

**U.S. DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE**

**RECORD OF DECISION**

**FINAL TRAIL MANAGEMENT PLAN AND ENVIRONMENTAL IMPACT  
STATEMENT**

**CUYAHOGA VALLEY NATIONAL PARK  
Cuyahoga and Summit Counties, Ohio**

**U.S. DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE**

**RECORD OF DECISION**

**FINAL TRAIL MANAGEMENT PLAN AND  
ENVIRONMENTAL IMPACT STATEMENT**

**CUYAHOGA VALLEY NATIONAL PARK  
Cuyahoga and Summit Counties, Ohio**

The United States Department of Interior, National Park Service (NPS), has prepared this Record of Decision for the Trail Management Plan and Environmental Impact Statement for Cuyahoga Valley National Park. This Record of Decision (ROD) includes: the project background; a statement of the decision made; a description of the alternative selected for implementation; a listing of measures to minimize and/or mitigate environmental harm; a synopsis of other values; a description of the environmentally preferred alternative; and a summary of public and agency involvement in the decision-making process.

**BACKGROUND**

The Final Trail Management Plan (Final Trail Plan/EIS) for Cuyahoga Valley National Park was developed under the guidance of an interdisciplinary team including the deputy superintendent, park staff, regional park partners, Cleveland Metroparks and Metroparks, Serving Summit County, and the non-profit park partner, Conservancy for Cuyahoga Valley National Park. During the planning process, the Final Trail Plan/EIS team: involved the public, gathered background information, conducted site visits, examined park and NPS legislation, compared similar sites, consulted with other agencies, partners, and resource experts, explored solutions, assessed impacts and published draft and final plans.

Public involvement was a large component of the development of the Final Trail Plan/EIS. Public participation included a survey to trail stakeholder groups, public meetings, updates provided through Trail Plan newsletters and the availability of the Plan's website to submit comments during various phases of the planning process.

The Draft Trail Plan/EIS considered eight alternatives for future uses, locations and management of trails in the park. The alternatives include a no action alternative, and seven action alternatives. Action Alternatives 2, 3 and 4 were developed with A and B alternatives to consider mountain bike use. Alternative 5 was developed as 'hybrid' of the all of the alternatives. Additionally, actions common to all and all action alternatives were considered, including the introduction of trail facilities for trail-side camping, paddle-launch sites for river use access and trailhead parking improvements. The Final Trail Plan/EIS addressed public and agency comments on the Draft plan and identified the NPS preferred alternative.

The completion of the plan does not ensure that all actions will occur or that funding will be available. As the plan is implemented, public involvement opportunities will occur for associated actions. Some actions may require additional compliance or agency review prior to implementation, subject to federal and park regulations.

## **PURPOSE AND NEED STATEMENTS**

The purpose of the Final Trail Management Plan and Environmental Impact Statement is to develop a blueprint that will guide the expansion, restoration, management, operations and use of the trail system and its associated amenities, over the next 15 years, in keeping with the purpose, mission and significance of Cuyahoga Valley National Park.

The updated Trail Management Plan is needed as a strategic tool to guide the future management and development of the trail system in the Park, for the following reasons:

- The Park's 1985 Trail Plan is outdated;
- Regional trail networks have blossomed across Northeast Ohio near or adjacent to the Park over the past 15 years;
- Recreation trends have emerged that the park currently does not provide for nor permit;
- The Park's trail system is a significant recreation feature in the Park and is the predominant purpose of park visits;
- The Park's destinations, features, and programming have evolved since the development of the 1985 Trail Plan;
- Trails within the Park cause increased operational investment as a result of factors such as their historical placement and current use patterns; and
- The Park has been ranked as one of the top ten most visited National Parks in the country the past five years. Annual park visitation has increased by 1.5 million since the introduction of the 1985 Trail Plan.

## **Objectives**

The Park set forth goals and objectives to guide the development of the Trail Plan and consideration of proposed actions. The goals of the Trail Management Plan are to develop a trail network that:

- provides experiences for a variety of trail users;
- shares the historic, scenic, natural and recreational significance of the Park;
- minimizes its impact to the park's historic, scenic, natural and recreational resources;
- can be sustained; and
- engages cooperative partnerships that contribute to the success of the Park's trail .

## **DECISION (SELECTED ALTERNATIVE)**

The NPS has selected the Preferred Alternative as identified in the Final Trail Plan/EIS for implementation. Alternative 5 includes the following actions; all actions common to all alternatives, evaluation of 12 trail miles for restoration or elimination, adoption of Sustainable Trail Guidelines, addition of 37 trail miles from existing conditions, if fully implemented, including new off-road bicycling trails, trail facilities including expanded and new parking areas, introduction of launch sites for water trail access and expansion of hike/bike-in and paddle in campsites. Bicycle use proposed on new and existing

trails are conditional subject to additional processes set forth in 36 CFR 4.30, including rulemaking for bicycle use on new trails outside of developed areas.

## **OTHER ALTERNATIVES CONSIDERED**

### **Alternatives Development Process**

Alternatives analyzed in the Final Trail Plan/EIS were developed based on the results of internal and public scoping, input from local, state and federal agencies, and the research of scientific literature related to trail management topics. The development of the alternatives included the consideration of factors including, the General Management Plan Management Zones, Goals and Objectives established for the Trail Plan, park resources, program elements identified during public scoping, the Park's role in within the metropolitan region and the country in outdoor recreation and resource stewardship, and general planning considerations.

### **Alternatives Analyzed in the Plan/EIS**

**Actions Common to All Alternatives.** There are actions and policies that will apply or occur under any alternative selected, including the continuation of current management. The actions common to all alternatives include; policies, protocol, monitoring and special designations, trail projects currently underway, park sustainability practices, visitor use carrying capacity, accessibility and mobility, trail signage, partnerships and development of an implementation strategy.

**Alternative 1- Continuation of Current Management.** Under Alternative 1, the trails, authorized uses and facilities addressed in this plan would remain as they currently exist. The Park would continue to implement the 1985 Trail Plan. The Park would continue trail management under current park policies, protocols and monitoring. A continuation of trail projects would occur on an individual basis and as opportunities arise with separate planning and compliance.

**Actions Common to All Action Alternatives.** There are actions and policies that are being considered as part of the Action Alternatives. The actions common to all action alternatives include the restoration of the existing trail system, adoption of the Sustainable Trail Guidelines and the consideration of trail facilities. Trail facilities evaluated include a water trail system with paddle launch sites along the portion of the Cuyahoga River within the park boundary, trailside and riverside campsites accessible by hiking, biking or paddling, and improved parking facilities.

The Final Trail Management Plan and Environmental Impact Statement referenced the previously promulgated NPS servicewide Bicycle Rule, which was amended in July, 2012, before the Final Plan was released. Because of this error, the new NPS servicewide Bicycle Rule (36 CFR 4.30) is not clearly referenced in the Final Trail Management Plan. The Selected Alternative proposed in the Final Trail Management Plan was evaluated and meets the planning and compliance standards set forth in this new rule. No major or significant impacts were found in the selected alternative, including impacts on existing trails. Additionally, the Plan identifies procedures for future compliance and incorporates sustainable bicycle trail guidelines. However, proposed bicycle trails in the Alternatives on existing or new trails are not approved for implementation in this Record of Decision until all requirements of the NPS servicewide bicycle rule at 36 CFR 4.30 are met, including issuance of a superintendent's written determination and promulgation of a special park regulation.

**Alternative 2A – ReUse.** Alternative 2A emphasizes the importance of enhancing the existing trail system’s sustainability for future generations with limited expansion. Alternative 2A adds a total of 17 miles of new trails to the park’s trail system and removes 11 miles of existing trails. It includes one additional expansion of an existing parking area from the trail facilities common to all action alternatives.

**Alternative 2B – ReUse Plus Mountain Bike Trails.** Alternative 2B is the same as Alternative 2A with the addition of authorization of a linear off-road single-track bicycle trail on existing trails within the Park and Park Partner lands. The addition and removal of trail miles and facilities are the same as described in Alternative 2A with the addition of a change in use designation on 10 miles of existing trail for mountain bike use.

**Alternative 3A- Recreation Focus.** Alternative 3A is focused on the concept of utilizing areas as interchangeable recreational “trail hubs” that provide the full variety of trail experiences the Park has to offer. Trail hubs would be placed at existing trailheads and visitor centers where various trail and outdoor recreation activities would commence. Alternative 3A would add a total of 30 miles of new trails and would remove 11 miles of existing trails. This alternative also includes almost 40 miles of roadways recommended for improvement for on-road bike use. In addition to actions common to all alternatives, Alternative 3A would also include two additional campsites, one additional new parking area and trailhead, and one additional expansion of an existing parking area.

**Alternative 3B – Recreation Focus Plus Mountain Bike Trails.** Alternative 3B is the same as Alternative 3A with the addition of new off-road single track bicycle trails consisting of two zones of loop routes. The proposed off-road bicycle trails would include two new trails on both sides of the Valley in the central region of the park totaling approximately 17 miles. The proposed trails would include a linear distance segment and shorter loops on each end of the segments. One additional new parking area is proposed to accommodate the new mountain bike trail proposed in the west rim of the park.

**Alternative 4A – Destination Focus.** Alternative 4A is focused on the destination rather than the journey of the Park’s trail network. Park features and attractions are the focus of this Alternative with the trail system serving as the main visitor access to these features. Expansion of the primitive hiking experience occurs to the greatest extent in Alternative 4A. Alternative 4A would add a total of 53 miles of new trails and removes 11 miles of existing trails. Alternative 4A adds one additional campsite and expansion of an existing parking area.

**Alternative 4B – Destination Focus Plus Mountain Bike Trails.** Alternative 4B is the same as Alternative 4A with the addition of new off-road single track bicycle trails. The off-road bicycle trail system consists of a long point-to-point trail with shorter loop trails to provide a variety of lengths and experiences to the mountain bike user. The East Rim Mountain Bike Trail would include nearly 21 miles of trail for mountain bike use on new proposed trails.

**Alternative 5 – ReUse, Recreation & Destination (Preferred).** Alternative 5 combines trail elements from all of the Alternatives and proposed trail facilities. The “hybrid” approach for Alternative 5 will include all elements common to all action alternatives, an increase of 37 miles of trails from existing conditions, if fully implemented, including a new off-road single track bicycle trails, trail facilities including expanded and new parking areas, introduction of launch sites for water trail access and expansion of hike/bike-in and paddle-in campsites. Alternative 5 was identified as the preferred alternative in the Final Trail Plan/ EIS. Alternative 5 will best meet the mission of the Park, its resource conditions and visitor use, the Trail Plan purpose, goals and objectives, while fulfilling the criteria of NEPA.

## **BASIS FOR DECISION**

The NPS considered the enabling legislation and planning documents for Cuyahoga Valley National Park; NPS Management Policies 2006; relevant Executive Orders summarized in Chapter 1 of the Final Trail Plan/EIS; and other relevant laws and regulations summarized in Chapter 1 of the Final Trail Plan/EIS; the body of scientific knowledge regarding the effects of trails on park resources including direct and indirect effects of bicycle use in undeveloped areas; and the public and agency comments received during the planning process. Actions proposed under the alternatives comprised of the following categories, (1) Restoration of Existing Trails, (2) New Trails (3) New Trails and (4) Trail Facilities, including expanded and new parking areas, trail campsites, and paddle launch access sites. The Final Trail Plan/EIS describes the impacts associated with a conceptual trail management plan for the Park. The Final Trail Plan/EIS identifies that prior to implementation of any specific trail or facility, the NEPA analysis will be reviewed to determine that 1) all impacts have been adequately analyzed for particular actions, and 2) that there are no changes to the affected environment or impacts on resources. If site-specific detail is insufficient, additional compliance documentation will be completed as required.

The NPS has identified Alternative 5 as the Preferred Alternative for implementation rather than the environmentally preferred alternative because it better fulfills the purpose and need for the Final Trail Plan/EIS and provides the broadest range of visitor experiences while minimizing impacts to park resources. Based upon the comments received during the Draft Plan/EIS comment and review period, the NPS revised the Final Trail Plan/EIS to include additional measures to further avoid unacceptable impacts. Through the improvements of new trails, addition of new trails and uses, expansion and addition of trail facilities and the incorporation of Sustainable Trail Guidelines in all actions. Alternatives 1, 2A, 2B, 3A, 3B, 4A and 4B meet some of the goals and objectives of the plan but do not address them to the extent that Alternative 5 provides.

## **Mitigation Measures/Monitoring**

Over the next 15 years as the NPS implements the actions associated with the selected action, it must protect the park's natural and cultural resources and not impair the quality of the visitor experience. Additionally, bicycle use must be consistent with the protection of the park area's natural, scenic and aesthetic values, safety considerations and management objectives, and not disturb wildlife or park resources. To ensure that this occurs, a consistent set of mitigation measures will be applied to all trail management actions in the park. The NPS will complete all necessary reviews of environmental impacts for each proposed trail action as required under the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), 36 CFR 4.30 and other relevant laws, regulations, and policies. As part of the environmental reviews, the NPS will avoid, minimize, and mitigate adverse impacts of trail management actions when practicable. Compliance monitoring and reporting will be part of all mitigation measures.

As part of ensuring mitigation measures, the Trail Plan's selected alternative includes Sustainable Trail Guidelines. The Guidelines will serve as the standard protocol for trail planning, design, construction, management and monitoring of the implementation of all Trail Plan proposed actions. The Guidelines include standards for bicycle specific design standards for proposed bicycle trails.

## **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

In accordance with the Council of Environmental Quality (CEQ) regulations, the NPS is required to identify the environmentally preferred alternative in a Record of Decision [40 CFR 1505.2(b)]. The environmentally preferred alternative is defined by the CEQ 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). The Department of Interior NEPA regulations further explain: “The environmentally preferable alternative is identified upon consideration and weighing by the Responsible Official of long-term environmental impacts against short-term impacts in evaluating what is the best protection of these resources” (43 CFR 46.30).

Alternative 2A has been selected as the environmentally preferable alternative because it is the alternative that best protects the biological and physical environment within the park while meeting the purpose and need of the Plan. This is accomplished through the adoption of the Sustainable Trail Guidelines, restoration and removal of trails in sensitive areas, the limited expansion of trails, use of existing disturbed areas for trails, and connections to regional trail networks to serve a variety of users throughout all regions of the Park.

## **PUBLIC INVOLVEMENT IN THE PLANNING PROCESS**

### **Scoping**

The Trail Plan and EIS planning process began with the Notice of Intent published in fall of 2009. An Interdisciplinary Advisory Team, comprising of park staff, regional park district partners and Conservancy for Cuyahoga Valley National Park was formed. Public involvement was a large component to the development of the trail elements established under the Alternatives. Through public scoping, ideas were generated for the trail system and issues were identified to be considered in the planning process. Public scoping, largely conducted in 2010, included a survey to trail stakeholder groups, workshops to invite ideas for the Trail Plan conducted in February, 2010, public meetings held in September, 2010 to present and receive input on conceptual alternatives, and public meetings held in July, 2012, to present the Draft Trail Plan and EIS to the public. The Park received approximately 500 comments at the scoping workshops from approximately 150 persons. Additional comments were received from approximately 100 persons during the comment period for the conceptual alternatives.

### **Public Notification, Meetings and Comments**

Public review of the Draft Trail Plan and EIS occurred from June 22, 2012 through August 20, 2012. Approximately 200 interested individuals, agencies, and organizations received through a newsletter announcing availability of the plan. Approximately 30 of these stakeholders received either a CD or paper copy of the Plan. The NPS made the plan available for review as a paper copy at six local public libraries and two of the Park’s visitor centers, Boston Store and Canal Visitor Center. The NPS Planning, Environment, and Public Comment (PEPC) website (<http://parkplanning.nps.gov/cuyahogatrailplan>) offered interested parties an opportunity to review and comment on the plan via the internet. On July 24, 25, and 26, 2012, the NPS hosted public meetings in Cleveland, Peninsula and Akron, Ohio, respectively where the public had opportunities to hear a presentation on the Draft Trail Plan and EIS, ask questions and submit written comments. Press releases in local newspapers and the park’s nps.gov homepage announced the availability of the plan, as well as the public meeting dates and times. The NPS received 290 pieces of correspondence during the public comment period. Correspondence was received by one of the following methods: hard copy letter via mail or in-person delivery to the Park (10 received), written statement received at a public meeting (5 received), or entered directly into the NPS PEPC website for this project (274). Of the comments received through PEPC, 130 comments were unsolicited bulk messages and advertising (i.e. Spam) and not relevant to the subject of the Plan and

therefore dismissed for further evaluation or analysis. The remaining 144 comments received through PEPC were reviewed and evaluated for substantive content and relevant responses.

Comments received consisted of discussions on a variety of issues. The majority of comments were related to eight subject areas;

- clarification of content or recommendations for additional content within Trail Plan,
- compatibility of preferred alternative with Trail Plan and Park mission, purpose and goals,
- trail uses/visitor experiences
- individual trail elements within alternatives
- visitor use conflict
- impacts to Park resources
- proximity of trail elements to private property
- trail facilities

## **AGENCY CONSULTATION**

*U.S. Environmental Protection Agency.* Comments were received from the U.S. Environmental Protection Agency (EPA) on July 17, 2012. NPS has revised the FEIS preferred alternative to address U.S. EPA's concerns. U.S. EPA's letter is in Appendix D of the final Plan/EIS.

*Ohio Department of Transportation.* Comments were received from the Ohio Department of Transportation (ODOT) on July, 2012, NPS has revised the FEIS preferred alternative to address ODOT's concerns.

*Summit County Engineer.* Comments were received from the Summit County Engineer on July, 2012. No additional changes were necessary for revision within the FEIS from the comments received.

## **National Historic Preservation Act Section 106 Consultation**

Cuyahoga Valley National Park sent letters to the Ohio State Historic Preservation Office (SHPO) to initiate consultation for the Trail Plan/EIS in September 2010, during the invitation for comments on the Conceptual Alternatives Workbook and in August, 2012 on the Draft Trail Plan/EIS. The Park received comments from SHPO in November, 2012. Consultation with the SHPO during the implementation of the Trail Plan will occur where cultural resources have been identified in the Plan for further consideration and evaluation.

## **Threatened and Endangered Species Act Section 7 Consultation**

Cuyahoga Valley National Park sent letters to the Ohio Department of Natural Resources and to the Ohio Field Office of the U.S. Fish and Wildlife Service (USFWS) for consultation purposes and to request information about special status species.

The U.S. Fish and Wildlife Service commented on the Draft Trail Plan/EIS in a letter dated July 17, 2012 stating that the service concluded that no project does not involve any federal wildlife refuges, wilderness



areas, or critical habitat and that the institution of Sustainable Trail Guidelines for the implementation of the Final Trail Plan/EIS will assist in the protection of sensitive species and their associated habitats. NPS has revised the Final Trail Plan/EIS preferred alternative to address USFWS' concerns. USFWS' letter is in Appendix D of the Final Trail Plan/EIS.

## TRIBAL CONSULTATION

Indian tribes with possible cultural associations with sites within Cuyahoga Valley National Park were contacted via letter to initiate consultation regarding management planning for the park. The initial consultation letter provided tribes notice of the intent of the Trail Management Plan in September, 2009. A notice letter was provided to the tribes in September, 2010 to review the conceptual Alternatives. Letters inviting comments for the Draft Trail Management Plan and EIS were sent in June, 2012. These three letters of notice were sent to the following federally and state recognized tribes and interested parties:

Seneca-Cayuga Tribe of Oklahoma  
Shawnee Tribe  
Delaware Tribe  
Delaware Tribe of Western Oklahoma  
Eastern Shawnee Tribe of Oklahoma  
Miami Tribe of Oklahoma  
Wyandotte Nation  
Shawnee Tribe of Oklahoma  
Seneca Nation  
Ottawa Tribe of Oklahoma

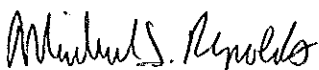
No comments were received from the Tribes that were sent invitation for comment. Consultation with tribes will continue during implementation of the Trail Plan, as needed.

## CONCLUSION

The approved plan sets a vision and framework for the future of trails and associated facilities in Cuyahoga Valley National Park. Among the eight alternatives considered, the selected action best meets the NPS legal and regulatory requirements and policy guidance for managing trails as well as meeting the purpose, need and goals and objectives of the Final Trail Plan/EIS. The selected action will provide a wide variety of trail experiences to visitors while protecting, restoring and sustaining park resources for future generations. Bicycle use proposed in the selected alternative is not yet authorized by this Record of Decision and is conditional subject to the rulemaking process set forth in 36 CFR 4.30 Bicycles, including a notice of proposed rulemaking, public comment and subsequently a final rule.

Approved:

Date:



8/8/13

---

Michael T. Reynolds, Regional Director

Midwest Region, National Park Service

## Attachment A

### **Non-Impairment Determination for the Selected Action Trail Management Plan and Final Environmental Impact Statement Cuyahoga Valley National Park Cuyahoga and Summit Counties, Ohio**

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 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.

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)

Section 1.4.5 of *NPS 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, or*
- *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.*

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

A determination of non-impairment is made for each of the resource impact topics analyzed in the environmental impact statement for the selected alternative (Alternative 5). Non-impairment determinations are not necessary for visitor experience, socioeconomics, land use, and park operations, because impairment findings relate back to park resources and values. These impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired the same way that an action can impair park resources and values.

## **Water Resources**

The presence of the Cuyahoga River system and its adjacent floodplain and tributary streams, and an array of wetlands create a landscape unique to the surrounding developed region of the Cuyahoga Valley. Water resources within Cuyahoga Valley National Park include water quality, functional riparian zones and streams, floodplains and wetlands.

Trail elements in Alternative 5 will likely have minor to moderate, adverse impacts to water resources from the increase of trail miles within close proximity of water resources of the park. Alternative 5 includes management actions for sustainable design practices and additional evaluation for some proposed trail segments. Minor to moderate adverse effects to water resources would not result in impairment.

## **Vegetation**

Trail impacts to vegetation communities can vary based upon trail location, resource sensitivity, level of trail development and its designated use. The principal vegetation concerns in the analysis area changes in vegetation through habitat disturbance and fragmentation and introduction of exotic species.

Alternative 5 would result in affecting approximately 217 acres of natural vegetation communities within the park, and an overall net increase of 31 acres from current conditions, if restoration measures for proposed trails are conducted. Overall, impacts on vegetation from Alternative 5 will be long-term, moderate and adverse from new trails in current trail-free areas, an overall increase in trail miles and new entrances for potential invasive plant proliferation. Alternative 5 requires the utilization of Sustainable Trail design guidelines to minimize and avoid impacts to vegetation for its implementation. Moderate adverse effects to vegetation would not result in impairment.

## **Wildlife**

Wildlife species are distributed throughout the park and are associated with the three primary habitats; mature deciduous forests, early successional fields and meadows, and wetland habitats. The effects on wildlife in the analysis include disturbance of wildlife and wildlife habitat due to the presence of trails and trail users, habitat fragmentation and edge effects by the placement of trails as it relates to species composition, increased predation and change in plant habitat for wildlife, and the change in movement corridor patterns that trails may create for species interactions and habits.

Alternative 5 increases impacts on forest habitats from the trail footprint by approximately 39 acres resulting in long-term, minor to moderate adverse impacts on wildlife from increase fragmentation in large forest blocks and potential loss of habitats.

The utilization of sustainable trail design measures will limit impacts to wildlife resources within the park. Minor to moderate adverse effects to wildlife would not result in impairment.

## **Soils**

The management of soils is not identified as a specific purpose in the establishing legislation of the park and is not specifically identified in the park's general management plan as being of significance. However soils do contribute to the integrity of park resources and their sustainability.

Alternative 5 will have long-term, minor to moderate, adverse impacts to soils from increased use, increase in natural surface trails in undisturbed areas of the park and proximity of proposed trails in steep grade areas of the Park that may require additional measures to stabilize soils in these locations. Alternative 5 would not result in impairment because of the utilization of sustainable design practices and implementing monitoring and management actions to limit or reverse any ongoing adverse impacts to soils.

## **Cultural Resources & Scenic Values**

The established legislation for the park identifies the preservation and protection of the historic and scenic values within the Park.

The impacts on cultural resources from Alternative 5 will be long-term, negligible to minor, and adverse by the actions and their associated visibility and minor changes to the rural character of the park. Archeological resources will likely have long-term minor to moderate, adverse impacts from the proximity of some trail elements and the need for potential additional archeological survey evaluation for proposed trail elements. With the recommended and applied mitigation measures identified for Alternative 5, impairment of cultural resources and scenic values will not occur.

## **Soundscapes**

Soundscape is not specifically identified as a park purpose or as a significant park resource either in the established legislation or in the general management plan for the park.

Alternative 5 will have long-term, minor to moderate, adverse impacts due to the proximity of some of the trail elements to adjacent land owners, and level of projected use. With the monitoring and management measures prescribed for Alternative 5, the impacts on soundscapes will not result in impairment.

## **SUMMARY**

The NPS has determined that the selected alternative will not result in impairment of any park resources or values set forth in its established legislation. The selected alternative will not result in major or significant impacts of any park resources including proposed new bicycle use on existing trails, in part due to its overall trail mileage occurring in the park, its location within the park, and the utilization of Sustainable Trail Guidelines for their implementation. The only major impact occurred in a non-selected alternative, in park operations, and which falls outside of the non-impairment determination's scope. The selected alternative meets the National Park Service's purpose and goals for managing Cuyahoga Valley National park and meeting the criteria of the National Environmental Policy Act. As described in the mitigation measures section, all practical means to avoid or minimize environmental harm in the implementation of the selected alternative will be adopted.