

PURPOSE AND NEED

PURPOSE AND NEED FOR ACTION

In accordance with the National Environmental Policy Act (NEPA) the National Park Service (NPS) is preparing an Environmental Assessment (EA) to implement recommendations for the Roanoke Valley Trail System within the lands administered by the Blue Ridge Parkway. The purpose of the proposed action is to develop a multi-use trail network, linking the Parkway and the Roanoke Valley Greenway trail network. The proposal would include establishing and continuing to maintain approximately 30 miles of pedestrian and horse trails, authorizing several greenway connections which would accommodate pedestrians and provide bicycle access to the Parkway motor road, and authorizing mountain bike use adjacent to the Roanoke River Parkway. The Roanoke Valley trail system is located between Mileposts (MP) 110.6 and 126.2, Section 1-M, in Roanoke County, Virginia (**Figure 1**).

The intent of this project is:

- 1) To address issues and concerns raised by the public regarding access and recreational use on the Blue Ridge Parkway and provide solutions that are both safe and consistent with the mission of the National Park Service and the Parkway.
- 2) To explore the potential for development of an integrated, interjurisdictional multi-use trail system for the Roanoke area that would connect the Blue Ridge Parkway and Roanoke Valley Greenway trails.
- 3) To explore the potential of a multi-use trail system that may incorporate mountain biking along the Roanoke River Parkway.
- 4) To consider upgrades to the highly eroded and substandard existing trail system within the Parkway boundary, in order to provide a more sustainable, easier to maintain system that includes safer road crossings, and that meets the National Park Service trail construction standards.
- 5) To consider the addition of updated trail facilities to enhance public use including trail marking, signage, and the identification and enforcement of authorized and unauthorized trail access points.
- 6) To establish a network of trail maintenance volunteers that would participate in the future long-term maintenance and preservation of the entire trail system.
- 7) To identify appropriate bicycle access to the Parkway motor road.

This EA will analyze alternatives and the resulting decision will establish the guidelines for an integrated, interjurisdictional trail system for the Roanoke area that would connect the Blue Ridge Parkway and Roanoke Valley Greenway trails. Additional compliance and further impact analysis may be needed for site-specific actions that are not described in this plan.

PROJECT BACKGROUND

The Blue Ridge Parkway was established by an Act of Congress on August 25, 1916 (39 Stat.535), as a 469-mile recreational motor road connecting Shenandoah and Great Smoky Mountains National Parks. Specifically, the intended purpose of the Parkway is:

"To conserve, interpret, and exhibit the unique natural and cultural resources of the central and southern Appalachian Mountains, as well as provide for leisure motor travel through a variety of environments."

The park encompasses 82,000 acres of Federal land and has more than 1,100 miles of boundary to manage. There are also approximately 4,000 adjacent landowners, 29 county governments and several town and city governments along the border, and 181 access points from regional roads. In the vicinity of Roanoke, the Parkway snakes along the top of the mountain ridge to the east of the greater Roanoke urban area (refer to **Figure 1**). Designed as a "scenic drive," the Parkway provides both protection for the cultural and natural features of the region, as well as a place of discovery for visitors to the park.

The Blue Ridge Parkway trails in the Roanoke area were planned with the original design of the Parkway. The trails were intended to follow the Parkway motor road from Stewart's Knob at MP 110.6 to State Route 220 at MP 121.4. The Chestnut Ridge Trail loop surrounding the Roanoke Mountain Campground was added to complete the trail system with the construction of the campground a few years later. Both equestrian and hikers have shared the trail systems since its construction.

In addition to hiking and horseback riding, mountain biking is another rapidly growing outdoor recreation activity in the Roanoke valley. Other challenges include upgrading the existing Blue Ridge Parkway trail system to a sustainable design, rerouting several sections that have become washed out and gullied, controlling user access, accommodating greenway connections, and developing a strategy to address long-term management and maintenance needs.

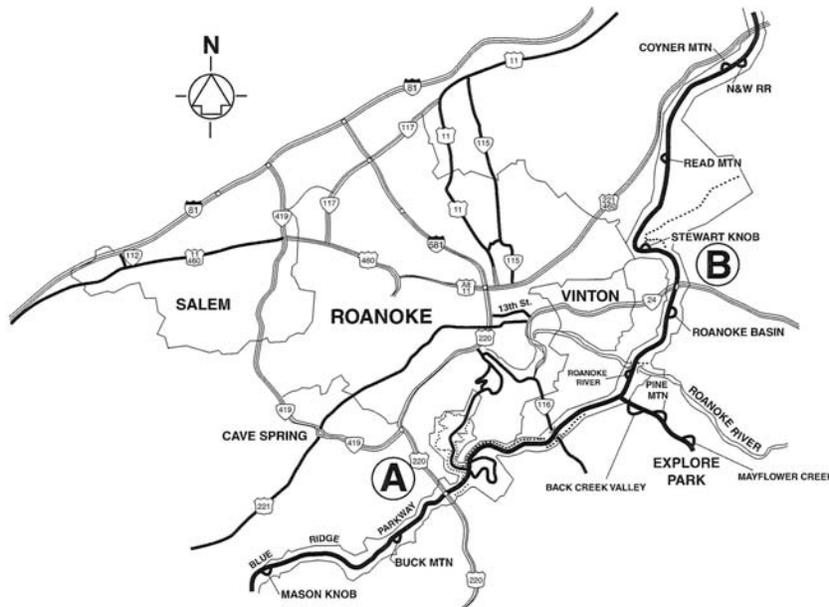


Figure 1. Blue Ridge Parkway in Roanoke, Virginia

In 1995, the Roanoke Valley Greenways/Open Space Steering Committee was established to spearhead efforts in the development of a regional greenway system. Coordinated by the Fifth Planning District Commission, and consisting of Roanoke County, the Cities of Roanoke and Salem and the Town of Vinton, the committee went to work at facilitating the efforts of numerous citizens, interest groups and public and private entities in the development of a Roanoke Valley Conceptual Greenway Plan (RVCGP). Adopted in 1997, the plan is providing a framework for the development of an interconnected network of trails and greenway corridors throughout the Roanoke region. In 1997 the Roanoke Valley Greenways Commission was established to oversee implementation of the plan.

The Roanoke Valley CGP has identified 35 specific greenway segments, radiating outward from the urban core of Roanoke, Salem and Vinton, Virginia (refer to **Figure 2**). In order to realize the Roanoke Greenway vision, the Commission works continuously to explore potential trail linkages, as well as potential new partnerships to complete these segments. Over the past few years attention has been given to the areas south and east of the urban core. In this part of the region, the urban area abuts the Blue Ridge Mountain. Located on the ridge crest is the Blue Ridge Parkway, which is one of the 35 routes in the plan.

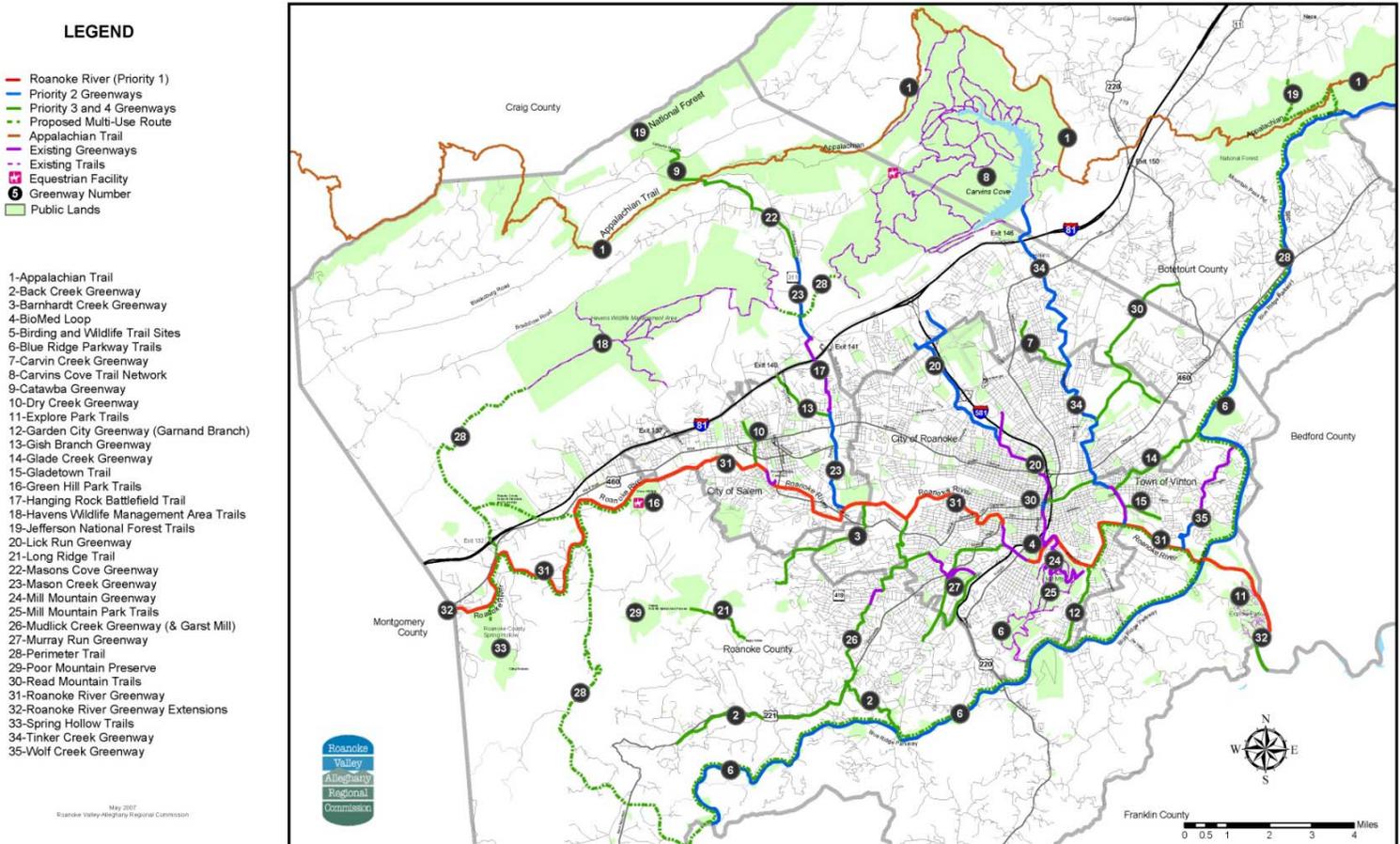


Figure 2. Roanoke Valley Conceptual Greenway Plan

The Roanoke Valley Greenways Commission and Blue Ridge Parkway signed a General Agreement in 2001 allowing the Commission to assist with trail planning, mapping and rehabilitation under the direction of Parkway staff. Ensuing discussions followed to explore options for development of an integrated system that would provide a valley-wide trail system connecting to the Parkway.

A planning team was established to determine the feasibility of developing a shared-use trail network, linking Blue Ridge Parkway and the Roanoke Valley trail network. The Parkway is committed to continuing the partnership with the Commission and implementing an adaptive management approach of these trail resources, with the following project goal:

To expand outdoor recreational opportunities for both residents and visitors to the Roanoke region by providing a network of shared use trails that link downtown Roanoke and surrounding neighborhoods to locally and national significant open space resources.

PARK PURPOSE AND SIGNIFICANCE

The legislated purpose of the Blue Ridge Parkway, under the Act of June 30, 1936, is to link Shenandoah National Park in Virginia and the Great Smoky Mountains National Park in North Carolina and Tennessee by way of a recreation-oriented motor road intended for public use and enjoyment. Under the provisions of the Organic Act approved by Congress on August 25, 1916 (39 Stat. 535) creating the National Park Service, the intended purpose of the Parkway is to provide an elongated park to conserve, interpret, and exhibit the unique natural and cultural resources of the central and southern Appalachian Mountains, as well as provide for leisure motor travel through a variety of scenic environments.

The general interpretation of the Parkway's purpose has been further refined into the following more specific purpose statements:

- 1) Connect Shenandoah and Great Smoky Mountains National Parks by way of a "national rural parkway" – a recreational, destination-oriented motor road traveling through a variety of scenic ridge, mountainside, and pastoral farm landscapes.
- 2) Conserve the scenery and preserve the natural and cultural resources of the Parkway's designed and natural area to preserve the integrity of resources and to provide a quality visitor experience.
- 3) Influence the protection of the scenic, natural and cultural resources within the corridor composed of those lands that are visible from the Blue Ridge Parkway and/or situated adjacent to the boundary.
- 4) Provide for public enjoyment and understanding of the natural resources and cultural heritage of the central and southern Appalachian Mountains.
- 5) Provide opportunities for high quality scenic and recreational experiences along the Blue Ridge Parkway and within the corridor through which it passes.

The following significance statements summarize the importance or distinctiveness of the aggregate of resources along the Parkway:

- 1) The Blue Ridge Parkway was the first national rural parkway to be conceived, designed, and constructed for a leisure-type driving experience. Its varied topography and numerous vista points

offer easy public access to spectacular views of central and southern Appalachian rural landscapes and forested mountains.

- 2) As an example of pre- and post-World War II automotive rural parkway design, the Blue Ridge Parkway retains the greatest degree of integrity of any parkway in the United States. The Parkway is further recognized throughout the world as an international example of landscape and engineering design achievements with a roadway that lies easily on the land and blends into the landscape.
- 3) The Parkway is the highest and longest continuous route in the Appalachian area. Along its 469-mile length the parkway provides scenic access to crests and ridges of five major ranges within the central and southern Appalachian Mountains, encompassing geographic and vegetative zones that range from 649 feet at James River in Virginia to 6,047 feet at Richland Balsam in North Carolina.
- 4) The park's uninterrupted corridor facilitates the protection of a diverse range of flora and fauna, including rare and endangered plant and animal species and globally imperiled natural communities.
- 5) The park preserves and displays cultural landscapes and historic architecture characteristic of the central and southern Appalachian highlands.
- 6) The Blue Ridge Parkway is a primary catalyst for promoting regional travel and tourism, serving as a unifying element for 29 counties through which it passes, engendering a shared regional identity, providing a common link of interest, and being a major contributor to regional economic vitality.

The route of the Blue Ridge Parkway follows mountain and valley landscapes to link Shenandoah and Great Smoky Mountains National Parks. Its location was selected to provide the best in a variety of scenic, historic, and natural features that evoke the regional image of the central and southern Appalachian Mountains. In order to maximize scenic views and give Blue Ridge Parkway visitors the impression that they are in a park with boundaries to the horizon, the Parkway was located in mountainous terrain that normal roads would have avoided. The Blue Ridge Parkway was the first national rural parkway and is widely recognized as an international example of landscape and engineering design achievements with a roadway that lies easily on the land and blends into the existing scene. The Blue Ridge Parkway also was the first national rural parkway to be conceived, designed, and constructed as a leisure-type driving experience.

The Blue Ridge Parkway follows the crests and ridges of the Blue Ridge, Black, Great Craggy, Great Balsam and Plot Balsam Mountains. These five major mountain ranges are part of the central and southern Appalachian Mountains. The 469-mile Parkway encompasses several geographic and vegetative zones, with altitudes ranging from approximately 650 feet at James River in Virginia to nearly 6,050 feet at Richland Balsam in North Carolina. The Blue Ridge Parkway is known for spectacular mountain and valley vistas, quiet pastoral scenes, sparkling waterfalls, colorful flowers and foliage displays, and interpretation of mountain history and culture. Its varied topography and numerous vista points offer easy public access to views of southern Appalachian rural landscapes and forested mountains. Designed for recreational driving, the Blue Ridge Parkway provides visitors with quiet, leisure travel, free from commercial traffic and the congestion of high-speed highways. As its All-American Road status indicates, it is one of the most diverse and high quality recreational driving experiences in the world.

The Blue Ridge Parkway is the highest and longest continuous route in the Appalachian area. Because of its long length, proximity to large Eastern United States urban areas, numerous access points, quality design and diversity of scenic, natural and cultural resources, the Blue Ridge Parkway is the most visited unit of the National Park System.

LAWS, REGULATIONS, AND POLICIES

The following laws and associated regulations provided guidance for the development of this EA, design of the Preferred Alternative and alternatives, the analysis of impacts, and the creation of mitigation measures to be implemented as part of the Preferred Alternative. Summaries of the following laws, as well as a complete list of environmental laws and regulations relevant to the project, are provided in **Appendix D** of this EA.

Recreational use in national parks, like all activity, is governed by several overarching laws, regulations, and policies.

National Environmental Policy Act of 1969 (NEPA) (42 USC 4321-4370) requires Federal agencies to evaluate the environmental impacts of their actions and to integrate such evaluations into their decision-making processes. Implementing regulations for NEPA are contained in 40 CFR 1500 through 1508. This EA was prepared in accordance with NEPA and its implementing regulations.

National Park Service Organic Act of 1916 declares that the National Park Service is established to:

... conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

The 1970 National Park System General Authorities Act, (as amended in 1978), prohibits the National Park Service from allowing any activities that would cause derogation of the values and purposes for which the parks have been established (except as directly and specifically provided by Congress).

National Historic Preservation Act of 1966, as amended (NHPA) (16 USC 470 et seq.):

Section 106 of the NHPA requires Federal agencies to consider the effects of their proposals on properties listed or eligible for listing in the National Register of Historic Places (NRHP). Section 106 also directs Federal agencies to provide the state historic preservation officer, tribal historic preservation officers (THPO), and, as appropriate, the Advisory Council on Historic Preservation (ACHP), a reasonable opportunity to review and comment on these proposals.

To comply with Section 106 of the National Historic Preservation Act (36 CFR Part 800), the NPS negotiated and signed a programmatic agreement (PA) with the Virginia SHPO on November 8, 2010, and is included as **Appendix B**. The PA records the terms and conditions agreed upon to resolve and mitigate potential adverse effects to historic properties.

National Park Service Management Policies 2006, Section 8.1 Appropriate Use, states that in exercising its discretionary authority, the Service will allow only uses that are:

- 1) *appropriate to the purpose for which the park was established, and*
- 2) *can be sustained without causing unacceptable impacts.*

Recreational activities and other uses that would impair a park's resources, values, or purposes cannot be allowed. The only exception is when an activity that would cause impairment is directly and specifically mandated by Congress.

Section 8.1.2 Determining Appropriate Use, states that all proposals for park uses will be evaluated for:

- 1) *consistency with applicable laws, executive orders, regulations, and policies;*
- 2) *consistency with existing plans for public use and resource management;*
- 3) *actual and potential effects on park resources and values;*
- 4) *total costs to the Service; and*
- 5) *whether the public interest will be served.*

The National Park Service will always consider allowing activities that are appropriate to the parks, although conditions may preclude certain activities or require that limitations be placed on them. In all cases, impacts from park uses must be avoided, minimized, or mitigated through one or more of the following methods:

- 1) *visitor education and civic engagement;*
- 2) *temporal, spatial, or numerical limitations on the use;*
- 3) *the application of best available technology; and*
- 4) *the application of adaptive management techniques.*

If, in monitoring a park use, unanticipated impacts become apparent, the superintendent must further manage or constrain the use to minimize the impacts, or discontinue the use if the impacts are unacceptable.

Section 8.2 Visitor Use, states in order to provide for enjoyment of the parks, the NPS will encourage visitor activities that:

- 1) *are appropriate to the purpose for which the park was established; and*
- 2) *are inspirational, educational, or healthful, and otherwise appropriate to the park environment; and*
- 3) *will foster an understanding of and appreciation for park resources and values, or will promote enjoyment through a direct association with, interaction with, or relation to park resources; and*
- 4) *can be sustained without causing unacceptable impacts to park resources or values.*

Bicycle use, Equestrian Use, and Trail Use in the national park system is governed specifically by the following regulation and policy:

Code of Federal Regulations (CFR), Title 36, Volume 1, Part 4, Sec 4.3 (a), states, in part:

The use of a bicycle is prohibited except on park roads, in parking areas and on routes designated for bicycle use; provided, however, the superintendent may close any park road or parking area to bicycle use pursuant to the criteria and procedures of Sections 1.5 and 1.7 of this chapter. Routes may only be designated for bicycle use based on a written determination that such use is consistent with the protection of a park area's natural, scenic and aesthetic values, safety considerations and management objectives and will not disturb wildlife or park resources.

NPS Management Policies 2006, Section 9.2.2.4 Bicycle Trails, quotes CFR language and states:

The designation of bicycle routes is allowed in developed areas and in special use zones based on a written determination that such use is (1) consistent with the protection of a park's natural, cultural, scenic, and esthetic values; (2) consistent with safety considerations; (3) consistent with management objectives; and (4) will not disturb wildlife or other park resources. A similar determination may be made to designate routes outside developed areas and special use zones; however, the designation must be made by promulgating a special regulation.

NPS Management Policies 2006, Section 9.2.2 Trails and Walks, states that trails and walks will serve as management tools to help control the distribution and intensity of use. All trails and walks would be carefully situated, designed, and managed to:

- 1) *reduce conflicts with automobiles and incompatible uses;*
- 2) *allow for a satisfying park experience;*
- 3) *allow accessibility by the greatest number of people; and*
- 4) *protect park resources.*

Section 9.2.2 further states:

In addition, trail planning will take into account NPS interest in cooperating with Federal, State, local, and tribal governments, as well as individuals and organizations, to advance the goal of a seamless network of parks. These partnership activities are intended to establish corridors that link together, both physically and with a common sense of purpose, open spaces such as those found in parks, other protected areas, and compatibly managed private lands.

Section 9.2.2.4 Equestrian Trails, states, in part:

Equestrian trails and related support facilities, such as feed boxes and hitch rails, may be provided when they are consistent with park objectives and when site conditions are suitable. Horse camps should be designed with user interest in mind and consistency with NPS policy. Photovoltaic systems should be evaluated to power any necessary water systems. Ramps for mounting the animals must be provided for persons with disabilities.

Executive Order – 13266 Activities to Promote Personal Fitness (2002), Section (d) states:

While personal fitness is an individual responsibility, the Federal Government may, within the authority and funds otherwise available, expand the opportunities for individuals to empower themselves to improve their general health. Such opportunities may include improving the flow of information about personal fitness, assisting in the utilization of that information, increasing the accessibility of resources for physical activity, and reducing barriers to achieving good personal fitness.

The NPS Organic Act (1916) and the General Authorities Act (1970) prohibit impairment of park resources and values. The NPS 2006 *Management Policies* uses the terms “resources and values” to mean the full spectrum of tangible and intangible attributes for which the park was established and is managed, including the Organic Act’s fundamental purpose and any additional purposes as stated in the park’s establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the NPS is to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoy them.

The evaluation of whether impacts of a preferred alternative would lead to an impairment of park resources and values is included in this EA. Impairment is more likely when there are potential impacts to a resource or value whose conservation is:

- 1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- 2) essential to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- 3) identified as a goal in the park's GMP or other relevant NPS planning documents.

SCOPING

Scoping is an open process that determines the breadth of environmental issues and alternatives to be addressed in an EA. Scoping involves obtaining internal and external input on project-related issues from resource specialists and the public, respectively. The park conducted internal scoping with appropriate NPS staff (BLRI and SERO) and external scoping with the public, including interested and affected groups or individuals and non-NPS agency personnel.

An interdisciplinary team comprising BLRI and SERO staff members contributed to the internal scoping process. This process resulted in definition of the purpose and need, identification of potential actions to address the need, and determination of what the likely issues and impact topics would be. Additional management concerns identified by park staff to be addressed in this plan include:

NPS Law Enforcement Regulations
Parking Areas
Safety
Unacceptable Resource Damage
Unauthorized Trails
Visual Resources

For external scoping, a public scoping letter and a news release (see **Figures A-1** through **A-2** in **Appendix A**) describing the project and requesting public input on the proposed alternatives was issued to private parties and State, Federal, and local agencies on October 23, 2007. **Appendix A** provides a list of individual and agencies/organizations that were sent the scoping letter (**Table A-1**). Agency comments that were received are presented in **Figures A-3 to A-8**.

There was also a public meeting held on November 15, 2007 at the Explore Park Visitor Center Auditorium in Roanoke, Virginia. Comments were solicited during external scoping until December 1, 2007. **Appendix A** also provides a content analysis report of public comments received (**Table A-2**).

Most of the comments stated support for the trail plan and development of a safe and integrated trail system that would provide linkages between the Roanoke Valley Greenway trail network, Parkway trails, and the community. The comments indicated that the addition of a mountain biking trail system would be desirable, as well as upgrading the current trail system utilizing local volunteers. Other general comments received expressed a desire for updated trail facilities including marking, signage, access points, etc.

There were also several issues identified by the public that are beyond the scope of this project and will not be evaluated in this EA. These include:

Road Shoulders
Roanoke River Crossing (due to funding)
Commuter Use (Traffic)
Horse Campground
Speed Enforcement
Speed Limits

THE ENVIRONMENTAL ASSESSMENT

This environmental assessment analyzes the environmental impacts that would result from the alternatives considered, including the No Action Alternative. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code (USC) 4321 et seq.), the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations (CFR) (1500 through 1508) for implementing NEPA, and the NPS NEPA compliance guidance handbook (DO-12, *Conservation Planning, Environmental Impact Analysis, and Decision-making*).

IMPACT TOPICS

Issues and concerns with this project are grouped into distinct impact topics to aid in analyzing environmental consequences, which allows for a standardized comparison of alternatives based on the most relevant information. The impact topics were identified on the basis of Federal laws, regulations and orders, *NPS Management Policies 2006*, and NPS knowledge of potentially affected resources. A brief rationale for selecting or dismissing each topic is provided below.

Impact Topics Analyzed in this Environmental Assessment

Soils and Geology

Construction activities, such as excavation and the use of equipment, would disturb soils and potentially cause soil compaction and erosion in the project area. Soil grading and other construction related activity could permanently change the character of the soil.

Water Resources, Including Wetlands

NPS Management Policies 2006 requires protection of water quality consistent with the provisions of the Clean Water Act of 1977, a national policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to prevent, control, and abate water pollution. Section 404 of the Clean Water Act authorizes the U.S. Army Corps of Engineers (USACE) to prohibit or regulate, through a permitting process, the discharge of dredged or fill material into U.S. waters. The proposed trail system could cross or access 11 tributaries that flow into Back Creek, Wolf Creek and the Roanoke River and construction activities have the potential to affect water quality.

Vegetation

Vegetation within the project area could be impacted both from clearing and from trampling during trail use. The spread of invasive plants may occur.

Wildlife

Clearing vegetation could potentially reduce or alter wildlife habitat. Construction activities could temporarily displace wildlife from the immediate vicinity.

Archeological Resources

The National Park Service is required to, “*preserve collections of prehistoric and historic material remains, and associated records, recovered under the authority of the Antiquities Act (16 U.S.C. 431-433), the Reservoir Salvage Act (16 U.S.C. 469-469c), Section 110 of the National Historic Preservation Act (16 U.S.C. 470h-2), or the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm)*” (36 CFR Part 79). These regulations, promulgated under the authority of the Secretary of Interior, apply to findings made by historic preservation professionals that meet qualification standards for Federal projects. The proposed project does cross potential historic sites; archeological resources could be present.

Socioeconomic Environment

Adverse impacts on the local economy and businesses of the community, as well as adverse social impacts, could be anticipated under the No Action Alternative due to the potential loss of regional income generated by sustainable trails with safe connections. Lack of recreational users due to degraded trails could potentially decrease the quality of life in this area and would not attract new users or related business activities to the area. Trail upgrades and trail system connections could produce beneficial impacts to the local economies both in terms of better quality of life and increased opportunities for trail and tourism related businesses.

Visitor Use and Experience, Including Recreation and Visual Resources

Visitor use and experience would be affected through noise, aesthetic, and traffic-related effects during trail construction. Visual resources would be affected by trail construction activities and after construction by changes to the trail configurations as well as roadway crossings. Recreational opportunities could be affected by changes in trail patterns and higher volume use; these effects could be adverse or beneficial depending on the volume of use.

Human Health and Safety

Continuation of existing conditions could contribute adversely to health and safety issues as trails deteriorate and possibly become unsafe. Safety along the Parkway trails would improve with approved trail design and repairs/improvements to road crossings, as the current safety hazards would be eliminated. There could be adverse safety impacts in the short- and or long-term resulting from shared use trails if that option were implemented.

Park Operations

Construction of new trail, trail crossings and trail amenities would create a long-term increase in maintenance cost in dollars and staff time as those assets must be maintained and repaired. Increased use both on Parkway trails and across the motor road would have the potential to contribute to a need for enhanced law enforcement and education activities and potential health and safety issues, both of which would require additional law enforcement staff time and cost.

Impact Topics Dismissed from Further Consideration

Air Quality

Air quality could be impacted during the trail construction phase of the project; however, impacts would be temporary and minor in intensity. Overall, there could be a slight and temporary degradation of local air quality due to dust generated by activities and emissions from any equipment. These effects would last only during construction activities. Best Management Practices (BMP) would be utilized to limit dust generation and dispersal. To keep equipment emissions down, equipment would be properly maintained. Therefore, air quality was dismissed as an impact topic in this document.

Greenhouse Gas Emissions and Climate Change

There is strong evidence linking global climate change to human activities, especially greenhouse gas emissions associated with the burning of fossil fuels (IPCC 2007). Some of the activities associated with the proposal and initial construction activities may result in fossil fuel consumption, such as equipment used to carry out the proposed actions. In addition, the removal of immature trees to construct mountain bike trails may release sequestered carbon from woody vegetation. However, greenhouse gas emissions associated with the proposed project would be negligible in comparison to adjacent land clearing and development, other agencies burning in the area, local, and, regional greenhouse gas emissions. Therefore, the issue of initial construction activities to climate change through greenhouse gas emissions was dismissed from further analysis.

Floodplains

Executive Order 11988, *Floodplain Management*, requires all Federal agencies to take action to reduce the risk of flood loss, to restore and preserve the natural and beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. The proposed project area is not located near or in any floodplains; therefore this topic was dismissed from consideration.

Wetlands

Executive Order 11990, *Protection of Wetlands*, NPS *Management Policies 2006*, Section 4.6.5, *Wetlands*, and NPS DO-77-1, *Wetland Protection*, require an examination of impacts to and protection of wetlands. No wetlands are known in the project area; therefore this topic was dismissed from further analysis.

Threatened and Endangered Species

There are no Federally-listed threatened or endangered animals in the vicinity.

Neotropical Migratory Birds

Executive Order 13186, January 2001, directs each Federal agency taking actions having or likely to have a negative impact on migratory bird populations to work with the USFWS to develop an agreement to conserve those birds. The protocols developed by this consultation are intended to guide future agency regulatory actions and policy decisions; renewal of permits, contracts or other agreements; and the creation of or revisions to land management plans. In addition to avoiding or minimizing impacts to migratory bird populations, agencies are expected to take reasonable steps that include restoring and enhancing habitat, preventing or abating pollution affecting birds, and incorporating migratory bird conservation into agency planning processes whenever possible. The proposed trail plan would not prevent movement of migratory birds; therefore this topic was dismissed from consideration.

Soundscape

In accordance with NPS *Management Policies 2006*, the Parkway strives to preserve the natural soundscape. The soundscape could be impacted during the trail construction phase of the project; however, impacts would be temporary and minor in intensity. The proposed action would not affect natural ambient sound in the long-term. Therefore, soundscape was dismissed as an impact topic in this EA.

Lightscape Management

In accordance with NPS *Management Policies* (NPS 2006), the Parkway strives to preserve natural ambient landscapes, which are natural resources and values that exist in the absence of human caused light. The proposed project would not add any artificial outdoor lighting; therefore, lightscape management was dismissed as an impact topic.

Cultural Landscapes

Cultural landscapes are defined by the NPS as “a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions” (DO-28: *Cultural Resource Management Guideline*, 1998). The proposed project is not in an area considered to be within a cultural landscape.

Ethnographic Resources

The National Park Service must be respectful of ethnographic resources, those cultural and natural features that are of traditional significance to traditionally associated peoples. These are contemporary peoples whose interest in the park began prior to its establishment (1936) and who have associated with the park for more than two generations (40 years) (*Management Policies 2006*, Sec. 5.3.5.3). The proposed project would not affect any ethnographic resources currently known to park staff, and thus will not be discussed as an impact topic.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes. There are no Indian trust resources in BLRI. The lands comprising the BLRI are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, Indian trust resources were dismissed as an impact topic.

Historic and Prehistoric Structures

The National Historic Preservation Act, as amended in 1992 (16 USC 470 *et seq.*); NEPA of 1969 (42 USC 4321 *et seq.*); NPS DO-28, *Cultural Resource Management Guideline*, NPS *Management Policies 2006*, and NPS DO-12, *Conservation Planning, Environmental Impact Analysis, and Decision Making* require the consideration of impacts on historic structures and buildings listed in or eligible for listing in the NRHP. No structures, historic or prehistoric, are directly involved in this project, and thus, this topic has been dismissed.

Museum Collections

The NPS' *Management Policies, 2006* and DO-28, *Cultural Resource Management Guideline* require the consideration of impacts on museum collections (historic artifacts, natural specimens, and archival and manuscript material). There are no museum objects that would be affected by this proposal, and thus was dismissed as an impact topic.

Prime and Unique Farmlands

In August 1980, the CEQ directed that Federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resources Conservation Service as prime or unique. Prime or unique farmland is defined as soil that particularly produces general crops, such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops, such as fruits, vegetables, and nuts. Since the project area does not meet the definition of farmland as stated in Title 7, Chapter 73, Section 4201 (c)(1) of the Farmland Protection Policy Act (FPPA), it is not applicable to the FPPA. Therefore, the topic of prime and unique farmlands was dismissed as an impact topic in this EA.

Environmental Justice

Presidential Executive Order 12898, *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires all Federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The proposed project would not have disproportionate health or environmental effects on minorities or low-income populations or communities as defined in the US EPA's Draft Environmental Justice Guidance (July 1996). Therefore, Environmental Justice was dismissed as an impact topic in this EA.