



**ON THE COVER** (all photographs courtesy of the National Park Service)

Top: Nuttallburg coke oven bank and rail grade area (spring 2007)

Bottom Left: Nuttallburg headhouse (fall 2006)

Bottom Center: Nuttallburg power house near Nuttallburg headhouse (fall 2006)

Bottom Right: Nuttallburg conveyor (fall 2006)

#### **NUTTALLBURG VISITOR USE AREA**

Implementation Plan/Environmental Assessment

## **New River Gorge National River**

Fayette, Summers, and Raleigh Counties, West Virginia

## Summary

The National Park Service (NPS) proposes to develop a new visitor use area at New River Gorge National River. The new visitor use area will encompass land within and adjoining the Nuttallburg Mining Complex and Town Historic District. The Historic District has been listed on the National Register of Historic Places. The historic district is nationally significant for its association with Henry Ford's revolutionary experiment from 1920 to 1928 to vertically integrate automobile production at his Rouge River Plant in Dearborn, Michigan, by controlling the supply and flow of raw materials needed for automobile manufacturing. It is also nationally significant for Henry Ford's use of engineering innovation at the site. The purpose of the project is to provide a focal point within New River Gorge National River for the interpretation of early coal mining technology in the New River Coal Field. The project is needed to enable visitors to learn about the park's industrial heritage, to provide treatments needed to protect the site's cultural resources, and to protect visitors from unsafe conditions that exist today at the site. As a result of the proposed action visitation to the Nuttallburg area is expected to increase. Because portions of the site provide habitat for two federally-designated endangered species of bats and two state-designated rare species, actions are included in the alternatives under consideration that will protect critical habitat of these species and avoid potential adverse effects associated with development of visitor facilities and visitor use.

This Implementation Plan/Environmental Assessment (IP/EA) examines in detail four alternatives: Alternative 1 – Continuation of Current Management with Structure Stabilization (No Action); Alternative 2 – Multiple Settings on Recreational Trails (Preferred Alternative); Alternative 3 – Integrated Interpretive Destination, and; Alternative 4 – Historic and Cultural Cross Section of the Gorge. All of the alternatives include additional treatments for the site's most significant remaining historic structures – the headhouse, conveyor, and tipple – that will provide long-term stabilization and secure them from collapse. The alternatives vary in terms of the treatments for other cultural resources, the extent of tree thinning at the Mining Complex and town of Nuttallburg site, new trail access, interpretive media and the scope of the interpretive program, and connections to other visitor use areas within the park.

Environmental impacts that will result from implementation are addressed in this IP/EA. Impact topics include: soil resources; vegetation resources; rare, threatened, or endangered species, and their habitats; cultural landscapes; historic buildings and structures; archeological resources; ethnographic resources; local roads and park access; visitor use and visitor experience, and; park operations.

# Notes to Reviewers and Respondents

This environmental assessment is available online at the New River Gorge National River web site at <a href="http://parkplanning.nps.gov/NERI">http://parkplanning.nps.gov/NERI</a> and is being distributed for public and agency review and comment for a period of 30 days. Comments can be made on-line or in the form of email and letters and must be post marked by the due date posted on the website. Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the record, which we will honor to the extent allowable by law. If you want us to withhold your name and address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

<u>Please comment on-line at the park website or address comments to</u>: Don Striker, Superintendent, New River Gorge National River, P.O. Box 246, Glen Jean, WV 25846-0246; E-mail: NERI\_Superintendent@nps.gov

#### **EXECUTIVE SUMMARY**

## Project Purpose and Need

New River Gorge National River was established by Congress in 1978 in part to provide public understanding and appreciation of the park's natural, cultural, and scenic resources and values. The park's cultural resources include, among others, the sites of multiple coal mining communities that were once part of a thriving industrial corridor during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The Nuttallburg Mining Complex and town site is the most intact example of an early 20th century coal mining complex in the New River Gorge and West Virginia, and one of the most complete coal related industrial sites in the United States (NPS 2007). The mining complex has remained essentially unaltered since the 1920s when most of the existing structures and buildings were erected. The town site has been altered by the removal of most of the structures; only foundations and road traces remain.

The National Park Service (NPS) proposes to develop a new visitor use area that will encompass land within and adjoining the Nuttallburg Mining Complex and Town Historic District. The Historic District has been listed on the *National Register of Historic Places*. The historic district is nationally significant for its association with Henry Ford's revolutionary experiment from 1920 to 1928 to vertically integrate automobile production at his Rouge River Plant in Dearborn, Michigan, by controlling the supply and flow of raw materials needed for automobile manufacturing. It is also nationally significant for Henry Ford's use of engineering innovation at the site.

The purpose of the project is to:

- to provide the focal point within New River Gorge National River for the interpretation of early coal mining technology in the New River Gorge
- to provide park visitors with a safe experience that offers opportunities for education and recreation
- to protect the park's natural and cultural resources from potential adverse effects
- to provide visitor facilities that are cost effective, that are harmonious with and integrated into the park environment, and that reflect sustainable design

The project is needed for the following reasons:

- without the project the park's significant cultural resources where visitors can learn about the park's industrial heritage will continue to remain largely inaccessible
- no visitor facilities are currently available at the Nuttallburg Mining Complex and town site
- although the site is not officially open to the public, visitors do use the site and find potentially hazardous conditions due to the unstable condition of some structures at the Nuttallburg Mining Complex and town site
- unmanaged visitor use in the vicinity of the Nuttallburg Mine poses potential adverse impacts to critical habitat of several species of bats that are designated of conservation interest

#### Alternatives Evaluated in the IP/EA

Based upon consideration of the full range of potential alternatives, the NPS retained four alternatives for study and evaluation in this IP/EA. They include:

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- Alternative 1 Continuation of Existing Management (No Action Alternative)
- Alternative 2 Multiple Settings on Recreational Trails (Preferred Alternative)
- Alternative 3 Integrated Interpretive Destination
- Alternative 4 Historic and Cultural Cross Section of the Gorge

#### NPS Preferred Alternative

Alternative 2 – Multiple Settings on Recreational Trails is the NPS preferred alternative. Alternative 2 would meet the project purpose and fulfill the need for the project. It would provide a focal area within the park for the interpretation of early coal mining technology in the New River Coal Field. When compared to Alternatives 3 and 4, Alternative 2 would involve less trail construction and less thinning of trees on the site resulting in fewer and less intense adverse impacts on the site's soil resources, vegetation resources, and threatened and endangered species and their habitats. When compared to Alternatives 3 and 4, Alternative 2 would attract fewer visitors to the site resulting in the potential for fewer and less intense adverse impacts on the site's archeological resources and historic buildings and structures. Alternative 2 would have a less intense impact on park operations because it would include fewer miles of new trails and fewer interpretive media, and require a less intense interpretive program.

#### Impacts of the Preferred Alternative

**Soil Resources**. Cultural resource management actions in Alternative 2 would have a local short-term minor adverse impact on soil resources. Natural resource management Actions in Alternative 2 would have a local short-term moderate adverse impact on soil resources. Rehabilitation of major historic traces and new trail construction would result in a local short-term minor adverse impact on soil resources. Routine maintenance of park administrative roads and trails would have periodic short-term negligible impacts on soil resources. Construction of new visitor parking facilities would result in both short-term and long-term local moderate adverse impacts on soil resources. Alternative 2 would contribute an imperceptible adverse increment to the overall cumulative long-term major adverse impact on soil resources. There would be no impairment of soil resources in the park.

**Vegetation Resources**. Cultural and natural resource management actions in Alternative 2 would result in a local long-term minor beneficial impact on vegetation resources. Removal of vegetation from major historic road traces and new trail construction in Alternative 2 would have a local long-term minor adverse impact on vegetation resources. Clearing for construction of new trails and parking facilities in Alternative 2 would result in a local long-term minor adverse impact on vegetation resources. Routine maintenance of park administrative roads and trails would have a local long-term negligible impact on vegetation resources. Alternative 2 would contribute an imperceptible adverse increment to the overall cumulative long-term major adverse impact on vegetation resources. There would be no impairment of vegetation resources in the park.

Rare, Threatened, or Endangered Species and Their Habitats. Cultural resource and natural resource management actions in Alternative 2 would result in local short-term and long-term negligible impacts on designated species and their habitat. Rehabilitation of major town historic road traces would result in a short-term minor adverse impact on designated species and their habitat. Routine maintenance of trails, administrative roads, and rehabilitated historic road traces would result in a local long-term negligible impact on designated species and their habitat. Clearing for parking facilities would result in a local long-term negligible impact on designated species and their habitat. Projected visitor use associated with Alternative 2 would result in a local long-term negligible impact on designated species and their habitat. The collective management actions in Alternative 2 would contribute an imperceptible adverse increment to the overall cumulative long-term major adverse

impact on designated species and their habitat. There would be no impairment of designated species and their habitat.

**Cultural Landscapes**. Cultural and natural resource management actions in Alternative 2 would have local long-term minor beneficial impacts on cultural landscape resources. The collective management actions in Alternative 2 would contribute an imperceptible beneficial increment to the overall cumulative long-term major adverse impact on cultural landscape resources. There would be no impairment of cultural landscape resources in the park.

Historic Buildings and Structures. Cultural and natural resource management actions in Alternative 2 would have local long-term minor beneficial impacts on historic buildings and structures. Projected visitor use associated with Alternative 2 would have a local long-term negligible impact on historic buildings and structures. Development of new visitor use facilities associated with Alternative 2 would have a long-term minor adverse impact on historic buildings and structures. The collective management actions in Alternative 2 would contribute an imperceptible beneficial increment to the overall cumulative long-term major adverse impact on historic buildings and structures. There would be no impairment of historic buildings and structures in the park.

Archeological Resources. Cultural resource management actions in Alternative 2 and development of new visitor use facilities would have local long-term negligible to moderate adverse impacts on archeological resources. Natural resource management actions in Alternative 2 would have a long-term minor beneficial impact on archeological resources. Projected visitor use associated with Alternative 2 would have a local long-term negligible impact on archeological resources. The collective management actions in Alternative 2 would contribute an imperceptible beneficial increment to the overall cumulative long-term major adverse impact on archeological resources. There would be no impairment of archeological resources in the park.

**Ethnographic Resources**. Cultural and natural resource management actions in Alternative 2 would have local long-term moderate beneficial impacts on ethnographic resources. The collective management actions in Alternative 2 would contribute an imperceptible beneficial increment to the overall cumulative long-term major adverse impact on ethnographic resources. There would be no impairment of ethnographic resources in the park.

**Local Roads and Park Access.** In Alternative 2 visitor-related traffic and parking would result in a local long-term minor beneficial impact on local roads and park access. Alternative 2 would contribute an imperceptible beneficial increment to the overall cumulative long-term moderate adverse impact on local roads and park access.

Visitor Use and Visitor Experience. Cultural resource management and natural resource management actions in Alternative 2 would result in a local long-term moderate beneficial impact on visitor use and visitor experience. Management actions taken to provide interpretive media and visitor facilities would have a local long-term major beneficial impact on visitor use and visitor experience. Alternative 2 would contribute a perceptible beneficial increment to the overall cumulative long-term major beneficial impact on visitor use and visitor experience.

**Park Operations**. The long-term operational needs associated with Alternative 2 for staff, maintenance, interpretation and visitor services, resource and visitor protection, and administration would result in a local long-term minor adverse impact on park operations. Alternative 2 would contribute an imperceptible adverse increment to the overall cumulative long-term major beneficial impact on park operations.

#### Alternatives Considered but Dismissed

The NPS has evaluated numerous alternative actions that would enhance the visitor experience at the Nuttallburg Visitor Use Area. Those considered but dismissed during the planning process included a larger upper level parking facility at the Nuttallburg Mine Trail Trailhead, rebuilding some of the former town buildings or outlining lost buildings in three dimensions, restoration of the entire coke oven bank, development of a visitor contact station, and building a trail connection to Nuttallburg from the river at either Short Creek or Keeney Creek was considered but eliminated. These alternatives were dismissed primarily because of potential adverse impacts on the park's cultural and natural resources.

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#### 1.0 PURPOSE AND NEED FOR ACTION

## 1.1 New River Gorge National River Overview

New River Gorge National River encompasses approximately 72,000 acres within a 53-mile corridor along the New River, extending from Hinton to Hawks Nest State Park in West Virginia. Congress established the park in 1978 for the purpose of "conserving and interpreting outstanding natural, scenic, and historic values and objects in and around the New River Gorge and preserving as a free-flowing stream an important segment of the New River in West Virginia for the benefit and future enjoyment of present and future generations" (Public Law 95-625, 11/10/78).

The NPS mission at New River Gorge National River reflects the park's legislated mandate found in Public Law 95-625. As stated in the park's *Strategic Plan* (NPS 2006d):

"The park is dedicated to conserving the natural, cultural and scenic resources and values found on its lands and in its waters. The park is further dedicated to developing facilities and progress in such a manner that park resources provide for education, inspiration and enjoyment in such a manner and by such means as to leave them unimpaired for future generations."

The mission goals of the park are to bring about the following desired future conditions (NPS 2000):

- ecological integrity of natural resources is restored and/or maintained
- cultural resources and landscapes are preserved and protected
- the free-flowing character of the river segment is not further compromised
- visitors understand the value of resources and their responsibility to protect those resources
- scenic viewsheds and drives are maintained and enhanced through cooperative efforts with local communities
- a system of land and water based recreational opportunities is developed that allows visitors to safely experience the resources without impairing them



New River Gorge viewed from Diamond Point

# 1.2 Purpose of the Proposed Action

This environmental assessment describes and evaluates the proposed action to develop a visitor use area at the site of the former Nuttallburg Mining Complex and adjoining town of Nuttallburg adjacent to the New River near Winona and Edmond, West Virginia, and within the New River Gorge National River (see Figures 1.1 and 1.2). The purpose of the project is:

 to provide the focal point within New River Gorge National River for the interpretation of early coal mining technology in the New River Gorge

- to provide park visitors with a safe experience that offers opportunities for education and recreation
- to protect the park's natural and cultural resources from potential adverse effects
- to provide visitor facilities that are cost effective, that are harmonious with and integrated into the park environment, and that reflect sustainable design

#### 1.3 **Need for the Proposed Action**

New River Gorge National River was established by Congress in 1978 in part to provide public understanding and appreciation of the park's natural, cultural, and scenic resources and values. The park's cultural resources include, among others, the sites of multiple coal mining communities that were once part of a thriving industrial corridor during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Today the mines and the towns that grew up around them are largely abandoned, most of the roads leading to them are no longer passable, and 50 to 100 years of forest growth obscures what remains of most of the industrial and community structures. Visitor access to these sites is largely constrained due to rugged terrain and the poor condition or absence of roads and trails. The NPS has developed trails to a few resource areas and has provided some media to interpret coal mining sites, though in general the story of coal mining technology and the life of those who worked in the mines and who lived in the gorge's mining communities is told primarily at the park's visitor centers. Only those visitors who are in good physical condition and who have good orienteering skills are able to actually visit the abandoned mine and town sites. Many of the remaining industrial structures at these sites also pose hazards to adventurous visitors who might try to enter into or climb around them.

The NPS is proposing to address its mandate for providing public understanding and appreciation of the park's cultural resources related to coal mining by developing a visitor use area at the site of the Nuttallburg Mine and adjoining town of Nuttallburg. The project is needed for the following reasons:

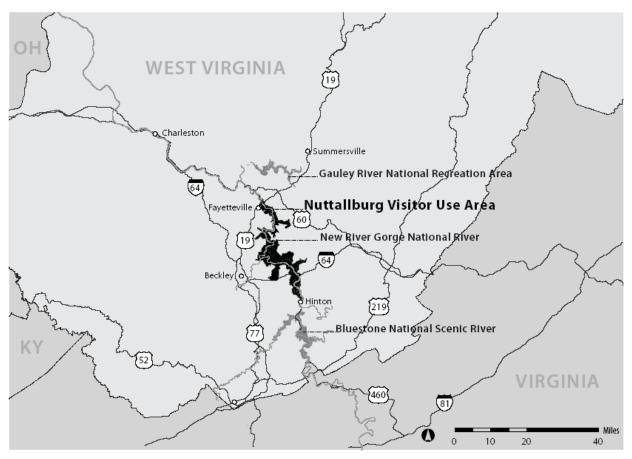
- without the project the park's significant cultural resources where visitors can learn about the park's industrial heritage will continue to remain largely inaccessible
- although the site is not officially open to the public, visitors do use the site and find potentially hazardous conditions due to the unstable condition of some structures at the Nuttallburg Mining Complex and town site
- no visitor facilities are currently available at the Nuttallburg Mining Complex and town
- additional visitor use in the vicinity of the Nuttallburg Mine poses potential adverse impacts to critical habitat of several species of bats that are designated of conservation interest

#### 1.4 **Project Background**

# **Project Setting**

The Nuttallburg Visitor Use Area is located near the New River within New River Gorge National River at the end of WV Route 85/2 near Winona and Edmond, West Virginia. The site encompasses the remains of the former Nuttallburg mining complex, the abandoned Nuttallburg town site, the abandoned Seldom Seen settlement site, and adjoining lands (see Figure 1.2). The main remaining visible features of the site include the principal physical structures that were required to extract materials from the upper level coal seam and to transport them to the railroad near the river level. These include the headhouse adjoining the Nuttallburg Mine shaft opening, the tipple that sorted the coal and dropped it into rail cars, and a conveyor connecting the headhouse and tipple. The remains of these structures occur within a larger landscape that includes the ruins of many related structures that were integral to the mining operations, the remains of Nuttallburg and Seldom Seen, rail lines

Regional Location



that served the complex and connected to the main line railroad (now owned and operated by the CSX Corporation), and the ruins of facilities from different periods of the mining operation, such as a bank of coke ovens adjoining the tipple. Although surrounded by relatively dense vegetation that has grown up since the mine ceased operation in the mid-1950s, the relationships among the headhouse, conveyor, and tipple are readily discernable, allowing visitors to comprehend the function of each element and to appreciate some of the difficulties that were involved in constructing the facilities and in operating the mine.

# ■ Historic Significance of the Site

The Nuttallburg mining complex and town site is the most intact example of an early 20th century coal mining complex in the New River Gorge and West Virginia, and one of the most complete coal related industrial sites in the United States (NPS 2007). The mining complex has remained essentially unaltered since the 1920s when most of the existing structures and buildings were erected. The town site has been altered by the removal of most of the structures; only foundations and road traces remain. The site is associated with the historical period when West Virginia became the leading coal producer in the country. Other early coal mining complexes have been documented in the state, but many are either in ruins or have been demolished (NPS 2007).

The Nuttallburg Coal Mining Complex and Town Historic District is listed on the *National Register of Historic Places* (see Figure 1.2 and Appendix A). The site is nationally significant for its association with Henry Ford's revolutionary experiment from 1920 to 1928 to vertically integrate automobile production at his Rouge River Plant in Dearborn, Michigan, by controlling the supply and flow of raw materials needed for automobile manufacturing (NPS 2007). The site is also nationally significant for

Ford's use of engineering innovations designed to streamline and vertically integrate all levels of industrial production (NPS 2007). The site was acquired by the Fordson Coal Company, a Ford Motor Company subsidiary, and was one of a small number of coal mine properties in West Virginia and Kentucky. The Nuttallburg Mine was the only coal mine in the productive New River Gorge Coal Field purchased by the Fordson Coal Company for this purpose.

Because of the site's association with John Nuttall the site also derives local significance. John Nuttall came to West Virginia from Pennsylvania and became a pioneering coal operator and early developer in the New River Coal Field (NPS 2007).

The site's intact archeological resources are locally significant because of their potential to yield information on the social and industrial history of the town and the coal-related industrial complex (NPS 2007).

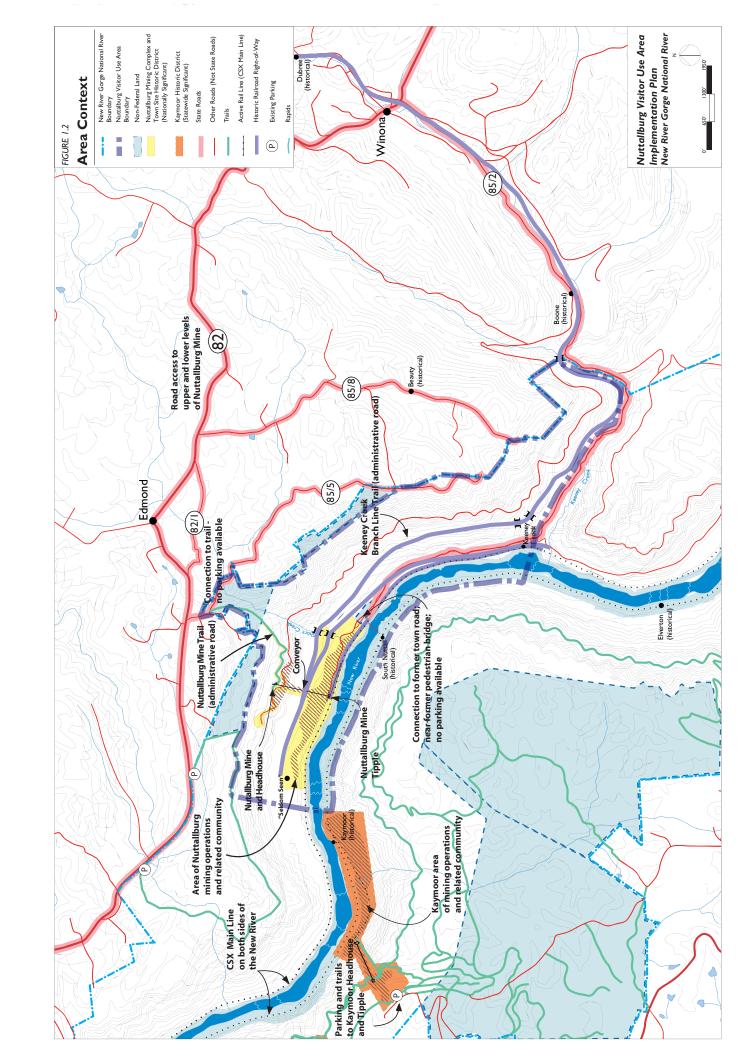
#### **Historic Overview and Context**

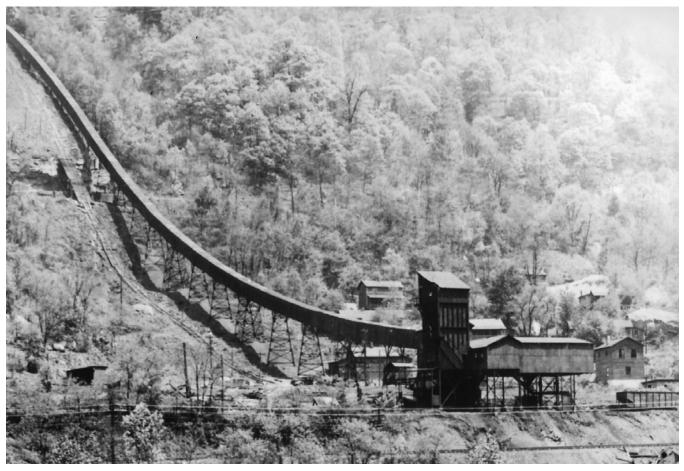
The Nuttallburg Coal Mining Complex and Town Historic District is located in Fayette County, West Virginia on the east side of the New River at the north end of New River Gorge National River. The district consists of 90 acres and includes, the Nutallburg mine complex colliery structures, a bank of 46 coke ovens, the town's residential and commercial areas at the bottom of the gorge including the piers of the foot bridge that linked Nuttallburg to South Nuttall on the west side of the river, and sidings of the former Chesapeake and Ohio (C&O) or "Chessie" railroad. The boundary extends to the east shore of the New River.

The primary elements of the Nuttallburg coal mine complex and town are included in the historic district. These include the 1925-26 headhouse and related elements at the top of the gorge linked to the coal seams, a 1925-1926 conveyor measuring 1,385 feet in length that brought coal from the mine to the bottom of the gorge, and a 1923-1924 tipple and related elements that sorted coal discharged from the Conveyor and directed it to rail cars below. Sections of two railroad lines closely associated with the operation of the mine and nearby mines are also included. These railroad lines are the three abandoned railroad sidings adjacent to a section of the active CSX railroad line in the bottomlands next to the New River and a section of the right-of-way of the abandoned Keeney Creek branch railroad line, including its dramatic switchback west of the conveyor and two c. 1930 trestle bridges that cross over Short Creek in two places. A circa 1892 stone retaining wall on the Keeney Creek line is included in the district, as well as a line of circa 1873 coke ovens west of the Tipple that parallel the former railroad sidings north of the active CSX railroad line. These coke ovens, of which 46 of the original 80 remain, apparently stood idle after 1919 and are the only remaining mining structures built by John Nuttall, the original mine founder.

The underground elements of the Nuttallburg Mine are not included in the historic district. Historic maps show that the Nuttallburg Mine was laid out in room and pillar configurations that reached well beyond the surface boundaries of the New River Gorge National River. The mines have been sealed off since 1958 and are presumed to be in a collapsed state following 85 years of extractive activities and abandonment.

John Nuttall began developing a coal mine at the confluence of Keeney Creek and the New River in 1870 in anticipation of the construction of the C&O Railroad through New River Gorge. Coal from this mine was the second to be shipped from the gorge on the C&O Railroad. Nuttall developed a second mine that opened in 1874 adjacent to Short Creek that he named the Nuttallburg Mine. When the C&O Railroad was completed through the area in 1873, Nuttall had already constructed 17 two-family dwellings and 80 single-family dwellings. At the Nuttallburg Mine he erected 80 coke ovens, a scale house and scales, a drumhouse or headhouse, blacksmith shop, carpentry shop, slate dump, and a tipple located on the railroad sidings that branched off the C&O mainline. These buildings were constructed in the vicinity of the Nuttallburg Mine at Short Creek in the unincorporated town of Nuttallburg. The remnants of the town are primarily located in close proximity to the Nuttallburg mining complex. The topography of the town directly affected the spatial organization of Nuttallburg. Due to the steep walls of the gorge and narrow bottomland along the New River, there was relatively





Nuttall Mine Tipple and Conveyor c. 1925

little level land on which to build. The remaining buildings that Nuttall constructed were in and around the Nuttallburg Mine. Because of the concentration of mining interests on both sides of the New River, a pedestrian suspension bridge constructed by the Roebling Bridge Company, was built across the New River in 1899, connecting Nuttallburg to South Nuttall or Browns, West Virginia.

As the town developed after 1873, the level area adjacent to the C&O tracks was dedicated to railroad and industrial activities. The buildings and structures that were built included railroad sidings, tipples, and coke ovens. Houses and other buildings were built along the inclined and switchback circulation system in the town. Many of the dwellings in town were perched on piers adjacent to narrow roads that went 100' to 200' up the east slope of the gorge.

At the turn of the century, Nuttallburg was a bustling mining town with a doctor, blacksmith, carpenter, schools, churches, and a company store. By 1895, Nuttallburg was segregated with the white workers settled on the west side of Short Creek and the black workers settled on the east side and on the river side of the C&O tracks. Each racial group had its own church, grade school, and club or boarding house. Wealthier families had more prominent homes in Nuttallburg. Historic photographs reveal that these structures were two-story wood frame buildings that included ornamented porches and clapboard fenced yards. Remarkably, the town of Nuttallburg saw few major changes during the period of its occupation from 1873 to 1958.

Although the coal processing buildings at Nuttallburg are the only above ground structures remaining, the mine and town retain the same spatial organization they had during Nuttallburg's period of significance. Primary refuse deposits and privies occur in direct association with residences, churches, and schools throughout the district. One large secondary refuse dump occurs on a slope near the Nuttallburg conveyor. In addition, the roads still pass under the conveyor, branching to connect to the locations of numerous foundations.

Deterioration from the weather or fires may account for the absence of intact wood frame residences and structures in the town, although local residents say that the lumber and other building materials were salvaged by the residents who built new houses on top of the gorge. Despite this, Nuttallburg is replete with stone building foundations, masonry stone walls, concrete pillars, roadways, railroad sidings, and other architectural features that provide a clear sense of the community's historic layout.

Mining in the New River Gorge posed an enormous challenge for the engineering design of mine structures because of the horizontal and vertical distance of the mine portals from the railroad tracks. The mine conveyance systems in the gorge generally had three principal elements: a headhouse just below the rim of the gorge at the level of the coal seam; a conveyor to carefully transport the highly friable New River coal between the headhouse and tipple; and a tipple to sort and load the coal at the bottom of the gorge adjoining the railroad. Paralleling many of the conveyors was a separate inclined rail tram or haulage to carry workers, supplies, and mine mules to and from the mines.

There is sparse evidence of the two earlier mine conveyor systems that John Nuttall built at the Nuttallburg Mine. Historical photographs, however, show that they were both constructed using cross-braced timbers. The conveyor at Nuttall's first mine at Nuttallburg was built between 1873 and 1874 and connected to a wooden tipple that stood over the side track adjacent to a long bank of coke ovens. Photographs of the first conveyor also show two shorter banks of coke ovens parallel to it on either side of the tipple. These coke ovens are absent in the photograph of Nuttall's second Nuttallburg mine conveyor. The second Nuttallburg mine conveyor differed from the first in having a rail line that curved down to the side track for the coke ovens.

Historical records indicate that the Nuttallburg mine conveyors carried their coal down to the tipple in twin "monitors". Monitors were basically cylindrical tubes with a door at one end that was fastened shut with a heavy steel bar. When the monitor reached the tipple, the bar was tripped, opening the door emptying it of its coal. After Henry Ford tore down Nuttall's second Nuttallburg mine conveyor in the early 1920s, he replaced it with a steel conveyor that employed an innovative "rope and button" technology, which increased the capacity of the conveyor while reducing the fragmentation of the coal.

The NPS acquired the mining complex and town and surrounding property from the Nuttall Estate in 1998 for inclusion in the New River Gorge National River that was originally established in 1978. The existing Ford-era structures of the Nuttallburg Coal Mining Complex are located on the northeast slope and lowland bench of the New River Gorge. The steep hill side in and around the Nuttallburg conveyor system is overgrown with invasive shrubs and volunteer trees, although the immediate area around the conveyor was cleared during the decades of its operation. Short Creek, which steeply cascades down the slope in a series of waterfalls, lies a short distance to the east of the Nuttallburg mining structures. Two of the railroad trestles of the Keeney Creek branch railroad line cross over this creek.

Passage to the Nuttallburg Mine bench is limited to two narrow roads, one to the headhouse from the Edmonds, West Virginia area and one following a northwest to southeast road along the mine bench. Within the town, the roads, including State Route 85/2, are passable only by foot, as is the route of the abandoned Keeney Creek branch railroad line.

In 2005 the NPS began implementation of a number of emergency and short-term stabilization actions to ensure the structural stability of the tipple, conveyor, headhouse, adjacent coke ovens, and foundation ruins. The actions included vegetation clearing, drainage improvements, concrete foundation repairs, structural steel repairs, and replacement of roofing and siding required to shield the steel structures from the elements. At the town site invasive plant vegetation (kudzu, multiflora rose, and Japanese knotweed) covering much of the town ruins was removed. Improvements were also made to the Nuttallburg Tipple Administrative Road, the Nuttallburg Mine Administrative Road, and the Keeney Creek Branch Line Administrative Road to enable four-wheel drive vehicle access to the Mining Complex structures for maintenance and emergencies. Improvements included clearing vegetation that had encroached within the rights-of-way, placement of crushed stone, and reseeding with native grasses. On the Keeney Creek Branch Line Administrative Road improvements also included re-decking and installation of handrails on the four trestle bridges.



Mine Conveyor and Tipple (2006)

## **Previous Studies of the Project Site**

HABS/HAER Documentation (IHTIA 1992). In 1991 the Historic American Engineering Record (HAER) in collaboration with the West Virginia University Institute for the History of Technology and Industrial Archaeology (IHTIA) recorded the coal mining resources at the Nuttallburg Mining Complex. The study focused on the structures and period of significance connected to Ford ownership of the site from 1920 to 1928. It also documented the development history of the site prior to and after the Ford era. Products included annotated measured drawings, a detailed historical narrative and physical description, and large-format archival photographs of the site and major structures.

Nuttallburg Level II Cultural Landscape Inventory (NPS 2006c). The NPS completed a Level II cultural landscape inventory for the Nuttallburg area which documents the location of all known structures, landscapes, man-made features, and objects in the historic cultural landscape that compose Nuttallburg.

Nuttallburg Mine Historic Structures Report (Heritage Partners/ICON architecture 2004). The Historic Structures Report (HSR) assessed the existing condition of structures remaining at the Nuttallburg Mining Complex and determined appropriate treatment alternatives and approaches. Historical architects, engineers, and technical personnel undertook on-site investigation of structures in collaboration with NPS staff. The HSR recommended a staged program of improvements for the headhouse, conveyor, and tipple, summarized as follows:

- emergency work to prevent collapse, including bracing, shoring, and key connections between these elements
- short-term stabilization, including repairing critical structural joints and members, as well as addressing overall integrity of elements that are compromised
- long-term stabilization, including addressing sub-elements that are important, but that are not of short-term importance
- long-term protection, including protecting each entire structure

For the short-term the HSR recommended stabilization of the tipple, headhouse, and conveyor, including short-term emergency actions to prevent collapse of structures accompanied by actions to stabilize structures and limit their further deterioration. These recommendations were considered essential to protect the resources and to enable their future use collectively as an important interpretive and visitor use site that can uniquely represent the industrial history of the park.

New River Gorge Historic Resource Study (Unrau 1996). The Historic Resource Study (HRS) (Unrau 1996) was the first survey and context study of resources in the New River Gorge. It was based on the NPS report, in cooperation with the West Virginia Division of History and Culture, entitled A coal Heritage Study: A Study of Coal Mining and Related Resources in Southern West Virginia (NPS 1992b) and a draft study entitled "Historical Context for the Coal Heritage Survey" (Workman 1996). Written before Nuttallburg was acquired by the NPS, the HRS included a discussion of John Nuttall as one of the pioneer coal operators in the New River Coal Field. It also mentioned Nuttallburg in relation to coke production and the conveyance of coal between the mine and the railroad, and in the discussion of coal towns.

New River Gorge Historic Resource Study (Workman et al 2005). The Historic Resource Study (HRS) was prepared to supplement and update the historic resource study for New River Gorge National River (NERI) developed in 1996 by Harlan Unrau (Unrau 1996). The goals of the HRS were to assess and update NERI's historic contexts, evaluate the significance of its historic resources, produce a small scale cultural resources base map that clearly displays locations of NERI's significant cultural resources, and provide historic preservation planning information for the park. The HRS rates the Nuttallburg site as the most significant coal related cultural resource in the park and recommends that it be nominated to the National Register of Historic Places.

**Nuttallburg Coal Mining Complex and Town National Historic District National Register Nomination (NPS 2007).** The NPS has submitted the *Nuttallburg Coal Mining Complex and Town National Historic District National Register Nomination* (NPS 2007) to the National Register as documentation in support of the site's nomination to the *National Register of Historic Places*. The nomination provides documentation of the historic significance of the Nuttallburg Coal Mining Complex and Town National Historic District (see Figure 1.2), encompassing 90 acres and including the following:

- Nuttallburg coal mine complex colliery structures and ancillary structures
- the bank of 46 coke ovens
- the town of Nuttallburg site and associated residential and commercial areas at the bottom of the gorge
- the Seldom Seen settlement site and associate residential area at the bottom of the gorge
- the piers of the former footbridge that linked Nuttallburg to South Nuttall on the west side of the river
- the sidings of the former Chesapeake and Ohio (C&O) Railway
- an 0.85-mile section of the former Keeney Creek Branch Railway

The Historic District does not include the underground elements of the Nuttallburg Mine or the Keeney Creek Mine. The mines have been sealed off since 1958 and are presumed to be in collapsed states following 85 years of extractive activities and subsequent abandonment (NPS 2007).

The WV State Historic Preservation Officer determined that the Nuttallburg Mining Complex and Town Historic District is eligible for the National Register (see Appendix A). It was listed on the National Register on August 22, 2007.

# GMP Recommendations Pertaining to Abandoned Mines and Towns

NPS completed the "New River Gorge National River General Management Plan (GMP)" in 1982 (NPS 1982). Since its adoption the GMP has provided park managers with the basis for managing New River Gorge National River, identifying the opportunities for visitors that will be available in the park, guiding development of park facilities, and setting the course for protecting and managing the park's natural, scenic, and cultural resources.

The 1982 GMP recommends that land needed for access, resource protection, or public use be acquired by the NPS from willing sellers. All other land not needed for these purposes or that is unlikely to be able to be acquired from willing sellers is recommended to remain in private ownership. For land remaining in private ownership the GMP states that the NPS would attempt to protect resources on those lands that are within the park boundary through a combination of active monitoring programs, cooperative agreements, and technical assistance programs with government agencies and private individuals in and near the park.

Nuttallburg is located on land identified in the GMP as remaining in private ownership. While it is recognized in the GMP – along with Kaymoor – as one of two mine sites that retain the greatest physical integrity within the gorge, at the time the GMP was completed the NPS did not have a reasonable expectation of being able to acquire the site from willing sellers. As a result the GMP does not consider visitor use of the site. Instead the GMP specifically indicates that the following actions be taken at Nuttallburg:

"The NPS will seek a cooperative agreement with the owners of the Nuttallburg Mine to ensure its preservation. The goals of the agreement would be to prevent vandalism; study and record the site; stabilize the conveyor system, chute, headhouse; and encourage safe public access. It is also recommended that the Nuttallburg Mine site be nominated by the landowner to the National Register of Historic Places."

Since completion of the GMP the NPS was able to acquire Nuttallburg, including the town site and colliery buildings. Now that the site has been acquired by the NPS additional treatments beyond stabilization can be considered to enhance visitor use and understanding of Nuttallburg.

## 1.5 Planning Issues

Scoping with the NPS project planning team, government agencies, and the public, has revealed several issues related to planning and preliminary design of visitor use improvements at Nuttallburg.

#### Protection and Enhancement of Cultural Resources

Future visitor use must be planned and designed so that the site's sensitive cultural resources are not adversely impacted. Recent emergency measures implemented by the NPS have stabilized the most significant colliery structures whose integrity is in most imminent danger. Further treatments are needed to protect resources over the long-term from the impacts of natural weathering processes and vegetation growth, as well as from potential impacts of visitor use at the site.

# Interpretive Experience

Nuttallburg is the only nationally significant historic resource currently recognized in the park and offers a unique opportunity to tell the story of industry and coal mining in New River Gorge. Visitor use facilities should provide access to the site's resources so that visitors are enabled to understand and appreciate the important elements of the Nuttallburg story, such as:

- how the geology of New River Gorge formed upper level coal seams that are accessible only with great difficulty

- the ingenuity and innovation that was required to mine the plentiful coal deposits at Nuttallburg and elsewhere in the New River Gorge Coal Field and to transport raw material to market
- how the Nuttallburg Mine played a role in the vertical integration of industry pioneered by Henry Ford in the 1920s
- the harsh conditions that prevailed for miners and the mining community of Nuttallburg and similar communities throughout New River Gorge

# Recreation Opportunities

Nuttallburg offers a variety of recreation opportunities, such as hiking, climbing, biking, and nature study. Visitor facilities should provide a variety of ways for visitors to experience the area safely, recognizing differing physical and athletic capacities, as well as varying attention spans and varying amounts of time spent at the site. Recreation facilities – particularly the trail network – should be designed to take full advantage of existing rights-of-way and historic traces within the site. The system of trails should also connect to and enhance the greater park trail system adjacent to and beyond Nuttallburg.

## Visitor Safety

Several safety concerns exist at Nuttallburg. The remaining colliery structures and coke ovens could attract some visitors who might attempt to climb onto them or otherwise enter them. Mine openings along the upper bench could also attract visitors who might try to gain entrance to mine shafts. Rail traffic on the CSX Main Line poses a safety threat to visitors who might try to illegally cross the tracks to reach the New River. Some areas of mine spoils could be unstable and would not be suitable sites for visitor use. The site is also popular among local residents for hunting during some times of the year.

# Rare, Threatened, or Endangered Species

The NPS has identified the potential for occurrences of rare, threatened, or endangered species in the Nuttallburg Visitor Use Area vicinity through review of existing data, coordination with the West Virginia Division of Natural Resources (WV DNR), and field surveys by NPS staff and other experts. Consultation with the WV DNR provided a list of designated species that potentially occur within the park (see Appendix A). Field study confirmed occurrences of several designated species in the area including three species of bats and the Allegheny woodrat (*Neotoma magister*).

The federally-endangered Virginia big-eared bat (Corynorhinus townsendii virginianus) is known to inhabit the Nuttallburg Mine portal in the vicinity of the headhouse as well as well as four other mine portals within one mile of the headhouse. Virginia big-eared bats may also use the Nuttallburg Mine portal area as foraging habitat and for a travel corridor between roosting and foraging habitat. The federally-endangered Indiana bat (Myotis sodalis) has not been found at the mine portal near the headhouse but is present at the other four mine portals within one mile of the headhouse. Indiana bats utilize a variety of tree species for both primary and alternate roosts in the vicinity of the Nuttallburg Mine portal; the habitat in the mine portal area is also used as foraging habitat and includes travel corridors that link roosting and foraging habitat. The federally-designated species of special concern Allegheny woodrat (Neotoma magister) is known to inhabit the Nuttallburg Mine portal in the headhouse area and is suspected to inhabit the four other portals as well.

## Invasive Plant Management

During the period of mine operations trees were removed or thinned along the length of the conveyor and in the vicinity of the tipple, headhouse, and mine portals, as well as within the town of Nuttallburg and the Seldom Seen area. Since the late 1950s when the mine ceased operation and the town was abandoned, native and non-native vegetation has revegetated the site. Non-native plants such as

kudzu (Pueraria lobata), multiflora rose (Rosa multiflora), and Japanese jointgrass (Polygonum cuspidatum) have invaded most of the open areas. Paulownia (Paulownia tomentosa) occurs throughout the site and adversely impacts the structures, culverts, and retaining walls. It has grown up and through the corrugated roofing and siding of the colliery structures and is a major cause of deterioration.

In the summer of 2005 much of the kudzu was removed from the Nuttallburg town site. In the summer of 2006 the invasive vegetation was removed from a portion of the coke oven area and paulownia trees removed from portions of the tipple and conveyor area. Ongoing management of invasive plants will be required to keep the site open so that remaining structures and ruins remain visible and free from impacts caused by vegetation growth.

#### Park Operations

Improvements are needed to provide support facilities commensurate with intended and projected levels of visitor use. Keeping the site accessible to visitors will require ongoing maintenance of vegetation and roads and trails in rugged terrain subject to mass movement. Whatever desired conditions for visitor facilities and natural resources are selected for the site must be able to be feasibly maintained by the NPS.

# Potential Impacts of Access Improvements (roads, parking, trails)

The Nuttallburg area is characterized by very rugged terrain where construction of roads, trails, and parking facilities is difficult. Few level areas are available for parking. Roads and trails are susceptible to slides and slumping. Road and trail maintenance has the potential to adversely impact topography and soils, as well as drainage ways.

## **Access for Disabled Visitors**

Visitor use facilities should be designed to enable access for disabled visitors, including parking, restrooms, and trail access to major interpretive features on the site.

## Potential All Terrain Vehicle (ATV) Impacts

Enhanced trail access and parking, as well as enhanced public awareness of the site, has the potential to increase the potential for illegal use of all terrain vehicles (ATVs).

#### 1.6 **Impact Topics**

#### **Impact Topics Selected for Detailed Analysis**

Specific impact topics were developed for discussion focus and to allow comparison of the environmental consequences of each alternative for the Nuttallburg Visitor Use Area. These impact topics were identified based on the following: federal laws, regulations, and executive orders including NEPA guidance documents; NPS Management Policies (NPS 2006b); NPS staff knowledge of special or vulnerable natural and cultural resources in the Nuttallburg vicinity; external and internal scoping; and relevance to the project's planning issues. The following impact topics are addressed (see Chapter 4.0 below):

- soil resources
- vegetation resources
- endangered or threatened plants and animals and their habitats
- historic buildings and structures
- cultural landscapes
- archeological resources

- ethnographic resources
- local roads and park access
- visitor use and experience
- park operations and park facilities

## Impact Topics Dismissed from Detailed Analysis

The following impact topics were identified and dismissed from further analysis because the resources do not exist at the Nuttallburg Visitor Use Area or the resources will not be impacted adversely by the proposed action. A brief rationale for the dismissal of each impact topic is provided below.

Park Museum Collection. NPS Management Policies (NPS 2006b) require NPS to collect, protect, preserve, provide access to, and use objects, specimens, and archival and manuscript collections in the disciplines of archeology, ethnography, history, biology, geology, and paleontology, to aid understanding among park visitors, and to advance knowledge in the humanities and sciences. The Nuttallburg Visitor Use Area does not currently contain any facilities used to house the park's collections. Any artifacts collected from the site in the future will be added to the park's existing collections maintained elsewhere in the park. Once in the collection the artifacts will be documented and stored in accordance with the park's Collection Management Plan (NPS 2004). Therefore the museum collection impact topic was dismissed.

Indian Trust Resources. Secretarial Order 3175 requires that any anticipated impacts to Indian Trust Resources from a proposed project or action by agencies of the Department of the Interior be explicitly addressed in environmental documents. There are no known Indian Trust Resources at New River Gorge National River. No land within the park is held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore the Indian Trust resources impact topic was dismissed.

Indian Sacred Sites. Executive Order 13007, "Indian Sacred Sites", requires managers of federal lands to avoid adversely affecting the physical integrity of Indian sacred sites. There are no Indian sacred sites as defined by Executive Order 13007 within the limits of the Nuttallburg Visitor Use Area. Therefore Indian sacred sites impact topic was dismissed.

**Surface Water Quality**. The 1972 Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977, establishes national policy to restore and maintain the chemical, physical, and biological integrity of the nation's waters, to enhance the quality of water resources, and to prevent, control, and abate water pollution. *NPS Management Policies* (NPS 2006b) provide for the preservation, use and quality of waters in national parks.

Drainage from the Nuttallburg area flows via three permanently flowing streams and numerous swales and ditches that discharge directly into the New River. An unnamed tributary – originating midway up the gorge wall – drains the Nuttallburg town site and the mining complex at the base of the gorge. Short Creek flows through the Nuttallburg area to the east of the Nuttallburg town site. It originates on the plateau above the town site in the vicinity of US Route 60, collecting runoff from the Edmond area and other private lands within the watershed. Keeney Creek drains the area along WV Route 85/2 (Keeney Creek Road). It is a major tributary to the New River within New River Gorge National River and drains an extensive area of private land upstream of the site, including the Winona and Lookout areas. Routine water quality monitoring of Keeney Creek by the NPS indicates that water quality in the creek is poor. It is negatively impacted by bacteria (fecal coliforms) which likely originates from households within the watershed that are without septic systems or sewer service (Purvis 2002). Water quality data are not available for Short Creek or the unnamed tributary.

Management actions associated with the alternatives under consideration at the Nuttallburg Visitor Use Area would not directly impact surface water features on the site. Minor drainage diversions would be placed around historic buildings and structures, along trails, and at proposed parking sites. No new impervious surfaces would be added. The proposed suspension footbridge across the New River in Alternative 4 would not involve construction in the river. Erosion and sedimentation control

best management practices would be used at the locations where soils are disturbed as part of cultural resource management actions, reestablishment of trails, new trail construction, and unpaved parking area construction. Collectively these actions would have a local short-term negligible impact on surface water quality. Therefore the surface water quality impact topic was dismissed.

Floodplains. Executive Order 11988, "Floodplain Management," requires federal agencies to examine project impacts on floodplains and the potential risk involved in having facilities within floodplains. Floodplain mapping is not available for the New River in the Nuttallburg area. Empirical data suggest that flooding associated with the 100-year storm in the area is generally confined to land below the CSX Mail Line bed. None of alternatives for the Nuttallburg Visitor Use Area propose development of visitor use facilities within this area. There would be no impact to the floodplain and no potential risks associated with placement of facilities within the floodplain. Therefore the floodplains impact topic was dismissed.

Wetlands. Executive Order 11990, "Protection of Wetlands", requires federal agencies to avoid, where possible, impacts to wetlands. The Clean Water Act, the Rivers and Harbors Appropriation Act of 1899, and the Freshwater Wetlands Protection Act also protect wetlands (NJSA 13:9-B-1 et seq). NPS Management Policies (NPS 2006b) provide guidance on NPS activities regarding the management of wetlands including a "no net loss" policy. There are no jurisdictional wetlands within the areas of proposed visitor use for any of the alternatives under consideration at the Nuttallburg Visitor Use Area (US FWS 1992). No hydric soils indicative of wetlands are present on the site (USDA 1975). Therefore the wetlands impact topic was dismissed.

Prime and Unique Farmland Soils. Council on Environmental Quality (CEQ) NEPA Regulations (40 CFR 1508.27) require federal agencies to assess the impacts of their actions on soils classified by the U.S. Natural Resources Conservation Service as prime or unique farmland soils. No areas of prime farmland soils are within the area of impact associated with proposed actions at the Nuttallburg Visitor Use Area. There are no soils classified as unique within New River Gorge National River. Therefore the prime and unique farmland soils impact topic was dismissed.

Terrestrial Wildlife. The National Environmental Policy Act requires federal agencies to assess the impacts of their actions on components of affected ecosystems. NPS Management Policies (NPS 2006b) state that it is NPS policy to protect the abundance and diversity of natural resources.

No surveys for terrestrial wildlife have been conducted in the Nuttallburg area. However, wildlife surveys at other locations throughout the park indicate that 63 species of mammals (including 10 species of small mammals) are known to occur in the park (NPSpecies 2003). Species utilizing woodland habitat are likely to be most common, including squirrel, white-tailed deer, raccoon, and gray fox. Deer densities in the park vicinity are approximately 33 deer per square mile, considerably higher than the 3 to 8 deer per square mile characteristic of the area prior to European settlement (WV DNR 2003). Black bear may also be present. Currently 233 species of birds are also known to occur in the park (Mahan 2005). Of these approximately 93 percent were detected during breeding season and, therefore may nest in the park (Pauley et al 1997). The park is globally significant in providing critical habitat for neotropical migratory birds, especially wood warblers (Family Parulidae) (Mahan 2005). These species depend upon unfragmented mixed-deciduous forests with welldeveloped canopies and gap dynamics (e.g. tree falls) in place (Mahan 2005). Cerulean warblers, a species of neotropical migrant that is in decline throughout the northeast and a candidate for federal listing, appear to have a concentrated distribution in and around New River Gorge National River (Rosenberg et al 2000). Some bird species in the park are also dependent upon hemlock stands or forest gaps created by tree falls and other natural and/or human induced disturbances. Studies of reptile populations in the park have documented the occurrence of 38 species of reptiles (NPSpecies 2003). These include five species of turtles, timber rattlesnakes, and numerous species of lizards. The park is one of the few areas where turtle subspecies interbreed, making it regionally significant for painted turtles (Buhlmann et al 1987). Continuous forest, abandoned mine portals, and river/stream systems in the park provide habitat for a diverse, nationally significant assemblage of amphibian species (Mahan 2005). Studies have documented occurrences of 48 species of amphibians in the park (NPSpecies 2003).

Management actions associated with the actions under consideration at the Nuttallburg Visitor Use Area would produce short-term and long-term negligible impacts to wildlife. Short-term negligible impacts would include temporary displacement due to construction activities. Long-term negligible impacts would include loss of habitat associated with reestablishment of trails along historic traces and minor new trail construction in previously disturbed areas. Therefore the terrestrial wildlife habitat impact topic was dismissed.

**Air Quality**. The 1963 Clean Air Act as amended (42 USC 7401 et seq) requires that federal land managers protect air quality. The *NPS Management Policies* (NPS 2006b) address the need to analyze air quality during park planning. New River Gorge National River is designated as a Class II Clean Air Area. Fayette County is designated under the Clean Air Act as an air quality attainment area and a Class II Clean Air Area. This designation establishes a limit on the allowable increase in sulfur dioxide and particulate matter concentrations, effectively preventing additional pollutant-emitting industrial development in the vicinity of the park. Because New River Gorge National River is within a Class II Clean Air Area, NPS is not required to conduct air quality or visibility monitoring within the park.

None of the alternatives for the Nuttallburg Visitor Use Area would permanently affect air quality. However, local air quality could be temporarily affected by dust and vehicle emissions during construction of facilities. These effects would last only as long as construction occurs. The area's Class II air quality status would not be affected. Therefore the air quality impact topic was dismissed.

Wild and Scenic River. The Wild and Scenic Rivers Act establishes a system for the protection of rivers with outstanding scenic, recreational, geological, cultural, or historic values. These rivers are to be preserved in free-flowing condition for the benefit and enjoyment of present and future generations. The New River in West Virginia has been found to possess several characteristics making it eligible for inclusion in the National Wild and Scenic River System, including wildlife, cultural, recreational, and geological outstanding remarkable values. The New River, however, has neither been recommended as suitable for inclusion in the Wild and Scenic River System nor designated a wild and scenic river. No actions in this planning process are proposed that could adversely affect the values that qualify the New River for inclusion in the National Wild and Scenic River System. Therefore the wild and scenic river impact topic was dismissed.

**Scenic Resources**. Scenic resources at the Nuttallburg Visitor Use Site include a variety of views of natural features and cultural landscapes that can be seen from roads and trails. Views of natural features include: enclosed forest views; views of rock cliffs, rock ledges, and rock faces; and views of cascading streams. Views of cultural landscapes are of the former Nuttallburg town site and colliery structures, as well as other historic structures such as the coke ovens and wood timber railroad trestles across Short Creek on the former Keeney Creek Branch Line right-of-way.

Historically, views to the New River and canyon rim across the river were present from many of the structures within Nuttallburg. The settlement of Seldom Seen and the dwellings beyond the west edge of the town had spectacular views of the rapids and river corridor. These views still persist though they are now interrupted by uncontrolled vegetation growth. From the Keeney Creek Branch Line there were likely views of the town, valley, and surrounding gorge. Today second growth forest has grown up all along the right-of-way, generally obscuring views.

Historically, the headhouse area had spectacular views of the surrounding gorge and the town of Nuttallburg. The trail leading to the headhouse still provides a number of views of the river and canyon rim. However many of the historic views have been lost due to revegetation of the area.

Management actions included in all four alternatives for the Nuttallburg Visitor Use Area would enhance interior views of natural resources and the cultural landscape from roads and trails. Management actions would also slightly enhance views from the headhouse of the surrounding gorge. Overall there would be a local long-term moderate beneficial impact on scenic resource at the site. Therefore the scenic resource impact topic was dismissed.

Local and Regional Economy. Development of new visitor use facilities at the Nuttallburg Visitor Use Area would have a negligible one-time economic benefit to the local economy due to local spending for a portion of construction and labor and materials. New visitor use facilities would provide an additional attraction in the park with the potential to increase visitor length of stay for some visitors. This would result in a local long-term negligible beneficial impact on the local and regional economy. Therefore the local and regional economy impact topic was dismissed.

Environmental Justice. Executive Order 12891, "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 disproportionately high and adverse human health or environmental impacts of their programs and policies on minorities or lowincome populations or communities as defined in the Environmental Protection Agency's Draft Environmental Justice Guidance (July 1996).

Minority and low-income populations as defined in E.O. 12891 reside in Fayette County in the vicinity of New River Gorge National River. In Fayette County, 18.2 percent of families and 21.7 percent of individuals live below the poverty level and minorities constitute less than 10 percent of the population (U.S. Census 2000). None of the alternatives under consideration at the Nuttallburg Visitor Use Area would have a disproportionately high and adverse human health, economic, social, or environmental impact on minority or low-income populations residing in Fayette County. Negligible beneficial shortand long-term economic impacts on the local and regional economy would result from construction and operation of new visitor use facilities in the area. Subsistence hunting and fishing - an activity occurring in the project area by minority and low-income populations - would continue and would be enhanced through better access. Therefore the environmental justice impact topic was dismissed.

Lightscape and Night Skies. NPS Management Policies (NPS 2006b) require the NPS to preserve natural ambient lightscapes as natural resources and values that exist in the absence of humancaused light. None of the alternatives for the Nuttallburg Visitor Use Area would permanently affect the park's lightscape. No nighttime lighting is proposed in conjunction with development of visitor facilities at the site. Therefore the lightscape and night skies impact topic was dismissed.

Noise and Soundscape. NPS Management Policies (NPS 2006b) state that the NPS will strive to preserve the natural quiet and natural sounds associated with the physical and biological resources of parks. Activities causing excessive or unnecessary unnatural sounds in and adjacent to parks must be monitored, and action must be taken to prevent or minimize unnatural sounds that adversely affect park resources or values, or visitor enjoyment of them. The frequencies, magnitudes, and duration of human-caused sound considered acceptable varies among NPS units, as well as throughout each park unit, being generally greater in developed areas and less in undeveloped areas.

Construction required for the Nuttallburg Visitor Use alternatives would result in local short-term negligible impacts on daytime ambient noise levels. Equipment and vehicles would be the primary noise generators. Contractors would be required to use state-of-the-art noise reduction technology on equipment to the maximum extent practicable. Slightly increased traffic on Keeney Creek Road associated with increased visitor use would result in a local long-term negligible impact on day-time ambient noise levels. Therefore the noise and soundscape impact topic was dismissed.

Wilderness Resources. The Wilderness Act of 1964 established the National Wilderness Preservation System composed of federal lands designated as wilderness. The Act mandates a policy for the enduring protection of wilderness resources for public use and enjoyment. New River Gorge National River does not include any land within the National Wilderness Preservation System designated pursuant to the Wilderness Act of 1964.