



FINDING OF NO SIGNIFICANT IMPACT

**Design and Build Two Stacked Loop Hiking and Biking Trail Systems
Develop Three Trails on Existing Roads
Analyze Bike Use on Park Trails**

**New River Gorge National River
West Virginia**

The National Park Service (NPS) proposes to develop two stacked loop hiking and biking trail systems in the Craig Branch and Garden Ground areas of the New River Gorge National River, to develop three new single track trails on existing informal routes (such as abandoned roads, railroad grades and user-created OHV routes) and to allow bicycle use on all proposed new trails, as well as on some of the park's existing trails.

The purpose of the project is to enhance recreational opportunities for visitors in the park while rehabilitating some resource damage that occurred prior to NPS ownership.

Action is needed at this time for the following reasons:

- Line-item construction funding was awarded to the park in 2009 to design and construct new stacked loop single track trail systems; this funding should be spent within a reasonable amount of time.
- The Boy Scouts of America (BSA) requested the opportunity to bring about 2,000 volunteers to the park during June and July 2011 to construct new trails and participate in resource rehabilitation.
- During the park's recent planning process for a new General Management Plan (GMP), park managers learned that more prohibited off-road bicycle use was occurring on park trails than previously understood.
- Public input for the GMP process revealed that the public wants the park to provide more trails, more opportunities to create loops from trails and trail connections and to sanction bicycle use on some park trails, including both existing and new trails.
- Internal scoping for this Environmental Assessment revealed more extensive resource damage in some of the project areas from prior land uses and prohibited off-highway vehicle (OHV) use; rehabilitation of these areas is necessary to better protect park resources.

The NPS completed an Environmental Assessment (EA) that evaluated three alternatives and the resultant impacts, or environmental consequences of implementing each of the alternatives on a variety of resource areas. The EA addressed compliance with the National Environmental Policy Act (NEPA) of 1969, as amended; Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended; and Section 7 of the Endangered Species Act of 1973, as amended. The EA was prepared in accordance with

the Council on Environmental Quality (CEQ) "Regulations for Implementing the Procedural Provisions of NEPA" (40 CFR 1500-1508) and NPS Director's Order #12, "Conservation Planning, Environmental Impact Analysis, and Decision Making" (DO-12, 2001), and accompanying DO-12 Handbook.

Selected Alternative

The NPS has selected Alternative B, New Route Single Track Trail Construction, for implementation. The selected alternative was described in Section 2.2 of the EA ("Proposals Common to Both Action Alternatives," pages 19-24) and Section 2.3 ("Alternative B – New Route Single Track Trail Construction," pages 25-29). It was also presented as the NPS Preferred Alternative in Section 2.10 (pages 49-50)

The selected alternative is composed of four action elements: to allow bicycle use on existing park trails and administrative roads, to construct three single track trails on existing informal routes (abandoned roads and railroad grades), to construct the Craig Branch Stacked Loop Trail System, to construct the Garden Ground Stacked Loop Trail System and to allow bicycle use on all of the newly constructed trails.

Bicycle Use on Existing Park Trails and Administrative Roads

Pending the promulgation of a special regulation, bicycle use will be allowed on 18 park trails and administrative roads, as follows:

- Park Loop Trail
- Fayetteville Trail
- Timber Ridge Trail
- Long Point Trail (except the last 0.2 miles)
- Kaymoor Trail and Kaymoor Trail/Administrative Road
- Craig Branch Trail/Administrative Road
- Hawks Nest Connector Trail
- Southside Trail and Southside Trail/Administrative Road
- Brooklyn Mine Trail/Administrative Road
- Glade Creek Trail and Glade Creek Trail/Administrative Road
- Rend Trail/Administrative Road
- Keeney Creek Trail/Administrative Road
- Nuttall Mine Trail/Administrative Road
- Nuttallburg Tipple Trail/Administrative Road
- Nuttallburg Town Connector Trail
- Stone Cliff Trail/Administrative Road
- Terry Top Trail/Administrative Road
- Little Laurel Trail/Administrative Road

Amenities related to the management of mountain bike use will be provided, as appropriate. Existing trails will be assessed for their difficulty and classification, and signed accordingly.

Three Single Track Trails on Existing Informal Routes

The NPS will construct three single track trails – the Mud Turn Trail (2.75 miles), the Panther Branch Connector Trail (three miles) and the Brooklyn Miner's Connector Trail (0.8 miles) – on existing informal routes (abandoned road beds and railroad grades). Sustainable design and construction techniques, as described in Section 2.5 of the EA (pages 34-35) will be applied in the development of these trails. Once constructed, these trails will be assessed for their difficulty and classification, and

signed accordingly. Pending the promulgation of a special regulation, bicycle use will be allowed on these trails.

Visitor needs will be accommodated by existing facilities, such as parking areas, though the park will provide additional amenities where necessary.

Craig Branch Stacked Loop Trail System

The NPS will construct approximately 11 miles of new single track trail in an interconnected stacked loop system layout in the Craig Branch area of the park. About three miles of this trail system will be constructed within existing informal routes (mainly abandoned logging roads), while about eight miles would be newly constructed where no informal routes currently exist. Sustainable design and construction techniques, as described in Section 2.5 of the EA (pages 34-35) will be applied in the development of these trails. These trails will be classified as Easiest and More Difficult, and signed accordingly. Pending the promulgation of a special regulation, bicycle use will be allowed on this trail system.

A new trailhead will be constructed on an abandoned log landing along the Craig Branch Trail/Administrative Road, and the gate across that road will be moved to allow for public access to the new trailhead. Facilities and amenities will be provided at the trailhead, such as parking and an informational kiosk. A signed trail access point with no trailhead facilities will be located along the Kaymoor No. 1 Road.

About ten miles of informal routes, such as user-created OHV routes and abandoned logging roads, in the Craig Branch area will be closed and rehabilitated, and invasive, non-native plants will be treated and removed, concurrent with trail construction.

Garden Ground Stacked Loop Trail System

The NPS will construct approximately 33 miles of new single track trail in an interconnected stacked loop system layout in the Garden Ground area of the park. About four miles of this trail system will be constructed within existing informal routes (mainly abandoned logging roads and a short section of mine bench), while about 29 miles would be newly constructed where no informal routes currently exist. Sustainable design and construction techniques, as described in Section 2.5 of the EA (pages 34-35) will be applied in the development of these trails. These trails will be classified as More Difficult and Most Difficult, and signed accordingly. Pending the promulgation of a special regulation, bicycle use will be allowed on this trail system.

A new trailhead will be constructed in the Terry Top area, along the Terry Top Trail/Administrative Road. Facilities and amenities will be provided at the trailhead, such as parking and an informational kiosk. A signed access point with no trailhead facilities will be located along County Road 28. Trail users will also be able to access the Garden Ground Stacked Loop Trail System from existing trailhead facilities at Stone Cliff.

About five miles of informal routes, such as user-created OHV routes and abandoned logging roads, in the Garden Ground area will be closed and rehabilitated, and invasive, non-native plants will be treated and removed, concurrent with trail construction.

Other Alternatives Considered

The EA prepared for this project also analyzed the No Action Alternative (Alternative A), which represents a continuation of current management, and one other action alternative (Alternative C, “Existing Disturbance Single Track Construction”).

Alternative A, the No Action Alternative, was not selected for reasons associated with both visitor use and resource protection. Due in large part to public input through several recent planning processes, including the development of a General Management Plan, the park has identified the need to provide additional trails and more opportunities for trail users to create loops in their excursions, as well as the need to authorize bicycle use on some existing and new park trails. Alternative A would not meet these needs. Currently, the use of park trails is relatively concentrated, and demand is expected to increase. Implementing Alternative A would likely result in the increasing degradation of resources and the visitor experience due to the limited opportunities and increasing concentration of use. Additionally, under Alternative A, natural resource issues caused by past land use activities in the Craig Branch and Garden Ground areas would not be rehabilitated. For example, erosion from unsustainable logging road development would continue to adversely impact water quality and non-native and invasive plant species would not be prioritized for treatment and removal.

Alternative C, Existing Disturbance Single Track Construction, was not selected for the following reasons:

- The 2010 Draft GMP proposes that new trails, particularly those in backcountry areas, would be constructed on existing disturbance, such as existing informal routes like old logging and mining roads. It was thought that fewer adverse impacts to natural resources would result from developing trails in disturbed areas. Through the development of the proposals in this EA, the NPS learned that there are numerous species of rare plants that grow well in these disturbed areas. Also, many of the existing informal routes in the park were developed for resource extraction or for OHV use, and were not designed for sustainable long-term recreational use. Often, these informal routes and disturbed areas are the source of erosion and streamflow issues that indirectly impact water quality, vegetation and wildlife. Alternative B, New Route Single Track Trail Construction, proposes trail development on existing disturbances where they would lend themselves to sustainable trails; otherwise these disturbances would be avoided and, in many cases, rehabilitated. Alternative C, Existing Disturbance Single Track Trail Construction, proposes to use even the unsustainable alignments of these existing disturbances for trail construction; to make those trails sustainable, considerable recontouring would be necessary, in addition to importing materials such as rock and dirt to build features that would adhere to sustainable trail standards. Even with this extra construction (labor and cost), it may not be possible to mitigate some of the issues and impacts that occur simply as a result of the unsustainable alignments.
- In the Garden Ground area, Alternative C, Existing Disturbance Single Track Trail Construction, proposes trail development on the existing mine bench across the whole project area, in order to contain trail development within existing disturbances. The mine bench, however, is key habitat for the Allegheny woodrat, so Alternative C would result in more disturbance to woodrat habitat than Alternative B, New Route Single Track Trail Construction.
- In the Garden Ground area, Alternative C, Existing Disturbance Single Track Trail Construction, proposes the development of more miles of trail than Alternative B, New Route Single Track Trail Construction. These additional trail miles, in the form of further loop opportunities, would result in greater impacts to neotropical migratory birds that depend upon large, unfragmented forest blocks for their habitat. Alternative C would result in more and smaller forest blocks than Alternative B.

Alternatives Considered but Dismissed

There were several other alternative elements that were considered but rejected, and therefore not carried forward for further analysis because they were determined to be inappropriate for the park or for the scope of the EA.

Bicycle Use on the Bluestone Turnpike Trail

The Bluestone Turnpike Trail is located within the Bluestone National Scenic River, a unit of the NPS that is managed out of the New River Gorge National River administrative offices. Designating the Bluestone Turnpike Trail for bicycle use was considered but eliminated from further evaluation because it is situated in a separate unit of the NPS, and it was determined that the scope of this EA should remain within the New River Gorge National River. If, in the future, a regional trail plan for all three NPS units in the New River Gorge region is initiated, then bicycle use within the Bluestone National Scenic River could be evaluated in that future plan.

Trailhead in the Craig Branch Area

Within the Craig Branch area, there is a second log landing (in addition to the proposed trailhead) located near Gatewood Road, adjacent to several lots of private property. The log landing was considered as a possible trailhead for the proposed Craig Branch Trail System, but it was eliminated from detailed analysis. The access to this log landing is a narrow, gated gravel road that the NPS does not own, but does have a right of way for use. Approximately the first 50 feet of this road are shared with a private driveway that accesses two residential homes. Additionally, upon examination of the property line, the NPS owns only a portion of the log landing itself. It was determined that putting a trailhead here could cause too many conflicts with landowners and may impact private lands.

Trailheads in the Garden Ground Area

Development of a trailhead adjacent to the town of Terry was considered, but eliminated from detailed analysis. The terrain and property ownership is such that this trailhead could accommodate only a few cars, and the location at the bottom of the gorge is not feasible for a trailhead due to the steep slope that would be very difficult for the majority of trail users.

Development of a full trailhead with parking and facilities was considered at the proposed access point to the Garden Ground Trail System along County Road 28 where the corners of NPS and BSA property meet. This action was eliminated from detailed analysis, however, because County Road 28 is narrow, remote and used almost exclusively by the few private landowners that live along it. Inviting public traffic down this road could cause conflicts with park neighbors, space for a trailhead would be constrained by terrain and ownership and substantial road improvements may be necessary to make public access viable.

Garden Ground Stacked Loop Trail System Alternative

An additional alternative for the Garden Ground Stacked Loop Trail System was considered. It incorporated additional mileage and looping, interconnected trail segments beyond that proposed in Alternative C, Existing Disturbance Single Track Trail Construction. Resource specialists assessed that, while the 2010 Draft GMP finds that a single track trail is not considered to be a fragmenting feature in the project area's mixed mesophytic forest, the cumulative effect of the multiple loops of trail in this alternative could approach the potential for becoming a fragmenting feature. This alternative also proposed a segment of new trail through a tract of private land to the north and northeast of Terry. The NPS does not necessarily anticipate an opportunity to acquire the land or to work with the landowner to come to an agreement about public access. This alternative was eliminated from further analysis.

Environmentally Preferred Alternative

The NPS is required to identify the environmentally preferred alternative in its NEPA documents for public review and comment [NPS 2001a, Sec. 4.5 E(9)]. The environmentally preferred alternative is defined by the Council on Environmental Quality in their NEPA's Forty Most Asked Questions: "The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves and enhances historic, cultural and natural resources" (Q6a).

Based on the analysis of the environmental consequences of each alternative, the NPS determined that Alternative B (New Route Single Track Trail Construction), the selected alternative, is the environmentally preferred alternative. Implementation of the selected alternative results in many beneficial impacts to natural resources over Alternative A, the No Action Alternative, and it results in fewer and less intense adverse impacts to natural resources over Alternative C, Existing Disturbance Single Track Trail Construction.

Mitigation Measures

The NPS places a strong emphasis on avoiding, minimizing and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the NPS will implement a number of mitigation measures for all new trail development in the selected alternative. These mitigation measures are described in detail in Section 2.6 of the EA (pages 35-38) and can be summarized as follows:

Mitigations to Protect Soils, Streams and Water Resources

- Riparian areas will be avoided.
- Where trails must cross perennial and intermittent streams, bridges or bottomless culverts will be used.
- Protections will be put in place during construction that prevent or minimize the potential for loose soil to enter water ways. Duff layers will be replaced over side-cast soils to protect from post-construction erosion.
- Where existing features, such as abandoned roads, have changed natural streamflow characteristics, trail construction will generally include stream restoration to rehabilitate existing resource damage and to prevent impacts to streamflow from new trail development.

Mitigations to Protect Vegetation

- Known rare plants would be avoided. Rare plant surveys will be conducted along the proposed trail corridor prior to construction. Proposed trail alignments may be rerouted to protect vegetation.
- Known rare plant communities will be avoided, with the exception of several short trail sections that lead out and back to vistas through cliff top vegetation communities.
- Non-native, invasive plants along the trail construction corridor will be treated or removed as part of construction, in addition to the rehabilitation and invasive treatment actions described in the selected alternative.

Mitigations to Protect Wildlife

- Wildlife habitat surveys will be conducted along the proposed trail corridor prior to construction. Proposed trail alignments may be rerouted to protect key habitat of species of concern.
- Bat habitat will be avoided as much as possible. Where new trails are located near an open mine portal, the portal will be gated with a bat-friendly design.
- Seasonal tree cutting restrictions and review of all trees greater than five inches diameter breast height that may be removed for trail construction will be implemented in order to protect bat habitat.
- Allegheny woodrat habitat will be avoided as much as possible. Where avoidance is not feasible, measures will be taken, in consultation with the park wildlife biologist, to mitigate impacts, such as gating mine portals along the new trails with bat-friendly designs, which are also woodrat-friendly.
- The NPS will design trails to avoid rhododendron thickets as much as possible to protect Swainson's warbler habitat.
- Riparian areas and ruts in old road traces that have filled with water and serve as amphibian habitat will be avoided.

Mitigations to Protect Cultural Resources

- Known archeological and historic sites will be avoided. Archeological surveys will be conducted along the proposed trail corridor prior to construction. Proposed trail alignments may be rerouted to protect archeological and historic sites.
- Prior to construction, trail crews will be trained to recognize archeological and historic sites inadvertently discovered during construction and what to do to protect those sites.
- A cultural resource specialist will be roving during trail construction.

Why the Selected Alternative Will Not Have a Significant Effect on the Human Environment

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an Environmental Impact Statement (EIS).

As described in the EA, both beneficial and adverse impacts to the resources analyzed could result from the actions proposed. However, no significant impacts were identified that will require analysis in an EIS.

Short-term, localized, negligible to minor adverse impacts to water quality, vegetation, wildlife and visitor experience could occur as a result of construction activities. Long-term impacts to water quality and streamflow characteristics would be negligibly adverse in all project areas except for the Craig Branch area, where impacts would be beneficial as a result of the restoration and rehabilitation of many of the abandoned roads in that area that cause erosion and sedimentation of local streams.

Long-term impacts to vegetation from allowing bicycle use on existing and new trails would be negligibly adverse as compared to the impacts of hiking on trails. While development of new trails could allow for the spread of non-native, invasive plant species along trail corridors, mitigation measures and rehabilitation work proposed as part of the selected alternative would protect rare plants and rare plant communities. Overall long-term impacts to vegetation from new trail development is expected to be

minor and adverse from the new trails and beneficial from the area rehabilitation and restoration, particularly in the Craig Branch and Garden Ground project areas.

Long-term impacts to wildlife from allowing bicycle use on existing and new trails would be negligibly adverse as compared to the impacts of hiking on trails. The only two federally-listed endangered species in the park are bats; any adverse impacts to bat species from implementation of the selected alternative would be negligible as a result of mitigations included in the alternative. Other species of concern include the Allegheny woodrat, neotropical migratory birds and amphibians. Adverse impacts to woodrats would be negligible in the Mud Turn, Panther Branch and Brooklyn Mine project areas and could be minor in the Garden Ground area; there is no known woodrat habitat in the Craig Branch area. Adverse impacts to neotropical migratory birds would be minor in the Mud Turn, Panther Branch and Brooklyn Mine project areas. Adverse impacts to the breeding capacity of these bird species could be moderate in the Craig Branch and Garden Ground areas, which represent a negligible increase in the impact over the existing condition in the Craig Branch area and a noticeable, incremental increase in the impact over the existing condition in the Garden Ground area. Impacts to amphibians could be negligibly adverse in the Mud Turn, Panther Branch and Brooklyn Mine project areas and would be beneficial in the Craig Branch and Garden Ground areas, where the rehabilitation and restoration actions will protect amphibian habitat.

There would be no long-term impacts to cultural resources from allowing bicycle use on existing and new trails as compared to hiking use, as trail surfaces are hardened and any resources beneath or around them would not be disturbed. Long-term impacts to cultural resources as a result of new trail construction could result in negligible adverse impacts if archeological sites are inadvertently discovered during construction. In the Craig Branch area, beneficial impacts could result from trail construction and use where archeological sites have been looted; appropriate use of the area by other visitors may deter further looting and vandalism.

The selected alternative would result in short-term minor to moderate, adverse impacts on park operations because of the staffing and funding needs associated with new trail development. In the long term, park facilities and operations would benefit from allowing bicycle use on existing trails and administrative roads and from development of the Craig Branch and Garden Ground Stacked Loop Trail Systems, and could be negligibly, adversely impacted from the facility maintenance needs associated with the proposed Mud Turn, Panther Branch Connector and Brooklyn Miner's Connector Trails.

The selected alternative would result in substantial long-term beneficial impacts to visitor use, experience and access by providing for recreational opportunities, including new trails and off-road bicycle use, that the public has been asking the park to provide for many years. The selected alternative could also result in substantial beneficial socioeconomic impacts for the three-county region around the New River Gorge National River.

The degree to which public health and safety are affected.

Public health benefits could result from the provision of more recreational trail opportunities, particularly in the Craig Branch area where trails will be classified as Easiest and More Difficult skill difficulty level, making them more accessible to novice trail users to develop healthy, active habits. To protect visitor safety, equestrian use will be separated from other trail users on existing trails in most instances. New trails will be designed and constructed with sustainable features that make trails safe for users, including those that control trail users' speed and provide for long sight lines. Also, where new trails must be located near mine portals, they will be gated, which will keep visitors from entering them.

Any unique characteristics of the area (proximity to historic or cultural resources, wild and scenic rivers, ecologically critical areas, prime farmlands, wetlands or floodplains, and so forth).

No wild and scenic rivers, ecologically critical areas, prime farmlands, or known Indian sacred sites occur within or adjacent to the project areas. No new development would occur in a floodplain as a result of the selected alternative, and any wetland in the project areas would be avoided in trail design and protected from sedimentation during construction.

Under the selected alternative, new trails would be developed near historic and cultural resources. Direct impacts to known archeological and historic sites would be avoided through trail design, including archeological surveys along all proposed trail prior to construction. Several trails will be constructed on existing informal routes (abandoned roads and railroad grades) that are also historic routes, including the Mud Turn, Panther Branch Connector and Brooklyn Miner's Connector Trails. Development of these trails could provide for protection and interpretation of these historic routes, allowing visitors to develop a better understanding of how people have moved around the gorge throughout its history.

The degree to which impacts are likely to be highly controversial.

No highly controversial effects were identified during either preparation of the EA or the public review period.

The degree to which the potential impacts are highly uncertain or involve unique or unknown risks.

No highly uncertain, unique or unknown risks were identified during either preparation of the EA or the public review period.

Whether the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.

The selected alternative does not establish a NPS precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration. Any future actions regarding trails and trail management will be directed by the park's most current approved General Management Plan.

Whether the action is related to other actions that may have individual insignificant impacts but cumulatively significant effects. Significance cannot be avoided by terming an action temporary or breaking it down into small component parts.

Implementation of the selected alternative will have no significant cumulative impacts. As described in the EA, the selected alternative would contribute either imperceptibly to cumulative adverse impacts on most resources that were analyzed, or it would contribute beneficially to the cumulative impacts. Impacts from the selected alternative could be noticeable, but not significant, within the overall cumulative impacts of numerous federal and non-federal actions to some localized communities of rare plants and species of concern, such as neotropical migratory birds and the Allegheny woodrat.

The degree to which the action may adversely affect historic properties in or eligible for listing in the National Register of Historic Places, or other significant scientific, archeological, or cultural resources.

Implementation of the selected alternative will result in no adverse affect to archeological or historic sites, including properties in or eligible for listing in the National Register of Historic Places. The selected alternative includes mitigations that would avoid direct impacts to historic and archeological sites. Proposed actions could result in beneficial impacts for cultural resources, particularly in the Craig Branch project area.

In accordance with Section 106 of the NHPA, the park consulted with the West Virginia State Historic Preservation Officer (SHPO) in development and analysis of and selection from the alternatives. The

park sent a copy of the EA to the SHPO with a determination of *No Adverse Effect* on archeological and historic resources on February 1, 2011. The SHPO concurred with this determination on March 3, 2011.

The degree to which an action may adversely affect an endangered or threatened species or its habitat.

In accordance with Section 7 of the Endangered Species Act, the park consulted with the U.S. Fish and Wildlife Service (USFWS) in development and analysis of and selection from the alternatives. The park mailed a letter and a copy of the EA to the USFWS on February 1, 2011 requesting concurrence with an NPS determination of *No Effect* for federally listed plant species, Virginia spirea and Running buffalo clover, which are not known to occur in the project areas and, if found through pre-construction rare plant surveys, would be avoided. Additionally, the NPS made a determination of *May Affect, But Not Likely to Adversely Affect* for federally listed Indiana and Virginia big-eared bats, allowing for any potential inadvertent indirect impacts if roosting bats were undetected along the proposed trail routes. The USFWS concurred with this determination on March 23, 2011 (received on March 28, 2011).

The park also consulted with the West Virginia Division of Natural Resources (WVDNR), Non-game Wildlife & Natural Heritage Program. A letter requesting comments and a copy of the EA was mailed to the WVDNR on February 1, 2011, and no response was received.

Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

The selected alternative violates no federal, state or local environmental protection laws. The development of new trails and allowing bicycle use on new and existing trails will be consistent with all laws, regulations and requirements.

Impairment of Park Resources or Values

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of Interior and the NPS to manage units “to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations” (16 USC § 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that NPS must conduct its actions in a manner that will ensure no “derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress” (16 USC 1a-1).

NPS Management Policies 2006, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the Nation Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The NPS has discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park (NPS 2006, sec. 1.4.3). However, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006, sec 1.4.3). An action

constitutes an impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values” (NPS 2006, sec 1.4.5). To determine impairment, the NPS must evaluate “the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts” (NPS 2006, sec 1.4.5). A determination on impairment for the selected alternative is attached to this document.

Public Involvement

In addition to internal and agency scoping, public scoping for this project (including to design and build two stacked loop hiking and biking trail systems, to develop three trails on existing roads and to analyze bike use on new and existing park trails) and EA began on November 10, 2009 and concluded on January 15, 2010.

As part of public scoping, the NPS planning team identified several individuals and groups with specific interest and/or expertise in bicycle use in the park, the areas for the proposed new stacked loop systems, visitor use and management, as well as trail design, construction and management. Twelve of these representatives were invited to attend a stakeholder focus group meeting on November 10, 2009, and nine attended.

The NPS hosted a public meeting on December 8, 2009 at the NPS Canyon Rim Visitor Center, the purpose of which was to describe the overall concept of the project to the public and to obtain public input during the initial phase of the planning process. A press release announcing the meeting was distributed to the local and state media and posted on the park webpage on November 25, 2009. Approximately 40 people attended the meeting. By January 15, 2010, over 390 public scoping comments were submitted online via the NPS Planning, Environment and Public Comment (PEPC) website.

In addition to scoping particularly for this project and EA, public input from previous park planning processes was considered in the development of alternatives, particularly from numerous opportunities for public involvement during the development of a general management plan for the park, dating from 2007 through 2010.

The EA was made available for public review and comment on January 26, 2011 and was followed by a 38 day comment period that concluded on March 4, 2011. Printed copies of the plan were mailed to 33 various groups, agencies and interested members of the public and made available at the park headquarters office and visitor centers. The plan was posted for review on the park webpage. A public open house to provide information and collect comments on the plan was held on February 10, 2011 at the NPS Canyon Rim Visitor Center. A press release announcing the meeting was distributed to the local and state media and posted on the park webpage on January 26, 2010. Advertisements were placed in local newspapers announcing the date and location of the meeting, availability of the document, and opportunities for public comment. Approximately 35 people attended the public open house.

Nearly all of the 50 public comments received during the comment period were in support of the plan (consultations with WV SHPO, USFWS and Native American tribes were considered separate from public comments and are discussed below). Most comments received from the local area expressed support for the selected alternative and excitement at the expansion of trail-related recreation opportunities in the park. The non-local public expressed interest in visiting the New River Gorge region more often and staying longer as a result of implementation of the selected alternative. Several comments applauded bicycle use as an attractive family activity and liked the proposed provision of trails suited to a variety of skill levels in the selected alternative. Many comments expressed the public’s interest in

volunteer opportunities to build and maintain park trails. Several comments expressed that hiking and biking are compatible uses on trails, citing consistent experiences on multi-use trails without conflicts, both locally around the New River Gorge and in the broader mid-Atlantic region.

Of the 50 comments received, 47 comments indicated a preference for Alternative B, New Route Single Track Trail Construction (the NPS Preferred Alternative), one comment preferred Alternative C, Existing Disturbance Single Track Trail Construction, one comment preferred Alternative B in the Craig Branch area and Alternative C in the Garden Ground area, and one comment preferred Alternative A, the No Action Alternative.

One comment expressed an objection to bicycle use in any natural area and questioned the scientific research used to inform some parts of the impact analysis; a summary of this comment and a response are provided in the attached Comments and Responses sheet.

Several of the comments received raised concerns that are not relevant to the selected alternative or impact analysis in the EA, but warrant a response; these comments are summarized with concern statements and responses in the attached Comments and Responses sheet.

The Section 106 and Section 7 consultation processes were initiated by the NPS with letters to the West Virginia SHPO and the USFWS on January 8, 2010. The NPS sent copies of the EA with letters containing the park's assessment and determination of effect from the selected alternative on February 1, 2011. A response was received from the SHPO on March 3, 2011 concurring with the determination of *No Adverse Effect*. A response was received from the USFWS on March 28, 2011 (sent on March 23, 2011), concurring with the determination of *No Effect* for federally listed plant species, Virginia spirea and Running buffalo clover, and *May Affect, But Not Likely to Adversely Affect* for federally listed Indiana and Virginia big-eared bats, and allowing for any potential inadvertent indirect impacts if roosting bats were undetected along the proposed trail routes.

Notification of the project and copies of the EA were sent to representatives of 14 Native American tribes who, lacking any federally recognized tribal affiliations within the park, were identified by the NPS as possibly having some interest in the New River Gorge National River. The Chief of the Remnant Yuchi Nation was the only tribal representative to respond; he indicated that he was grateful to be acknowledged, that the NPS should continue the excellent work and that he had no formal questions at this time.

Public and agency comments and further review by park staff resulted in no changes to the NPS Preferred Alternative or the impact analysis presented in the EA. Responses to the public comments are provided in the attached Comments and Responses sheet.

Finding of No Significant Impact

Based on the analysis presented in the EA, the selected alternative (Alternative B, New Route Single Track Trail Construction) will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible to moderate in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state or local environmental protection law. The selected alternative will not result in impairment of park resources or values.

Based on the foregoing, it has been determined that an EIS is not required for this action and thus will not be prepared.

Recommended:



Don Striker, Superintendent
New River Gorge National River
National Park Service

Mar 28, 2011
Date

Approved:



Dennis R. Reidenbach, Regional Director
Northeast Region
National Park Service

4/1/11
Date

Final Impairment Determination

The Prohibition on Impairment of Park Resources and Values

NPS Management Policies 2006, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

What is Impairment?

NPS Management Policies 2006, Section 1.4.5, *What Constitutes Impairment of Park Resources and Values*, and Section 1.4.6, *What Constitutes Park Resources and Values*, provide an explanation of impairment.

Impairment is an impact that, in the professional judgment of the responsible National Park Service manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values.

The NPS has discretion to allow impacts on Park resources and values when necessary and appropriate to fulfill the purposes of a Park (NPS 2006 sec. 1.4.3). However, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006 sec 1.4.3).

Section 1.4.5 of *Management Policies 2006* states:

An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated.

Per Section 1.4.6 of *Management Policies 2006*, park resources and values that may be impaired include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and condition that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural

- landscapes; ethnographic resources; historic and prehistoric sites, structure, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park, but this would not be a violation of the Organic Act unless the NPS was in some way responsible for the action.

How is an Impairment Determination Made?

Section 1.4.7 of *Management Policies 2006* states, "[i]n making a determination of whether there would be an impairment, an NPS decision maker must use his or her professional judgment. This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); consultations required under Section 106 of the National Historic Preservation Act (NHPA); relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision.

Management Policies 2006 further define "professional judgment" as "a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker's education, training and experience; advice or insights offered by subject matter experts and others who have relevant knowledge and experience; good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities relation to the decision

Impairment Determination for the Selected Alternative

This determination on impairment has been prepared for the selected alternative. An impairment determination is made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for Park Facilities and Operations; Visitor Use, Experience and Access; or Socioeconomics because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values.

Water Quality

Analysis of the selected alternative demonstrates that the actions proposed would result in beneficial impacts – negligible long-term improvements – to water quality within the New River Gorge National River. Benefits to park resources cannot be considered an impairment of water quality.

Streamflow Characteristics

Analysis of the selected alternative demonstrates that the actions proposed could result in negligible, long-term adverse impacts to streamflow characteristics of certain small drainages within the New River Gorge National River. The scope of the possible impacts to these small drainages would be so small as to have no effect on park purposes or foundational values, and therefore does not constitute an impairment of streamflow characteristics.

Vegetation

Analysis of the selected alternative demonstrates that the actions proposed could result in overall local, long-term, minor, direct and indirect adverse impacts in areas of new trail construction. As a result of rehabilitation of existing user-created OHV routes and some old logging roads and treatment of invasives in the Craig Branch and Garden Ground areas, long-term impacts could be beneficial to native vegetation communities. Because all adverse impacts were determined to be localized and forest fragmentation would not result from trail construction in the Garden Ground area, key park values, vegetation resources and forest blocks important to the natural integrity of the park and enjoyment thereof, the project does not result in an impairment of vegetation.

Wildlife and Habitat

Analysis of the selected alternative demonstrates that the actions proposed would result in beneficial or imperceptible adverse impacts to amphibians, negligible to minor adverse impacts on federally designated threatened and endangered species (bats, including non-listed bats), negligible to moderate adverse impacts on Allegheny woodrats and minor to moderate adverse impacts on neotropical migratory birds. Because all adverse impacts were determined to be localized within the project areas and key park values, wildlife resources and habitat important to the natural integrity of the park and enjoyment thereof, the project does not constitute an impairment of wildlife or habitat.

Cultural Resources

Analysis of the selected alternative demonstrates that some improvements to the protection of park cultural resources could occur through its implementation by mitigating existing erosional features and discouraging vandalism and looting of known archeological sites. Even with systematic surveys of all the proposed new trail routes, there remains the potential of inadvertently disturbing undocumented sites. With consideration of the mitigation plans and avoidance measures, the actions proposed would not result in an impairment of cultural resources.

Comments and Responses

Design and Build Two Stacked Loop Hiking and Biking Trail Systems
Develop Three Trails on Existing Roads
Analyze Bike Use on Park Trails

New River Gorge National River
West Virginia

The NPS received a total of 50 public comments during the public review period, as well as letters from the West Virginia SHPO, USFWS and a representative from the Remnant Yuchi Nation on the environmental assessment (EA) of its proposal to develop two stacked loop hiking and biking trail systems in the Craig Branch and Garden Ground areas of the New River Gorge National River, to develop three new single track trails on existing informal routes (such as abandoned roads, railroad grades and OHV routes) and to allow bicycle use on all proposed new trails, as well as on some of the park's existing trails.

COMMENTS

One comment expressed an objection to bicycle use in any natural area and questioned the scientific research used to inform some parts of the impact analysis:

***Comment Summary:* Much of the research on environmental and social impacts of mountain biking that is generally cited by mountain bikers makes the case that mountain biking does not create greater impacts than hiking. The authors of these studies have misinterpreted their data, and the studies have no scientific value.**

Several of the studies referenced in this comment were used to evaluate the potential impacts described in the impact analysis in the EA. These reference materials are peer-reviewed and professionally published studies that provide the best available science on impacts of mountain biking. The impact analysis is specific to the park and the local ecosystem, and the studies in question provide general background information to the analysis to make it more robust and accurate.

No changes were made to the NPS Preferred Alternative or the impact analysis presented in the EA.

CONCERNS

Several of the comments received raised concerns that do not affect the selected alternative or impact analysis in the EA, but warrant a response:

***Concern:* Bike use on park trails is appropriate and welcomed, as long as some trails in the park remain hiking only.**

The selected alternative will allow bicycle use on some, but not all, existing park trails, pending promulgation of a special regulation. Numerous existing park trails will remain designated as hiking-only, though they are not listed in the EA. Trailhead signage and park publications will clearly indicate allowable uses on individual park trails.

Concern: Park-wide trail-related issues were not addressed in this EA. Several comments included requests for a more extensive park trail network, including a Through the Park Trail and a variety of connector trails that could be developed on existing mine benches and railroad grades. Several comments requested that existing park trails be “upgraded” or maintained to a different standard. Two comments expressed safety concerns about trail users traveling on roads shared with public vehicular traffic in between trails. Questions were also raised about equestrian use being considered as a component of use on multi-use trails.

The scope of this EA is limited to the project areas described in Sections 1.3 through 1.5 (pages 2-9) of the EA. These broader issues that apply to trails, trail management, trail development and trail access and connections are beyond the scope of this project. The NPS expects to take a more holistic look at these issues throughout the park in a comprehensive trail management plan, which is proposed as a subsequent implementation plan to park’s General Management Plan planning process.

Concern: The actions proposed in this EA could affect permitted activities in the park, particularly bicycle tours provided by private businesses.

No changes to permitting procedures or existing permits were proposed in this EA. Permitted activities in the park will continue according to laws, regulations and policies governing these activities.