required by the Wild and Scenic Rivers Act such as protection of the Outstanding Remarkable Values and Section 7 Determinations
- Improvements within the Corridor that meet direction of the CRMP
- Improvements within the Watershed that enhance the Corridor and meet direction of the CRMP

### **On-going Actions**

- Develop baseline inventories for:
  - Water Resource Projects
  - Site Impacts
  - Vegetative Cover
  - Cultural Features/Sites
  - Water Quality
  - Exotic Species
- Maintain inventory of potential parking expansion/improvement sites (USFS and private)
- Consider designation of campsites in some areas
- Blaze all trails and provide routine maintenance
- Enhance vista opportunities
- Consider potential partnerships/acquisitions/easements to meet goals of CRMP
- Develop and maintain fishing access inventory and list of needed improvements

### **Short-term Priority Actions**

- Develop interpretation/information about Mortimer and other places (consider kiosks, etc)
- Work to provide public access via private property at 1-2 locations
- Consider designation of Scenic Byway and Auto Tour
- Clarify gold panning regulations
- Coordinate development of a new map for the Wilson Creek area
- Clarify or designate trail uses

### **Long-term Priority Actions**

- Enhance Harpers Creek Falls Overlook
- Coordinate corridor/watershed opportunities for Watershed Assessment
- Improve put-in/take-out opportunities to meet goals of CRMP
- Improve and expand parking to meet goals of CRMP
- Provide a variety of interpretation including geologic and cultural
- Develop fishing access improvements to meet goals of CRMP
- Develop diverse/dispersed trail system in watershed

## **Appendix E: Glossary**

### **Acronyms**

ACOE – Army Corps of Engineers

BMP - best management practice

CFR - Code of Federal Regulations

CFS - cubic feet per second

CWA - Clean Water Act

DFC - desired future condition

EA – Environmental Assessment

EIS - Environmental Impact Statement

EPA - Environmental Protection Agency

FSH - Forest Service Handbook

FSM - Forest Service Manual

IDT - Interdisciplinary Team

IS - Interpretive Services

LE - law enforcement

MA - management area

MIS - management indicator species

MOU - memorandum of understanding

NEPA - National Environmental Policy Act

NF - National Forest

NFMA - National Forest Management Act

NFS – National Forest System

NPS – National Park Service

NVUM – National Visitor Use Monitoring

OHV - Off-Highway Vehicle

PAOT - persons-at-one-time

PETS - proposed, endangered, threatened, or sensitive species

PL - public law

R - Rural

RD - Ranger District

RN – Roaded Natural

RN 1 – Accessible Roaded Natural

RN2 – Remote Roaded Natural

ROS - Recreation Opportunity Spectrum

ROW - right-of-way

RVD - recreation visitor-day

SPM – Semi-Primitive Motorized

SPNM – Semi-Primitive Non-Motorized

T&E - Threatened and Endangered

USDA - U.S. Department of Agriculture

USDI - U.S. Department of Interior

USFWS - U.S. Fish and Wildlife Service

USGS - U.S. Geological Survey

VMS – Visual Management System

VQO - visual quality objective

WFUD - wildlife and fish user-day

WSA - Wilderness Study Area

## Terms

### A

**accessibility** – The relative ease or difficulty of getting from or to someplace, especially the ability of a site, facility or opportunity to be utilized by persons of varying physical and mental abilities.

**accessible facility** - A single or contiguous group of improvements, that exists to shelter or support Forest Service Programs that is in compliance with the highest standard of current federal or Forest Service accessibility guidelines, at the time of construction.

**Agriculture Conservation Program** – USDA cost-share program for stream bank improvement.

**alternative** - In forest planning, a mix of resource outputs designed to achieve a desired management emphasis as expressed in goals and objectives, and in response to public issues or management concerns.

**amendment** - A formal alteration of the LMP by modification, addition, or deletion. Forest Plan amendment requires an environmental analysis. Significant findings require an environmental impact statement and the amendment will follow the same procedure used for plan preparation. Insignificant findings allow the changes to be implemented following public notification. Amendments can take place at any time following plan approval.

**aquatic ecosystem** - Component includes: the stream channel; lake and estuary beds; water; biotic community, and associated habitat features. Included are streams and lakes with intermittently, semi-permanently and seasonally flooded channels or streambeds. In the absence of flowing water, intermittent streams may have pools or surface water may be absent altogether.

**aquatic habitat types** - The classification of in-stream habitat based on location within channel, patterns of water flow, and nature of flow controlling structures. Habitat is classified into a number of types according to location within the channel, patterns of water flow, and nature of flow controlling structure. Riffles are divided into three habitat types: low gradient riffles, rapids, and cascades. Pools are divided into seven types: secondary channel pools, backward pools, trench pools, plunge pools, lateral scour pools, dammed pools, and beaver ponds. Glides, the third habitat type, are intermediate in many characteristics between riffles and pools. It is recognized that as aquatic habitat types occur in various parts of the country, additional habitat types may have to be described. If necessary, the regional fishery biologist will describe and define the additional habitat types.

### B

**BEIG** - Built Environment Image Guide, is a guide for design of administrative and recreation buildings, landscape structures, site furnishings, wayside structures, and signs installed or operated by the Forest Service, its cooperators and permittees.

**best management practice (BMP)** - A practice, or a combination of practices determined to be the most effective and practical means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

**biodiversity** - The variety of life in an area, including the variety of gene pools, species, plant and animal communities, ecosystems, and the processes through which individual organisms interact with one another, and their environments.

**biological evaluation** - A documented Forest Service review of its programs or activities in sufficient detail to determine how an action or proposed action may affect any proposed, endangered, threatened, or sensitive species.

**burning (prescribed)** - The application of fire, usually under existing stands and under specified conditions of weather and fuel moisture, in order to attain silvicultural or other management objectives.

## C

**carrying capacity** - The number of organisms of a given species and quality that can survive in, without causing deterioration of, a given ecosystem through the least favorable environmental conditions that occur within a stated interval of time. Also, the number of recreation visitors such as boaters, anglers, or others that can use a river corridor (or other area) in any specified time period without causing deterioration of the quality of the desired recreation experience or other resource conditions.

**channelization** – Artificial change of a stream channel profile.

**closed road/trail** – A road that is closed for public use.

**cold water fishery** - Aquatic habitats that predominately support fish species that have temperature tolerances up to about 70 °F, and exhibit their greatest reproductive success at temperatures below 65 °F (18.3 °C).

**constraint** - A restriction or limit that must be met.

**creel survey** – A survey of anglers.

**critical habitat** – Habitat, determined by the Secretary of Interior, essential to the conservation of the endangered or threatened species.

**cultural resources** - Physical remains of districts, sites, structures, buildings, networks or objects used by humans in the past. They may be historic, prehistoric, archaeological, architectural or spiritual in nature. Cultural resources are non-renewable.

## D

**demand** - The amount of an output that users are willing to take at specified price, time period, and condition of sale.

**desired future condition** - An expression of resource goals that have been set for a unit of land. It is written as a narrative description of the landscape as it will appear when the goals have been achieved. The condition also includes a description of physical and biological processes, the environmental setting, and the human experience.

**desired landscape character** - Appearance of the landscape character to be retained or created over time, recognizing that a landscape is a dynamic and constantly changing community of plants and animals. It includes the combination of landscape design attributes and opportunities, as well as biological opportunities and constraints.

**developed recreation** - Recreation use or opportunities occurring at developed sites.

**Development Level** - An indication of site modification based on classes in the Recreation Opportunity Spectrum. Development Level 1 equates to Primitive, with minimum site modification; 2 equates to Semi-Primitive Motorized/Nonmotorized, with little site modification; 3 equates to Roaded Natural, with moderate modification; 4 equates to Rural, with heavy site modification; and 5 relates to Urban, with a high degree of site modification. See *Facilities level*, below, and FSM 2330.3, Exhibit 1.

**dispersed recreation** – Recreation opportunities or use occurring in the general forest area. Not taking place in developed sites availability, or the physical environment.

**diversity** - The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

## E

**ecosystem** - A complete interacting system of organisms and their environment.

**endangered species** - Any species that is in danger of extinction throughout all or a significant portion of its range, other than members of the class *Insects* that have been determined by the Department of Interior to constitute a pest whose protection under the provisions of this (Endangered Species Act of 1973) act would present an overwhelming and overriding risk to humans. It must be designated in the *Federal Register* by the appropriate secretary.

**Endangered Species Act of 1973** - An act that enables endangered and threatened species to be conserved. It provides a program for the conservation of such species, and takes appropriate steps to achieve the purposes of the (relevant) treaties and conventions.

**endemic** – Species restricted to a particular geographic area. Usually limited to one or a few small streams or a single drainage.

**environment** - All the conditions, circumstances, and influences surrounding and affecting the development of an organism, or group of organisms.

**environmental effect** - The result or consequence of an action upon the environment.

**environmental impact** - Used interchangeably with environmental consequence or effect.

**erosion** - The wearing away of the land surface by the action of wind, water, or gravity.

**essential habitat** - Habitat in which threatened and endangered species occur, but which has not been declared as critical habitat. Occupied habitat or suitable unoccupied habitat necessary for the protection and recovery of a federally designated threatened or endangered species.

## F

**facility** - A single or contiguous group of improvements that exists to shelter or support Forest Service Programs. The term may be used in either a broad or narrow context; for example, a facility may be a ranger station compound, lookout tower, leased office, work center, separate housing area, visitor center, research laboratory, recreation complex, utility system, or telecommunications site.

**Federal Register** - The designated document that notifies the public of federal actions and includes Notice of Intent, calls for public involvement, etc. It also publishes the regulations needed to implement those federal actions.

**fisheries classification** - Water bodies and streams classed as having a cold- or warm-water fishery. This designation is dependent upon the dominant species of fish occupying the water.

**fisheries habitat** - Streams, lakes, and reservoirs that support fish.

**floodplains** - Lowland or relatively flat areas joining inland and coastal water including, at a minimum, that area subject to a 1-percent (100-year return period) or greater chance of flooding in any given year. Although floodplains and wetlands fall within the riparian area, they are defined here separately as described in the Forest Service Manual.

**foreground** - The area between the viewer and the middle ground in a landscape; generally from 0 to ½ mile distance.

**forest development road** - A road wholly or partly within, or adjacent to, and serving a part of the NFS. It also has been included in the Forest Development Road System Plan.

**forest health** – The perceived condition of a forest derived from concerns about factors as its age, structure, composition, function, vigor, presence of unusual levels of insects or disease, and resilience to disturbance.

**forest land** - Land at least 10 percent occupied by forest trees of any size, or formerly having had such tree cover, and not currently developed for non-forest use. Lands developed for non-forest use including areas for crops, improved pasture, residential, or administrative areas, improved roads of any width, adjoining road clearing, and power line clearing of any width.

**Forest and Rangeland Renewable Resources Planning Act of 1974** - An act of Congress requiring the preparation of a program for the management of the national forests' renewable resources, and of land and resource management plans for units of the NFS. It also requires a continuing inventory of all NFS lands and renewable resources.

**Forest Service Handbook (FSH)** - A handbook that provides detailed instructions for proceeding with specialized phases of programs or activities for Forest Service use.

**Forest Service Manual (FSM)** - Agency manuals that provide direction for Forest Service activities.

**forest trail system** - Trails that are part of the Forest transportation system. It is a designated path commonly used and maintained for hikers, horse riders, bicycles, or two-wheeled motorized vehicles.

**forest supervisor** - The official responsible for administering the NFS lands in a Forest Service administrative unit. It may consist of two or more national forests or all the forests within a state. The supervisor reports to the regional forester.

**forest-wide standard** - A performance criterion indicating acceptable norms, specification, or quality that actions must meet to maintain the minimum considerations for a particular resource. This type of standard applies to all areas of the forest regardless of the other management prescriptions applied.

**fuel treatment** - The rearrangement or disposal of fuels to reduce fire hazard. Fuels are defined as living and dead vegetative materials consumable by fire.

**fuels management** - The planned treatment of fuels to achieve or maintain desired fuels conditions.

## G

**game species** - Any species of wildlife or fish for which seasons and bag limits have been prescribed, and which are normally harvested by hunters, trappers, and fishermen under state or federal laws, codes, and regulations.

**geologic features** - Landforms or other features of significant geologic interest that may require special management to protect the special qualities, or provide interpretation to the public.

**geologic formation** - A mappable body of rock identified by distinctive characteristics, some degree of internal homogeneity, and stratigraphic position. The name normally consists of two parts. The first is the name of the geographic locality where the formation was first identified and described. This is followed by a descriptive geologic term, usually the dominant rock type.

**groundwater** - Water in a saturated zone in a geologic stratum. Water stored below the water table where the soil (or other geologic material) is saturated.

## H

**habitat** - The native environment of an animal or plant.

**heritage sites/assets** - Remnants of past cultures that remind us of the centuries-old relationship between people and the land (from *National Heritage Strategy*); property, plant or equipment that are unique for one or more of the following reasons: (1) historical or natural significance; (2) cultural, educational or artistic/aesthetic significance; or (3) significant architectural characteristics.

**historic landscapes** - Industrial, agricultural, pastoral or domestic landscapes that have evolved over many years from human alteration. They are commonly functional and often vernacular, and may not always be visually pleasing, often responding to specific functions or topography, not formally planned or designed. They may be informal to the degree that they appear to be natural occurrences, or the spatial organization of built and natural elements may be quite traditional or formal. They are identifiable and can be mapped, either as point-specific features or enclaves within a larger landscape, as entire landscapes themselves, or as a combination of both.

**immediate foreground** - The area in the landscape from the viewer out to 300 feet distance.

**in-stream flow** - The presence of adequate stream flow in channels necessary to maintain the integrity of the stream channel, and protection of downstream beneficial uses including fish and wildlife needs, outdoor recreation uses of water, and livestock watering needs.

**Interdisciplinary Team** - A group of resource specialists (e.g.: forester, wildlife biologist, hydrologist, landscape architect, engineer, etc.) responsible for developing the Forest Plan/Environmental Statement, and for making recommendations to the forest supervisor.

**interpretive services** - Visitor information services designed to present inspirational, educational, and recreational values to forest visitors in an effort to promote understanding, appreciation, and enjoyment of their forest experience.

## L

**land exchange** - The conveyance of non-federal land or interests in the land in exchange for NFS land or interests in land.

**landscape** - An area composed of interacting ecosystems that are repeated because of geology, land form, soils, climate, biota, and human influences throughout the area. Landscapes are generally of a size, shape, and pattern that are determined by interacting ecosystems.

**landscape character** - Particular attributes, qualities, and traits of landscape that give it an image and make it identifiable or unique.

**large woody debris (LWD) (coarse woody debris) (CWD)** – Any piece(s) of dead woody material, e.g., dead boles, limbs, and large root masses, on the ground in forest stands, or in streams.

**lease** - A contract between the landowner and another granting the latter the right to search for and produce oil, gas, or other mineral substances (as specified in the document) on payment of an agreed rental, bonus, or royalty. This right is subject to the terms, conditions, and limitations specified in the document.

**Limits Of Acceptable Change (LAC)** - A nine step planning process used to establish acceptable resource and social conditions and prescribe appropriate management actions.

## M

**management direction** - A statement of multiple-use and other goals and objectives. The associated management prescriptions, and standards and guidelines for attaining them.

**management indicator species** – An animal or plant selected for use as a planning tool in accordance with 1982 NFMA regulations (36 CFR 219.19). These species are used to help set objectives, analyze effects of alternatives, and monitor plan implementation. They are chosen because their population changes are believed to indicate the effects of management on selected biological components.

**middle ground** - The space between the foreground and the background in a landscape.

**mineral exploration** - The search for valuable minerals on lands open to mineral entry.

**mitigation** - Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

**modification** - A visual quality objective in which human activity may dominate the characteristic landscape but must, at the same time, use naturally established form, line, color, and texture appearing as a natural occurrence when viewed in foreground or middle ground.

**monitoring** - Techniques used to validate standards, determine visitor expectations, needs and preferences and to assess resource conditions.

**motorized equipment** - Machines that use a motor, engine, or other non-living power source. This includes but is not limited to such machines as chain saws, aircraft, snowmobiles, generators, motor boats, and motor vehicles. It does not include small battery or gas powered hand carried devices such as shavers, wristwatches, flashlights, cameras, stoves, or other similar small equipment.

**multiple use** - The management of all the various renewable surface resources of the NFS so that they are used in a manner that will best meet the needs of the American people. Making the most judicious use of the land for these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in the use to conform to changing needs and conditions.

## **N**

**National Environmental Policy Act (NEPA) of 1969** - An act to declare a national policy that will encourage productive and enjoyable harmony between humankind and the environment. It was created to promote efforts that will prevent or eliminate damage to the environment, biosphere, and stimulate the health and welfare of humanity. In addition, the act was crafted to enrich the understanding of the ecological systems and natural resources important to the nation, and establish a Council of Environmental Quality.

**National Forest Land and Resource Management Plan (LMP)** - A plan developed to meet the requirements of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, that guides all natural resource management activities and establishes management standards and guidelines for the NFS lands of a given national forest.

**National Forest Management Act (NFMA) of 1976** - Act passed as an amendment to the Forest and Rangeland Renewable Resources Planning Act, requiring the preparation of regional guides and forest plans, and the preparation of regulations to guide them.

**National Forest System (NFS)** - All national forest lands reserved or withdrawn from public domain of the United States and acquired through purchase, exchange, donation, or other means. National Grasslands and land utilization projects administered under Title III of the Bankhead–Jones Farm Tenant Act (50 Stat. 525, 7 U.S.C. 1010–1012), and other lands, waters, or interests that are administered by the Forest Service, or are designated for administration through the Forest Service as a part of the system.

**National Forest System Land**—federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

**National Register of Historic Places** - The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior.

**National Visitor Use Monitoring (NVUM)** - A systematic process to estimate annual recreation and other uses of NFS lands through user surveys.

**National Wild and Scenic Rivers System** - Rivers with outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values designated by Congress under the Wild and Scenic Rivers Act of October 2, 1968, for preservation of their free-flowing condition.

**no-action alternative** - The most likely condition expected to exist in the future if current management direction would continue unchanged.

**non-game species** - Any species of wildlife or fish which is ordinarily not managed or otherwise controlled by hunting, fishing, or trapping regulations. The designation may vary by state.

**non-point source pollution** – A diffuse source of pollution not regulated as a point source. May include atmospheric, deposition, agricultural runoff, and sediment from land-distributing activities.

## O

**objective** - A concise, time-specific statement of measurable planned results that respond to pre-established goals. It forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

**off-highway vehicle (OHV)** - Any vehicle capable of being operated off established roads; e.g., motorbikes, four-wheel drives, and snowmobiles. (Also referred to as ORV or off-road vehicle)

**off-stream use** – Water withdrawn or diverted from a ground or surface-water source for public water supply, industry, irrigation, livestock, thermoelectric power generation, and other uses.

**Outstandingly Remarkable Value (ORV)** – Criteria used to determine whether or not a river is eligible for consideration as a Wild and Scenic River. Those values listed in Section 1(b) of the Wild and Scenic Rivers Act are “scenic, recreational, geological, fish and wildlife, historical, cultural, or similar values...” Once the ORVs for a Wild and Scenic River are identified, all management plans and actions must ensure their enhancement or protection.

## P

**PAOT** - Persons-at-one-time; a measure of recreation carrying capacity, especially for developed sites. National conventions include 5 persons per family picnic/camp unit, 3.5 persons per parking lot stall at a trailhead or visitor center, 1.5 persons per motorcycle parking stall and 40 persons per tour bus parking stall.

**partial retention** - A visual quality objective which in human activities may be evident, but must remain subordinate to the characteristic landscape.

**partnership** - Voluntary, mutually beneficial and desired arrangement between the Forest Service and another or others to accomplish mutually agreed-on objectives consistent with the agency's mission and serving the public's interest.

**perennial stream** - Any watercourse that generally flows most of the year in a well-defined channel and is below the water table. Droughts and other precipitation patterns may influence the actual duration of flow. It contains fish or aquatic insects that have larvae with multi-year life cycles. Water-dependent vegetation is typically associated with perennial streams.

**physiographic region** - A region of similar geologic structure and climate that has had a unified geomorphic history.

**planning criteria** - Standards, tests, rules, and guidelines by which the planning process is conducted, and upon which judgments and decisions are based.

**prescribed fire** - Any fire ignited by management actions to meet specific objectives including disposal of fuels, and controlling unwanted vegetation. The fires are conducted in accordance with prescribed fire plans, and are also designed to stimulate grasses, forbs, shrubs, or trees for range, wildlife, recreation, or timber management purposes.

**preservation** - A visual quality objective that provides for ecological change only.

**primary trout stream** - Streams that contain naturally-reproducing populations of brook, rainbow, and/or brown trout.

**program** - Sets of activities or projects with specific objectives, defined in terms of specific results and responsibilities for accomplishments.

**project** - A work schedule prescribed for a project area to accomplish management prescriptions. An organized effort to achieve an objective identified by location, activities, outputs, effects, time period, and responsibilities for execution.

**public issue** - A subject or question of widespread public interest relating to management of the NFS.

**public lands** - Lands, or interest in lands, administered by a federal agency.

**public participation activities** - Meetings, conferences, seminars, workshops, tours, written comments, survey questionnaires, and similar activities designed or held to obtain comments from the general public and specific publics.

**public roads** - Roads across national forest land which were in place as public ways when these lands were acquired. These roads may be a part of the forest, state, or county system, and may be maintained by any of these agencies.

**public supply** - Water withdrawn by public and private water suppliers and delivered to users.

## R

**ranger district** - Administrative subdivisions of the forest supervised by a District Ranger who reports to the Forest Supervisor.

**rare species** - Any native or once-native species of wild animal which exists in small numbers, and has been determined to need monitoring. May include peripheral species.

**recreation** - Leisure time activity including swimming, picnicking, camping, boating, hiking, hunting, and fishing.

**Recreation Capacity** - A measure of the number of people a site can reasonably accommodate at one time; sometimes measured as PAOT or RVDs.

**Recreation Opportunity Spectrum (ROS)** - A method for classifying types of recreation experiences available or for specifying recreation experience objectives desired in certain areas. Classes are: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded

Natural, Rural, and Urban. Only those definitions that apply to the Wilson Creek Corridor are listed here.

**Semi-Primitive Non-Motorized (ROS)** - An area characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users (or concentration of users) is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present but are subtle.

The recreation experience opportunity level provided would be characterized by the high, but not extremely high (or moderate) probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. (The opportunity to have a high degree of interaction with the natural environment.) Motorized use is not permitted.

**Roaded Natural (ROS)** - An area characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.

The recreation opportunity experience level provided would be characterized by the probability for equal experiencing of affiliation with individuals and groups and for isolation from sights and sounds of humans. Opportunities for both motorized and non-motorized forms of recreation may be provided.

**Remote Roaded Natural (RN2)** - A sub classification of Roaded Natural and accounts for areas on the national forest that either buffer SPNM areas or stand alone as tracts of land 1,500 acres or larger with a low road density of 1.5 miles of road/1,000 acres. Inventoried RN2 areas are managed to provide additional semi-primitive recreation settings either motorized or non-motorized. Interaction between users is low, but with evidence of other users prevalent.

**Accessible Roaded Natural (RN1)** - A sub classification of Roaded Natural settings and are located within a half mile of an open road. These settings include the majority of developed recreation sites such as campgrounds, picnic areas and river access points. RN1 also accounts for undeveloped, but highly roaded settings popular for dispersed recreation activities such as hunting, fishing, camping and horseback riding. Interaction between users is moderate, but with evidence of other users prevalent. Opportunities for motorized forms of recreation may predominate.

**recreation visit** - The entry of one person upon a national forest to participate in recreation activities for an unspecified period of time.

**recreation visitor day (RVD)** - Recreational use of national forest sites, or areas of land or water, that aggregates 12 visitor-hours; may consist of one person for 12 hours, 12 persons for one hour, or any equivalent combination of continuous or intermittent recreation use by individuals or groups. This was the basic use-reporting unit in the Recreation Information Management (RIM) System.

**Region 8** - The national forest system is administered by geographic regions. Region 8 represents the thirteen southern states (TX, AR, OK, LA, AL, MS, GA, FL, TN, KY, VA, SC and NC) that make up the Southern Region of the USDA Forest Service.

**Regional Forester** - The official responsible for management of NFS land within a USDA Forest Service region.

**responsible line officer** - The Forest Service employee who has the authority to select and/or carry out a specific planning action.

**retention** - A visual quality objective in which man's activities are not evident to the casual forest visitor.

**re-vegetation** - The re-establishment and development of a plant cover. This may take place naturally through the reproductive processes of the existing flora or artificially through the direct action of humans.

**right-of-way** - A right of use across the lands of others. It generally does not apply to absolute purchase of ownership. Land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project or facility passing over, upon, under, or through such land.

**riparian** – Land areas directly influenced by water. They usually have visible vegetative or physical characteristics showing this water influence. Streamside, lake borders, and marshes are typical riparian areas.

**riparian areas** - Areas with three-dimensional ecotones of interaction that include terrestrial and aquatic ecosystems that extend down into the groundwater, up above the canopy, outward across the floodplain, up the near-slopes that drain to the water, laterally into the terrestrial ecosystem, and along the watercourse at a variable width.

**riparian corridor** - An administrative zone applied to both sides of a stream or along side a pond, lake, wetland, seep or spring. It is a fixed width by stream type that may fall within or beyond the true riparian area.

**riparian dependent species** - Species that are dependent on riparian areas during at least one stage of their life cycle.

**riparian ecosystem** – A transition area between the aquatic ecosystem and the terrestrial ecosystems; identified by soil characteristics or distinctive vegetation communities that require free or unbound water.

**riparian functions** - Activities that occur in a riparian area without the influence of management activities. Functions include erosion and deposition by the streams, nutrient cycling, movement and storage of water, vegetative succession, etc.

#### **River Classifications –**

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

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

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

**road** – A motor vehicle path more than 50 inches wide, unless classified and managed as a trail. It may be classed as a system or non-system road.

**road closure** - A technique used by management to regulate and control the use of facilities to achieve transportation economy, user safety, protection of the public investment, and accomplishment of forest resource objectives. It may be intermittent or long term.

## S

**secondary trout streams** - Streams that do not contain naturally-reproducing trout populations, but will sustain trout throughout the year. Populations must be maintained by stocking.

**sediment** - Solid mineral and organic material that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice.

**sensitive species** - Those species that (1) have appeared in the *Federal Register* as proposals for classification, and are under consideration for official listing as endangered or threatened species; (2) are on an official state list, or (3) are recognized by the Regional Forester to need special management to prevent the need for their placement on federal or state lists.

**sensitivity level** - A particular degree or measure of viewer interest in the scenic qualities of the landscape.

**soil and water resource improvement** - The application of preplanned treatment measures designed to favorably change conditions of water flow, water quality, rates of soil erosion, and enhancement of soil productivity.

**special places** - Those specific locations and expanses in outdoor settings that have attractions and features that are identified as unique, different, distinctive, and extraordinary to people. Special places can range in size from small areas to very large areas.

**special-use authorization** - A permit, term permit, or easement that allows occupancy, use, rights, or privileges of NFS land.

**special use permit** - A permit issued under established laws and regulations to an individual, organization, or company for occupancy or use of NFS land for some special purpose.

**state or county land** - Land owned by states, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

**supply** - The amount of a good or service that producers are willing to provide at a specified price, time period, and conditions of sale.

## T

**term permit** - A special-use authorization to occupy and use NFS land, other than rights-of-way, for a specified period. It is revocable and compensable according to its terms.

**threatened species** - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Designated as a threatened species in the Federal Register by the Secretary of Interior.

**tiering** - A National Environmental Policy Act term used to reference the coverage of general matters in broader environmental impact statements (including national program or policy statements), with subsequent narrower statements or environmental analyses (including regional or basinwide program statements or ultimately site-specific statements), incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

**topography** - The configuration of a land surface including its relief, elevation, and the position of its natural and human-made features.

**toxicity index profile** - Estimate of cumulative potential for toxic impacts in water.

**trailheads** - The parking, signing, and other facilities available at the terminus of a trail.

## U

**unacceptable alteration** - A scenic integrity level (never an objective) where human activities of vegetative and landform alterations are excessive and totally dominate the natural, natural-appearing or valued cultural landscape character.

**understory** - The trees and other vegetation growing under a more or less continuous cover of branches and foliage formed collectively by the upper portion (overstory) of adjacent trees and other woody growth.

## V

**variety class** - A classification system for establishing three visual landscape categories according to the relative importance of the visual features. This classification system is based on the premise that all landscapes have some visual values, but those with the most variety or diversity of visual features have the greatest potential for high scenic value.

**viable population** - Population of plants or animals that has the estimated numbers and distribution of reproductive individuals to ensure its continued existence is well distributed in the planning area.

**viewshed** - The total landscape seen, or potentially seen from all or a logical part of a travel route, use area, or water body.

**Visual Quality Objective (VQO)** - A desired level of excellence based on physical and sociological characteristics of an area under the Visual Management System (VMS). Refers to the degree of acceptable alterations of the characteristic landscape. Objectives include Preservation, Retention, Partial Retention, Modification, and Maximum Modification.

**Preservation** - A visual quality objective that provides for ecological change only.

**Retention** - A visual quality objective in which human activities are not evident to the casual forest visitor.

**Partial Retention** - A visual quality objective in which human activities may be evident, but must remain subordinate to the characteristic landscape.

**Modification** - A visual quality objective in which human activities may dominate the characteristic landscape but must, at the same time, use naturally established form, line, color, and texture appearing, but should appear as a natural occurrence when viewed as background.

**Maximum Modification** - A visual quality objective in which human activities may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

**visual resource** - The composite of basic terrain, geological features, water features, vegetative patterns, and land-use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

## W

**water supply area** - Areas that serve present and future municipal water supply and trout hatching or rearing operations.

**watershed** - The total area above a given point on a stream that contributes water to the flow at that point.

**Weeks Act** – Implemented in 1911, it authorized the acquisition of lands on the watershed of navigable streams for the purposes of conserving their navigability, or for the purpose of timber.

**wetlands** - (pursuant to the Federal Clean Water Act) - Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas, and are found primarily within palustrine systems; but may also be within riverine, lacustrine, estuarine, and marine systems.

**Wild and Scenic River** - A river selected for nomination and/or designation through the Wild and Scenic Rivers Act of 1968 for possessing Outstandingly Remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values.

**Wilderness Study Area (WSA)** - Lands possessing the basic characteristics of wilderness and designated by Congress for further wilderness study.

**wildland fire** - Any non-structural fire on wildlands other than one intentionally set for management purposes. Confined to a predetermined area. Not to be confused with “fire use,” which includes prescribed fire.

**wildland urban interface** – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

**wildlife** - All non-domesticated mammals, birds, reptiles, and amphibians living in a natural environment, including game species and non-game species. Animals, or their progeny (i.e., feral animals - including horses, burros, and hogs), that once were domesticated, but escaped captivity, are not considered wildlife.

**wildlife and fish user-day** – A 12-hour participation in the use of wildlife and fish primarily for consumptive or non-consumptive use including hunting, fishing, or wildlife viewing. Such use is the result of habitat management, and the populations supported by that habitat. A WFUD is counted as one day or any part of a day that the user participated in these activities. Does not include sport or commercial uses of anadromous fish.

**wildlife habitat diversity** - The distribution and abundance of different plant and animal communities and species within a specific area.

**wildlife habitat improvement** - The manipulation or maintenance of vegetation to yield desired results in terms of habitat suitable for designated wildlife species or groups of species.

**withdrawal** – Water removed from the ground or diverted from a surface water source for use.

## X

**xeric** – Pertaining to sites or habitats characterized by decidedly dry conditions.