



June 30, 2022

FINDING OF NO SIGNIFICANT IMPACT CAVE MOUNTAIN ROAD REHABILITATION ENVIRONMENTAL ASSESSMENT

Buffalo National River, Arkansas

BACKGROUND

The National Park Service (NPS) has completed a comprehensive analysis in preparation to rehabilitation Cave Mountain Road at Buffalo National River (BNR)

Prior to the establishment of the BNR, the gravel road known today as Cave Mountain Road (Newton County Road 9560) has been in existence. There is evidence that the road was in use during the Civil War, dating its establishment prior to 1861. Cave Mountain Road is located in the upper district of Buffalo National River near the southern end of Boxley Valley within Newton County Arkansas.

Cave Mountain Road serves as the primary access route from Arkansas Highway 21 to Whitaker Point. Whitaker Point, also known as Hawksbill Crag, is a popular scenic vista accessible by hiking trail on adjacent United States Forest Service (USFS) lands. The Whitaker Point trail and vista attracts thousands of visitors annually and is a source of numerous emergency assistance calls for county, state, and federal agencies. High traffic volumes have led to poor road conditions, high usage, and impacts to water quality from runoff. The current road is gravel with insufficient drainage and does not meet the Arkansas Department of Transportation's standards for roads.

In the past decade there has been concern for the water quality within the Buffalo River Watershed. The Buffalo River Conservation Committee (BRCC) as established by Arkansas Executive Order 19-14 launched support for this project. On May 19, 2020, Arkansas Department of Agriculture – Natural Resources Division, Arkansas Unpaved Roads Team convened a meeting with BRCC subcommittee members to discuss the findings of an assessment of high priority gravel roads within the Buffalo River Watershed that had the potential for direct impact to the water quality of the Buffalo River. While all sites evaluated exhibited erosion and excess sediment transport to streams or the Buffalo River impacting water quality, Cave Mountain Road was one of the highest priorities recommended for rehabilitation. As a result of that recommendation, the State of Arkansas as approved by the Arkansas Legislature's Committee on Public Health, Welfare, and Labor will fund this project pending finalization of this Finding of No Significant Impact (FONSI).

The public was provided an opportunity to comment. On February 7, 2022, BNR released the Cave Mountain Road Rehabilitation Environmental Assessment (EA) for public comment. Striving to reach a broad audience while maintaining health and safety practices during the COVID-19 pandemic, the park

distributed announcements by e-mail to local, state, and federal government officials; and individuals who had previously expressed an interest in the planning process. Additionally, the park created posts to their Facebook page requesting input and providing the link to the document through the parkplanning.nps.gov site. The public was asked to review the EA and share their comments for 30 days between February 7 and March 9, 2022, related to environmental analysis of actions proposed for the study area.

The National Park Service (NPS) proposes to authorize Newton County to take action to improve conditions to provide adequate drainage, pave the 1.8-mile section the road on NPS land, and increase safety by expanding road width and adding guard rails in certain areas.

Comments received by the NPS on the EA included input from a variety of park stakeholders. The responses to substantive public comments and minor modifications to the EA are summarized in [attachment A](#).

Selected Alternative

The National Park Service analyzed two alternatives in detail in the EA. Based on this analysis, the NPS selected Alternative B: Road Rehabilitation and Improvement. See Chapter 2 of the EA for a complete, detailed description of the selected alternative.

The selected alternative includes widening and resurfacing the road, tree removal, replacement of 13 existing culverts, the addition of 13 new culverts (total of 26 culverts), ditching, adding 0.5 miles of guardrails in certain locations, and potentially removing rock features within the proposed road corridor.

The National Environmental Policy Act (NEPA) requires public involvement and notification for all projects using federal funds that may have an effect on the human environment (40 CFR, 1506.6 in Council of Environmental Quality 1992). The EA was open a 30-day public comment period from February 7 – March 9, 2022.

Rationale for Decision

Cave Mountain Road serves as the primary access route from Arkansas Highway 21 to Whitaker Point. Whitaker Point, also known as Hawksbill Crag, is a popular scenic vista accessible by hiking trail on adjacent United States Forest Service (USFS) lands. The Whitaker Point trail and vista attracts thousands of visitors annually and is a source of numerous emergency assistance calls for county, State, and federal agencies. High traffic volumes have led to poor road conditions, high usage, and impacts to water quality from runoff. The current road is gravel with insufficient drainage and does not meet the Arkansas Department of Transportation's standards for roads. The purpose of and the need for the project is to improve conditions to provide adequate drainage, pave the 1.8-mile section the road on NPS land, and increase safety by expanding road width and adding guard rails in certain areas.

Mitigation Measures

The NPS places strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. Therefore, NPS recommends multiple mitigation measures and best management practices to protect the natural and cultural resources that the project could affect: Geologic Resources (including bluff lines, cave and karst features, karst processes, soils, landslides and slope stability), Human Health and Safety, Species of Concern (Bats), Vegetation, and Water Resources. These measures and practices are described in chapter 2 of the environmental assessment.

The authority for mitigation for this project comes from the following laws and policies:

- NPS Organic Act (16 United States Code [U.S.C.] 1)
- The Redwood Act (H.R. 3813 [95th])
- The Wilderness Act [16 U.S.C. 1131 et seq.]
- Director's Order 41: Wilderness Stewardship (NPS 2013)
- The National Park Service Management Policies (chapters 4, 5, and 6) (NPS 2006)

SIGNIFICANCE CRITERIA REVIEW

Potentially Affected Environment

The project will include widening the 1.8-mile county road where feasible due to topography, to 24 feet of pavement with 50 feet of right-of-way within the boundary of BNR. Road width is currently between 15 and 22 feet wide. The project area is approximately 11 acres within the 95,730-acre park; it includes 1.8 miles of gravel road out of the 885 miles of gravel roads within the watershed of the Buffalo River located in Newton County.

The project area is steep and narrow, passing through a mature mixed hardwood forest adjacent to steep rocky slopes and bluff lines. Cave and karst features exist within the project area to include Cave Mountain Cave, which serves as a very important hibernaculum for two endangered species, the Indiana bat (*Myotis sodalis*), and the Gray bat (*M. grisescens*), and one threatened species the Northern Long-Eared bat (*Myotis septentrionalis*). The cave is also a summer roost for a substantial number of Gray bats. Fossiliferous strata ranging in age from early through late Mississippian (Late Paleozoic) period are found in the project area. The paleontological resources documented in the few exposed blocks or down-dropped bedrock represent common marine invertebrate fossils including corals, brachiopods, crinoids, and invertebrate trace fossils. The road receives traffic primarily from rural residents and visitors to BNR and United States Forest Service lands. Some commercial traffic may use the road at certain times, generally rural delivery trucks or logging equipment. Less than 5 acres of vegetation would be permanently removed; five acres of vegetation constitutes less than 0.005% of total vegetation within the park. The project area is in the upper section of the Buffalo River, which is listed as an Extraordinary Resource Water, the highest water quality designation given by the Arkansas Department of Environmental Quality. Cave Mountain Road begins by paralleling the Buffalo River near its turnoff on Hwy 21 with the river's edge approximately 35 feet from the road's centerline. Near the top of the mountain this distance expands to around 2,700 feet. The area between the road and the river is heavily vegetated. Several unnamed intermittent streams drain into the river in the project area.

Degree of Effects of the Action

The National Park Service considered the following actual or potential project effects in evaluating the degree of the effects (40 CFR 1501.3(b)(2)) for this proposed action.

a. Beneficial and adverse, and short- and long-term effects of the proposed action.

The selected action will result in mostly long-term beneficial impacts, along with a few short-term adverse impacts, as described below.

Road rehabilitation will result in long-term beneficial impacts to geology as new culverts would reduce the erosional forces on the bedrock layers reducing downcutting and ledge undercutting while maintaining slope stability. Additionally, the project would have long-term beneficial impacts to soils because of less erosion events from improved infrastructure. The road rehabilitation is expected to have insignificant impacts to paleontological resources in the project area. A minimal number of common marine invertebrate fossils such corals, brachiopods, crinoids, and invertebrate trace fossils may be displaced or damaged.

The National Park Service determined the selected alternative may affect these threatened or endangered species and consulted with the United States Fish and Wildlife Service (USFWS). The USFWS concurred with Buffalo National River's determination of 'May Affect, Not Likely to Adversely Affect' bat species within the project area. Construction activity in the road corridor will adversely impact less than 5 acres of vegetation which would be permanently removed. Five acres of vegetation constitutes less than 0.005% of total vegetation within BNR.

Overall, this alternative would have long-term beneficial impacts on water quality by doubling the number of culverts which will restore a more natural stream function in the vicinity of Buffalo River. Additionally, paving the road will reduce the introduction of gravel and sediment to the river system and remove the need to disturb the road surface via grading after precipitation events.

b. Degree to which the proposed action effects public health and safety.

The selected alternative considers public health and safety during project implementation. Any risks to public health and safety from heavy equipment will be minimized by temporary reroutes and maintaining safety distances from construction operations. The addition of shoulders and vehicle barriers in strategic areas, as well as drainage improvements would improve safety in the long-term. Once the project is complete, emergency search and rescue response time via Cave Mountain Road is expected to be much faster resulting in a benefit to human health and safety.

c. Effects that would violate federal, state, tribal, or local law protecting the environment.

The selected alternative does not threaten or violate applicable federal, state, or local environmental laws or requirements imposed for the protection of the environment.

Arkansas State Historic Preservation Office

Preliminary project notification via letter was sent to the Arkansas State Historic Preservation Office January 11, 2021, which included the project description and maps of the area of potential effect. On February 7, 2022, the Arkansas State Historic Preservation Officer (SHPO) was provided a draft archeological report and request for comment via letter which included the project description, maps of the area of potential effect, and an assessment of actions having an effect on historic properties. The Superintendent received a response dated February 28, 2022, from the SHPO that stated, that based on the information provided, and with the implementation of stipulations they provided, they concurred with a determination of No Adverse Effect.

Tribal Consultation

In accordance with Section 106 of the National Historic Preservation of 1966 (as amended) and with Executive Order 13175 (Government to Government Consultation with Indian Tribes), Buffalo National River has engaged in consultation with all of its Tribal partners. Preliminary project notification via letter was sent to eight affiliated tribes on January 11, 2021. A draft archeological report and request for comment via letter was sent to eight affiliated tribes which included the project description, maps of the area of potential effect, and an assessment of actions having an effect on historic properties. Four responses have been received to date concurring with the NPS No Adverse Effect determination.

U.S. Fish and Wildlife Service

The NPS initiated informal consultation with the U.S. Fish and Wildlife Service (USFWS) via phone conversations and email in August 2020 and held the first meeting on November 2, 2020. The NPS notified the USFWS that the NPS was developing an EA to rehabilitate 1.8 miles of gravel road, requested a list of any federal species of concern, and included a brief description of a preliminary proposed action. The NPS also indicated it was initiating informal consultation on the project. The NPS referenced the electronic list of federally listed plant and animal species, as generated by the USFWS Information for Planning and Conservation (IPaC) system (<https://ecos.fws.gov/ipac>).

Buffalo National River prepared a biological assessment and consulted with the USFWS regarding the impacts to bats as a result of implementing the selected alternative. On July 30, 2021, the USFWS concurred with the BNR's determination of 'May Affect, Not Likely to Adversely Affect' the Gray Bat, Indiana Bat, Northern Long-Eared Bat, or the Ozark Big-Eared Bat within the project area.

FINDING OF NO SIGNIFICANT IMPACT

Based on the information contained in the EA, I have determined that the proposed action does not constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement will not be required.

This finding is based on consideration of the Council on Environmental Quality criteria for significance (40 Code of Federal Regulations [CFR] 1501.3 [b] (2020)), regarding the potentially affected environment and degrees of effects of the impacts described in the EA (which is hereby incorporated by reference) and as summarized below.

Recommended: _____

Mark A. Foust, Superintendent
Buffalo National River

Date

Approved: _____

Herbert C. Frost, Ph.D., Regional Director
National Park Service, DOI Regions 3, 4, and 5

Date

Attachment A: Errata and Response to Comments

On February 7, 2022, Buffalo National River released the Cave Mountain Road Rehabilitation at Buffalo National River Environmental Assessment (EA) for public comment. Striving to reach a broad audience, the park distributed announcements by e-mail to local, state, and federal government officials; and individuals who had previously expressed an interest in the planning process. The Park also announced the release of the EA via press release and social media post. The public was asked to review the plan and share their comments for 30-days between February 7 and March 9, 2022, related to environmental analysis of actions proposed for the study area.

This section includes both minor edits and technical revisions to the EA that resulted as a response to comments received from general commenters and consultants during the public review period. These revisions do not change the outcome of the impact analysis, nor do they affect the final decision documented in the Finding of No Significant Impact. Additionally, this section contains responses to substantive public comments on the plan. In some cases, the NPS chose to respond to some non-substantive comments received during the review period when doing so helped clarify aspects of the selected alternative.

The Errata, when combined with the EA, comprises the only amendment deemed necessary for the purposes of completing the Final Cave Mountain Road Rehabilitation at Buffalo National River Environmental Assessment.

ERRATA - MINOR EDITS TO THE ENVIRONMENTAL ASSESSMENT

Reviewers noted suggested edits and changes in the document text that may require correction or clarification. These technical revisions and additions are noted below.

Clarification or Minor Technical Edits:

Table 3: Technical Revision or Change

Page/Section	Revision or Change
Section 3	<p>Section 3 of the draft that was release to the public was misnumbered. Section 3.1 was inadvertently omitted. It started with “3.0 Affected Environment and Environmental Consequences” then went to “3.2 Trends and Reasonably Foreseeable Planned Actions”. The following changes were made to properly align the section numbers:</p> <p>“3.2 Trends and Reasonably Foreseeable Planned Actions” changed to 3.1 Trends and Reasonably Foreseeable Planned Actions</p> <p>“3.3 Geologic Resources (including bluff lines, cave and karst features, karst processes, soils, landslides and slope stability)” changed to 3.2 Geologic Resources (including bluff lines, cave and karst features, karst processes, soils, landslides and slope stability</p> <p>“3.4 Human Health and Safety” changed to 3.3 Human Health and Safety</p> <p>“3.5Paleontological Resources” changed to 3.4 Paleontological Resources</p> <p>3.6 Species of Concern (Bats)” changed to 3.5 Species of Concern (Bats)</p> <p>“3.7 Vegetation” changed to 3.6 Vegetation</p> <p>“3.8 Water Resources” changed to 3.7 Water Resources</p>
Section 3.0	<p>The following sentence “The above analysis incorporates the trends discussed in Section 3.2...” was changed to The above analysis incorporates the trends discussed in Section 3.1,</p>
Page 25 Section 3.5.2.2:	<p>Changed “The USFWS concurred with BNR’s determination of ‘Not Likely to Adversely Affect’ the Gray Bat, Indiana Bat, Northern Long-Eared Bat, or the Ozark Big-eared Bat within the project area.”</p> <p>To: The USFWS concurred with BNR’s determination of ‘May Affect, Not Likely to Adversely Affect’ the Gray Bat, Indiana Bat, Northern Long-Eared Bat, or the Ozark Big-eared Bat within the project area.</p>
Page 37 Appendix C	Added Appendix C – State Historic Preservation Office and Tribal Historic Preservation Officer Consultation Letters

RESPONSE TO COMMENTS AND ISSUES

This report summarizes public comments received during the public comment period and provides NPS responses to those public comments. Specific comments on the plan are summarized below in concern statements. The National Park Service (NPS) responses to the concern statements are listed following each concern statement.

COMMENT: The NPS should use the funding to perform deferred maintenance at other high priority locations.

NPS Response: Buffalo National River continues to pursue funding for deferred maintenance across the park. The proposed project is not park funded. The Buffalo River Conservation Committee (BRCC) as established by Arkansas Executive Order 19-14 promoted this project. On May 19, 2020, Arkansas Department of Agriculture – Natural Resources Division, Arkansas Unpaved Roads Team convened a meeting with BRCC subcommittee members to discuss the findings of an assessment of high priority gravel roads within the Buffalo River Watershed that had the potential for direct impact to the water quality of the Buffalo River. While all sites evaluated exhibited erosion and excess sediment transport to streams or the Buffalo River impacting water quality, Cave Mountain Road was one of the highest priorities recommended for rehabilitation. As a result of that recommendation, the State of Arkansas as approved by the Arkansas Legislature’s Committee on Public Health, Welfare, and Labor will fund this project.

COMMENT: The Park should close the road.

NPS Response: See Section 2.2 Alternatives Considered but Dismissed from Detailed Analysis. “This alternative was dismissed because the alternative addresses issues beyond the scope of this NEPA review, would greatly impact other Park resources, and would not address the purpose and need.”



June 30, 2022

DETERMINATION OF NON-IMPAIRMENT CAVE MOUNTAIN ROAD REHABILITATION ENVIRONMENTAL ASSESSMENT

Buffalo National River, Arkansas

National Park Service (NPS) *Management Policies 2006* (Section 1.4) requires analysis of potential effects to determine whether proposed actions will impair a national park's resources and values. NPS decision makers must always seek ways to avoid or to minimize, to the greatest degree practicable, adverse impacts on park resources and values. The NPS has the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park, although that discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically prescribes otherwise.

An impairment is an impact that, in the professional judgment of the responsible NPS decision maker, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values. An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact will 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, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact may be less likely to constitute 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. Impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park.

An impairment determination is not made for subject matters such as visitor experience, public health and safety, socioeconomics, environmental justice, land use, and park operations because impairment determinations only relate to resources and values that maintain the park's purpose and significance.

The consideration of impairment to resources at Buffalo National River applies to the remaining resources evaluated in the *Cave Mountain Road Rehabilitation Environmental Assessment* (EA). Additionally, this determination applies only to NPS lands.

Geologic & Soil Resources

Alternative B would have a temporary adverse impact to geologic features and soils during construction but a long-term beneficial impact as a result of less erosion events from improved infrastructure.

Geohazards such as landslides have been occurring at a higher frequency in the Ozark region. Construction actions such as blasting, vibration from equipment, pile driving, etc. have the potential to disturb geologic resources, however, these disturbances would be temporary, occurring only during construction. Soils would also be disturbed as a result of road widening and vegetation removal, leading to the potential for minor erosion. These impacts are expected to be short in duration and will be minimized by proper engineering controls and appropriate best management practices. After construction, seeding of areas will occur to help stabilize soils and reduce rill erosion from occurring within the disturbed site.

Human Health and Safety

Alternative B would have a permanent long-term beneficial impact to human health and safety, through the addition of shoulders and vehicle barriers in strategic areas, drainage improvements and resurfacing would improve traction, especially during inclement weather. The impacts from the rehabilitation, combined with the mitigation measures, best management practices as described in the EA and FONSI, would result in few measurable impacts as a result of the selected alternative. Therefore, the selected alternative would not constitute an impairment to human health and safety.

Paleontological Resources

Alternative B could displace or damage a minimal number of common marine invertebrate fossils such as corals, brachiopods, crinoids, and invertebrate trace fossils. The impacts from the rehabilitation, combined with the mitigation measures and best management practices as described in the EA and FONSI, would result in few measurable impacts as a result of the selected alternative. Therefore, the selected alternative would not constitute an impairment to paleontological resources.

Species of Concern (Bats)

Alternative B would have a temporary impact on bats during construction. Construction activity has the potential to create disturbance through noise, vibrations, and equipment. Alterations to the habitat from construction are expected to be temporary, negligible, and would have no measurable impacts to the population as a whole within BNR. Best management practices such as timing restrictions will be implemented to reduce potential adverse impacts. Impacts would be mitigated by planning construction activities outside sensitive roosting times for listed bat species. Protecting known, occupied maternity roost trees would be required by Park managers under this alternative and all efforts to avoid disturbing roost and other sensitive habitat would be taken to minimize impacts to threatened or endangered bat species. Proposed activities would have a short-term effect on listed bats, who depend on Cave Mountain cave as a primary hibernaculum. Buffalo National River reached a “may effect, not likely to adversely affect” determination for bat species within the project area, and the United States Fish and Wildlife Service concurred with that determination. The impacts from the rehabilitation, combined with the mitigation measures and best management practices as described in the EA and FONSI, would result in few measurable impacts as a result of the selected alternative. Therefore, the selected alternative would not constitute an impairment to species of concerns.

Vegetation

Alternative B would adversely impact less than 5 acres of vegetation which would be permanently removed. Five acres of vegetation constitutes less than 0.005% of total vegetation within BNR.

Additionally, construction activities have the potential to allow invasive species to move in and proliferate. Best management practices during construction such as retaining vegetation or reestablishing it by means of seeding and mulching, sodding, or erosion matting will reduce the likelihood of invasive species taking hold. Disturbed and de-vegetated areas will be reseeded with appropriate native species. It is expected that the selected alternative will have no measurable impacts to vegetation. The impacts from the rehabilitation, combined with the mitigation measures, best management practices as described in the EA and FONSI, would result in few measurable impacts as a result of the selected alternative. Therefore, the selected alternative would not constitute an impairment to vegetation.

Conclusion

As guided by the expected outcomes noted above, implementing the selected alternative does not constitute impairment of any resource or park value whose conservation is: (1) necessary to fulfill specific purposes identified in establishing legislation or proclamation of the park; (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park's general management plan or other relevant NPS planning documents as being of significance. This conclusion is based on the consideration of the purpose and significance of the park, a thorough analysis of the environmental impacts described in the environmental assessment, relevant scientific studies, the comments provided by the public and others, and the professional judgment of the decision-maker guided by the direction of NPS.