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U.S. Department of Interior

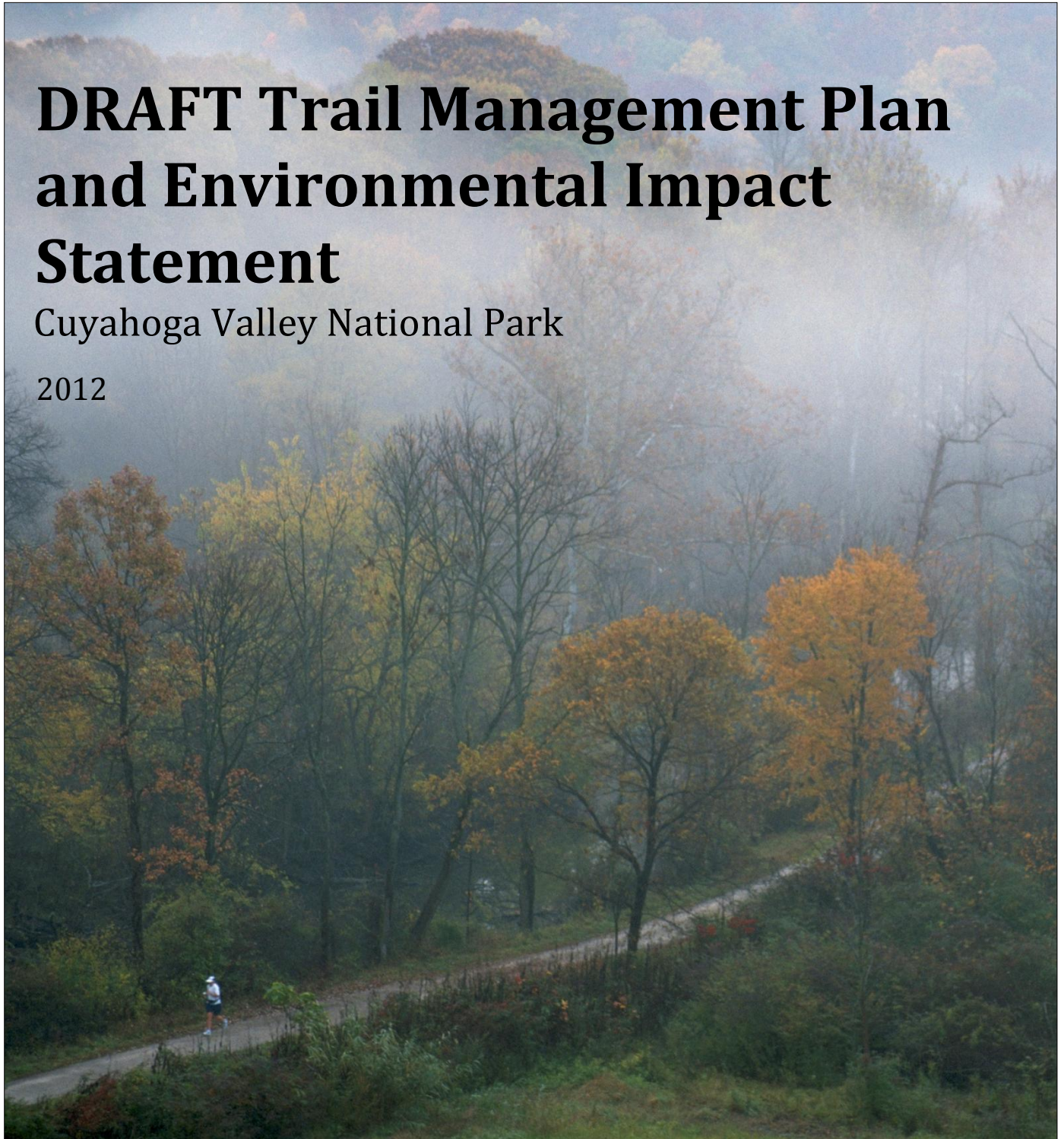


Cuyahoga Valley National Park
Brecksville, Ohio

DRAFT Trail Management Plan and Environmental Impact Statement

Cuyahoga Valley National Park

2012



Front Cover Photo: Tom Jones

About this Document

In 1969, the United States Congress passed the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq.). As a result, when any agency of the Federal Government proposes a “major Federal action significantly affecting the quality of the human environment,” a detailed statement on the environmental impact of the proposed action must be prepared. NEPA requires that the process include; 1) consideration of a range of alternatives, 2) an evaluation of potential environmental consequences of an action before deciding to proceed and 3) provide opportunities for public involvement. NEPA requires the preparation of an Environmental Impact Statement (EIS) when a federal agency proposes an action that may have significant impacts on the human environment. The EIS process serves as a primary tool to help NPS decision-makers assess the types and levels of impacts expected from a proposed action to avoid impairment. An EIS is the highest level of compliance provided under NEPA. Because of the scope and park-wide nature of the Cuyahoga Valley National Park *Trail Management Plan*, the Park is required to conduct an EIS for the Plan.

The Draft Environmental Impact Statement is organized in accordance with the National Environmental Policy Act and NPS Director’s Order #12. Below is an outline of the document.

Purpose and Need for Action and Goals and Objectives. This section sets forth the purpose, needs and goals and objectives of the Trail Plan. The section provides general information on Cuyahoga Valley National Park, background on the park’s trail system, an overview of the public scoping process and the issues identified for consideration of impacts from proposed actions.

Alternatives. This section describes the proposed actions common to all alternatives and those specific to each of the alternatives. It compares the alternatives by their general framework, impacts and goals of the Plan and criteria set forth by the National Environmental Policy Act.

Affected Environment. This section describes existing conditions of resources that may be affected by the proposed actions of the alternatives.

Environmental Consequences. This section describes the impacts on resources by the proposed actions of the alternatives.

Consultation and Coordination. This section provides an overview of the public participation process and project team.

Executive Summary

Cuyahoga Valley National Park

Draft Comprehensive Trail Management Plan & Environmental Impact Statement

Introduction and Background

Cuyahoga Valley National Park encompasses 33,000 acres between the metropolitan areas of Cleveland and Akron, Ohio. Cuyahoga Valley National Park provides visitors the opportunity to experience the cultural, scenic, natural and recreational resources of the Cuyahoga River Valley and a portion of the Ohio & Erie Canal Corridor.

Recreational use is central to Cuyahoga Valley National Park's legislative mandate as stated, "To preserve and protect for public use and enjoyment, the historic, scenic, natural and recreational values of the Cuyahoga River and the adjacent lands of the Cuyahoga Valley and for the purpose of providing for the maintenance of needed recreational open space necessary to the urban environment" (Public Law 93-555, 1974).

The Cuyahoga River Valley has a strong history as a centerpiece for outdoor recreation opportunities. At the same time, the Valley continues to be restored with thriving ecosystems while retaining the cultural heritage and landscapes of the Ohio & Erie Canal Corridor. These successes are particularly significant, given the Park's location within a large metropolitan area boasting a human population of over 3 million people within 25 miles. New challenges arise for the Park in meeting all of the goals of its legislative mission as visitation continues at a high level, recreation trends and the way people spend their leisure time change, and its landscape continues to be restored.

In 2009, the NPS embarked on a planning process to develop a *Trail Management Plan and Environmental Impact Statement* for Cuyahoga Valley National Park in accordance with the requirements of the National Environmental Policy Act to meet these emerging challenges for the Park.

Purpose of and Need for the Plan

The purpose of the updated *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. Since 1985, when the Park's first Trail Plan was established, many changes have occurred that require an update to the Plan. These include the Park's growth in visitation and programs, some park trails requiring increased operational investment due to their location and use patterns, expansion of regional trail networks, and change in outdoor recreation trends.

The Park set forth goals and objectives to guide the development of the Plan and consideration of proposed actions. The goals of the Plan include that the trail network provides for a variety of trail users, shares the features significant to the Park, minimizes impacts to park resources, can be sustained for future generations, and engages cooperative partnerships.

Public Participation

The Plan has been following the required NEPA and NPS planning process for the past two years. The Trail Plan process began with the Notice of Intent published in Fall, 2009. Public involvement was a large component of 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 of trail stakeholder groups, workshops to collect ideas for the Trail Plan and public meetings to present and receive input on conceptual alternatives. The Park received approximately 500 comments at the scoping workshops from approximately 150 persons. Additional comments were received from approximately 100 persons during an open comment period on a set of preliminary alternatives.

The Final Plan and EIS will provide a summary of the Draft Plan public review and comment process and responses to comments received during the Draft Plan review period.

Issues and Impact Topics

Through the public scoping process and initial data collection on existing conditions, five primary issues were identified for the Plan: park resources, visitor use, facility uses, maintenance and administrative operations. Impact topics were identified that may be impacted or have an impact on the proposed actions. Other resource topics were dismissed from further analysis because the alternatives would have negligible or no impacts to these resources. Impact topics retained and analyzed include:

- Water Resources (Water Quality, Wetlands, Floodplains, and Riparian areas)
- Vegetation and Invasive Plant Species (Trampling, Fragmentation, Proliferation of Exotic Species)
- Wildlife (Disturbance, Fragmentation)
- Soils (Soil Suitability, Slope Gradient)
- Cultural Resources (Archeological, Historical Districts, Cultural Landscapes and Scenic Values)
- Visitor Use and Experience (Visitor accessibility, visitor experience, visitor conflict, public health and safety, orientation and interpretation)
- Socioeconomic (Local Jurisdictions, Land Ownership, Transportation Network, Soundscapes/Noise, Business)
- Park Operations (Staffing, Partnerships, Local Jurisdictions)

Summary of Alternatives Considered

The alternatives reflect information and input from a variety of sources during the planning process. This Environmental Impact Statement evaluates eight alternatives that provide a park-wide vision of the trail network for the next fifteen years. A brief summary of each alternative is presented below with more information provided for Alternative 5, the preferred alternative. Elements that are common to all alternatives or all action alternatives are presented first.

Elements Common to All Alternatives

There are actions and policies that will apply or occur under any alternative selected. The actions common to all the alternatives include:

- *Polices, Protocols, Monitoring and Special Designations.* All alternatives will adhere to the policies, protocols and monitoring set forth by the National Park Service, including special designations that are applicable to Cuyahoga Valley National Park.
- *Trail Projects Underway.* The Park is currently managing trail-related projects that are in various stages of planning and development. These projects have completed or will undergo environmental review and will not be evaluated in this Environmental Impact Statement. They will be considered as common elements of all alternatives of the Trail Management Plan.
- *Park Sustainability Practices.* Cuyahoga Valley National Park's current sustainability practices for providing recycling, energy efficient lighting, energy efficient and pollution reduction operations practices will be continued and expanded where feasible under all alternatives. Identifying emerging practices and technologies to reduce energy demands of the park and enhance alternative energy generation are practices to explore for all alternatives.
- *Visitor Use Carrying Capacity.* User capacity guidance for the social and ecological changes on trails will be established to ensure the integrity of park resources is maintained. Development of user capacity standards will be part of the implementation phase of the Trail Plan.
- *Accessibility and Mobility.* Recommendations are outlined in the Plan, to address accessibility and power driven mobility devices and compliance with applicable laws, rules and guidelines.
- *Trail Signage.* The Park will continue to update its Sign Plan and utilize the UniGuide Sign Standard for the Trail Plan's selected alternative. The Park will evaluate the use of emerging technologies for trail orientation and information for visitor use.
- *Partnerships.* Partnerships between the public park agencies, local communities and the three primary Park Partners will continue as part of all Alternatives.
- *Implementation.* An implementation strategy will be important to accomplish the vision set forth in the Plan. NPS will conduct activities to implement the Trail Plan effectively. These include subsequent planning, prioritizing Trail Plan elements in the selected alternative for implementation, an Implementation Strategy Plan, and establishment of a progress report for Trail Plan completion.

Elements Common to All Action Alternatives

There are actions and policies that are being considered as part of each of the seven action alternatives (Alternatives 2A - 5). The actions common to all action alternatives include:

Sustainable Trail Guidelines. The NPS will establish Sustainable Trail Guidelines to guide the Park's planning and management of the trails related to the restoration of existing trails, planning and design for new trails and trail facilities, and maintenance and best management practices. The Action Alternatives and their trail elements are predicated on applying these Guidelines. The Guidelines will serve as the Standard Operating Procedure for trail management in the Park during implementation of the selected alternative of the Trail Plan. The Guidelines focus on the following topics:

- *Site Planning and Design of Trail.* The Guidelines outline the basic principles and practices to administer during the site assessment and design phases of trail development in the Park. Guidance includes the trail development process for trails in CVNP, identification of trail classes and types and their design and management criteria, site assessment and site design best practices, and program guidance for the development of trail facilities, signage and accessibility and mobility that is suitable to each trail's individual site conditions.
- *Trail Construction.* The Guidelines establish basic principles and best practices to administer during the physical construction and maintenance of a trail.
- *Management, Maintenance and Monitoring.* The Guidelines provide management policies that will sustain CVNP trails for future generations. Guidance is provided on annual and long term maintenance, trail closures, management of trails for Special Use Permit events, and trail monitoring.

Restoration of Existing Trail Network. A primary objective, common to all action alternatives, is the restoration of the existing trail network. Restoration may include rehabilitating trails in their present location, relocating or realigning trails, or removal and closure of trails. This will be accomplished through condition assessments, prioritization of restoration based upon trail use and resource quality, and monitoring.

Trail Facilities. The Trail Management Plan scoping process identified various uses and facilities that will complement and support the trail network and trail visitors. The facilities include water trails where paddle launch sites for non-motorized boat access to the Cuyahoga River and associated facilities would occur, trailside and riverside campsites, parking at trailheads, and trail amenities such as benches and drinking water. The facilities are considered and evaluated as part of all the action alternatives.

- *Water Trail Facilities.* The Plan sets forth criteria for paddle launch sites along the Cuyahoga River within the Park boundary. Nine sites are evaluated in the planning process.
- *Campsites.* The Plan sets forth criteria for trailside campsites and expansion of this use in the Park. Campsites under consideration within the Trail Plan are associated with non-motorized access through the Park's trail system. Dispersed and designated campsites were evaluated along primary trail corridors and primitive trails that travel across the entire length of the Park. Twelve campsites are evaluated in the planning process.

- **Parking.** Parking areas associated with trail access are considered and evaluated under four areas of implementation; expansion of an existing parking area, improvement or relocation of an existing parking area, expansion of an existing parking area for a new vehicle type, specifically horse-trailers, and the introduction of new parking areas associated with proposed trail elements. Parking considerations in the Plan, common to all action alternatives include expansion of six existing parking areas, relocation of two existing parking areas, expanded use for horse trailers at two existing parking areas, and two new parking areas including one for horse-trailers. Additional parking areas are considered as they are applicable to specific trail elements within each alternative.

The Alternatives

The National Park Service has developed eight alternatives for use, stewardship and management of the Trail system within Cuyahoga Valley National Park. The No-Action Alternative would continue current conditions. Alternatives 2, 3 and 4 focus on a specific aspect of the park's significance to develop the future Trail system. Alternatives 2A and 2B would focus on the protection of park resources and improvements to Towpath Trail circulation. Alternatives 3A and 3B would focus on expanding recreational opportunities and significant trail entry points and Alternatives 4A and 4B would focus on providing destination routes to park features and the primitive trail experience. Mountain biking is the only new use identified that is not currently permitted in the park. As such, each alternative is evaluated with and without this new use. Trails identified as mountain bike will be shared with hikers and in some limited areas, cross-country skiers. The alternatives are paired into a version "A" that has no mountain biking and "B" that includes mountain biking. For all other elements other than mountain bike use and (in some cases) new mountain bike trails, paired "A" and "B" alternatives (e.g., 2A and 2B) are exactly the same. Alternative 5 combines the ideas from all of the other alternatives considered. Alternative 5 is the Preferred Alternative of the National Park Service to meet the Plan's purpose and need, and also the goals set forth in NEPA.

Alternative 1: No Action Alternative. 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.

Alternative 2A: ReUse. In Alternative 2A, the Cuyahoga Valley Trail system would be developed and redeveloped with the concept of ReUse being its foundation. 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 with Mountain Bike Use. Alternative 2B is the same as Alternative 2A with the addition of authorization of a linear mountain bike 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 in a variety of locations throughout the park to establish activity centers for trail use and other activities. 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 in the Park recommended for improvements for on-road bike use. Alternative 3A also includes two additional campsites, one additional new parking area and trailhead, and one additional expansion of an existing parking area.

Alternative 3B: Recreation Focus with Mountain Bike Use. Alternative 3B is the same as Alternative 3A with the addition of new mountain bike trails consisting of two zones of loop routes. The proposed mountain bike trails would include two new trails on both sides of the Valley in the central region of the park totaling 17.7 miles. The proposed trails would include a linear longer 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 4 adds one additional campsite and expansion of an existing parking area.

Alternative 4B: Destination Focus with Mountain Bike Trails. Alternative 4B is the same as Alternative 4A with the addition of new mountain bike trails. The mountain bike 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 nearly 21 miles of trail for mountain bike use on new proposed trails.

Alternative 5: ReUse, Recreation & Destination (Preferred Alternative). Alternative 5 combines trail elements from all of the Alternatives and proposed trail facilities that will best fit the park. 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 10-mile mountain bike trail, trail facilities including expanded and new parking areas, introduction of launch sites for water trail access, and expansion of hike-in and paddle-in campsites.

Environmentally Preferable Alternative. The environmentally preferable alternative is the alternative required by 40 CFR 1505.2(b) to be identified that causes the least damage to the biological and physical environment and best protects, preserves and enhances historical, cultural and natural resources. Alternative 2A has been selected as the environmentally preferred 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.

NPS Preferred Alternative. As a result of the impact analysis results summarized in Table 1, the Park assembled a ‘hybrid’ of trail elements that best meets the goals of the Plan and CEQ’s criteria. The preferred ‘hybrid’ approach used Alternative 3B as its baseline concept. Alternative 5 was created by removing elements that were found to cause higher levels of impacts and combining of trail elements from all of the alternatives. Alternative 5 will best meet the mission of the Park, its resource conditions and visitor use, the Trail Plan purpose and goals, while fulfilling the criteria of NEPA.

Environmental Consequences

For the purpose of the Environmental Impact Statement (EIS), an issue or impact topic describes an environmental problem or relationship between a resource and an action or actions. Impact analysis predicts the degree to which the resource will be affected. The effects to be considered include direct, indirect and cumulative. Direct effects are caused by actions at the same time and place of the action. Indirect effects are actions and impacts caused by the alternatives that occur later in time or farther in distance than the action. The intensity of effects is identified as negligible, minor, moderate or major. The intensity of effects is determined for each issue and potential impacts by the proposed actions. Cumulative impacts are impacts to a particular resource and include impacts of actions in the past, present and the reasonable foreseeable future. These effects are both beneficial and adverse and will vary depending on the affected resource and the proposed action. Beneficial impacts are those that involve a positive change that moves the resource toward a desired condition. Adverse impacts involve a change that moves the resource away from a desired condition or detracts from its appearance and condition. A summary is provided in Table 1 that shows the type of impacts expected with each alternative.

Cumulative impacts are common to all alternatives, typically, long-term, minor and adverse or negligible and do not significantly change among alternatives the intensity of the adverse impact of the issue topics.

Impacts from trail facilities are also presented as common to all to action alternatives. While some individual facilities within these common facilities and additional facilities described within individual alternatives have specific site impacts, the intensity of the impacts do not change significantly among alternatives. The highest level of impact to park resources from trail facilities, are typically long-term, minor and adverse.

Table 1: Comparative Summary of Impacts

Impact Topic	General Analysis Results
Water Resources Imperviousness Riparian Buffers Stream Crossings Wetlands Floodplains Water Quality	<p>Watershed imperviousness would not be impacted at greater than negligible levels by any alternatives parkwide or at subwatershed scales. Given that riparian areas, wetland buffer areas and streams are present throughout the park, these resources are largely impacted as trail miles increase. Some isolated trail elements that would require boardwalk systems may impact wetlands. Impacts to floodplains are largely limited to site specific trail elements, primarily interpretive trails systems adjacent to or providing access to the river that may require boardwalk systems. Impacts to water quality are related to the increase of trail miles in select (3) cold water or high quality watersheds and additional human activity associated with the river and campsites.</p> <p><i>Impacts to Water Resources among alternatives range from negligible adverse to minor to moderate adverse.</i></p> <p><u>Alternative 1</u>: Long-term minor to moderate, adverse from current trails in close proximity to sensitive water resources and current alignment of trails in some locations where erosion occurs resulting in temporary increased sedimentation.</p> <p><u>Alternative 2A</u>: Long-term, negligible to minor, adverse from limited new trail development.</p> <p><u>Alternative 2B</u>: Long-term, negligible to moderate, adverse, from limited new trail development but increase of new use on existing natural surface trail in sensitive water resource area of the Park.</p> <p><u>Alternative 3A</u>: Long-term, minor to moderate, adverse from moderate levels of trail development, stream crossings in sensitive watersheds and limited new trails within buffer areas of wetlands and floodplains.</p> <p><u>Alternative 3B</u>: Long-term, minor to moderate, adverse from moderate levels of trail development, stream crossings in sensitive watersheds and limited new trails within buffer areas of wetlands and floodplains.</p> <p><u>Alternative 4A</u>: Long-term, minor to moderate, adverse from moderate levels of trail development, stream crossings in sensitive watersheds and limited new trails within buffer areas of wetlands and floodplains.</p> <p><u>Alternative 4B</u>: Long-term, minor to moderate, adverse from moderate levels of trail development, stream crossings in sensitive watersheds and limited new trails within buffer areas of wetlands and floodplains.</p> <p><u>Alternative 5 (Preferred Alternative)</u>: Long-term, minor to moderate, adverse from moderate levels of trail development, stream crossings in sensitive watersheds and limited new trails within buffer areas of wetlands and floodplains.</p> <p><u>Cumulative Impacts</u>: Long-term negligible to moderate and adverse from suburban development activities outside of the Park where water resources may be modified or lost. Long-term beneficial impacts if restorative actions related to the Brecksville Dam and combined sewer overflows occur.</p>

Impact Topic	General Analysis Results
	<p><u>Trail Facilities:</u> Long-term, negligible adverse from minimal change in footprint within riparian zone and no required stream crossings. Long-term, negligible to minor adverse impacts from the proximity of three launch sites, three campsites and four parking areas. Long-term negligible to minor adverse from presence of some facilities within floodplains. Long-term minor to moderate adverse impacts from increased human activity on the river, campsites, and runoff from additional parking surface areas.</p>
Vegetation Habitat Fragmentation Invasive Plants	<p>Impacts to vegetation involve the increased disturbance to vegetation from trail corridors ranging from 0.18 to 2.5 acres for bottomland forests, 2.6 to 6.5 acres in open areas, and 4 to 35 acres of upland forests. New trails and increased use in primitive areas will provide new entryways for invasive plant introduction.</p> <p><i>Impacts to Vegetation range from negligible to minor adverse to minor to moderate adverse.</i></p> <p><u>Alternative 1:</u> Long-term, moderate and adverse from disturbance of existing trails within primary vegetation communities, presence of exotic plants along main trail corridors and trails in areas of rare and special plant species.</p> <p><u>Alternative 2A:</u> Long-term, negligible to minor and adverse from an overall reduction of trails in primary vegetation communities and minimal development to limit spread of invasive plants.</p> <p><u>Alternative 2B:</u> Long-term, minor and adverse from an overall reduction of trails in primary vegetation communities, increase of trail use by mountain bikes in one isolated upland forest areas, and minimal development to limit spread of invasive plants.</p> <p><u>Alternative 3A:</u> Long-term, minor to moderate and adverse from an increase of trail miles within primary vegetation communities and new trail areas where spread of invasive plants may occur.</p> <p><u>Alternative 3B:</u> Long-term, moderate and adverse from a greater increase of trail miles within primary vegetation communities, including new mountain bike trails in undisturbed areas of the park and new trail areas where spread of invasive plants may occur.</p> <p><u>Alternative 4A:</u> Long-term, moderate and adverse. Long term, moderate and adverse from a greater increase of trail miles within primary vegetation communities and new trail areas where spread of invasive plants may occur.</p> <p><u>Alternative 4B:</u> Long term, moderate and adverse from a greater increase of trail miles within primary vegetation communities, including new mountain bike trails in undisturbed areas and new trail areas where spread of invasive plants may occur.</p> <p><u>Alternative 5:</u> (Preferred Alternative): Long-term minor to moderate and adverse from an increase of trail miles within primary vegetation communities and new trail areas where spread of invasive plants may occur.</p> <p><u>Cumulative Impacts:</u> Long-term, negligible and adverse effects from continuing development projects within and near the Park boundary that may cause vegetation disturbance but the increase of future exotic management activities and habitat restoration on disturbed sites within the Park.</p> <p><u>Trail Facilities:</u> Long-term, negligible to minor adverse impacts on the primary vegetation communities from minor ground disturbance in isolated regions of the park.</p>

Impact Topic	General Analysis Results
Wildlife Habitat disturbance by human noise Habitat fragmentation	Fragmentation of wildlife movement, increased disturbance from human activity and increased corridors for potential movement of species, including predators may occur as trail miles and “footprint” increase within the various wildlife habitats, most notably in forests, the predominant habitat in the Park. Three trails are within close proximity to known nesting areas.
	<p><i>Impacts to Wildlife among alternatives range from negligible and minor adverse to moderate, adverse.</i></p> <p><u>Alternative 1:</u> Long-term, minor and adverse due primarily to the overall continued fragmentation of forest habitats in the Park.</p> <p><u>Alternative 2A:</u> Long-term, minor, adverse from limited habitat fragmentation of minimal trail expansion.</p> <p><u>Alternative 2B:</u> Long-term, minor, adverse from limited habitat fragmentation of minimal trail expansion.</p> <p><u>Alternative 3A:</u> Long-term, minor to moderate, adverse from increased habitat fragmentation of trail expansion.</p> <p><u>Alternative 3B:</u> Long-term, minor to moderate, adverse from increased habitat fragmentation of trail expansion including mountain trails in undisturbed areas.</p> <p><u>Alternative 4A:</u> Long-term, moderate, adverse from significant habitat fragmentation of trail expansion.</p> <p><u>Alternative 4B:</u> Long-term, moderate, adverse from significant habitat fragmentation of trail expansion, including new mountain bike trails.</p> <p><u>Alternative 5</u> (Preferred Alternative): Long-term, minor to moderate, adverse from increased habitat fragmentation, including new mountain bike trails in a limited area.</p> <p><u>Cumulative Impacts:</u> Short-term and long-term minor and adverse from emerging development, increased loss of habitat, temporary disturbance from construction projects and potential changes associated with climate change. Future wildlife management plans currently in development will affect local wildlife populations beneficially.</p> <p><u>Trail Facilities:</u> Long-term negligible to minor and adverse from the position of trail facilities on the edge of forest blocks, minimal footprint and minimal localized disturbance from new or expanded uses.</p>

Impact Topic	General Analysis Results
Soils Recreation Use Compatibility Slope of Trail	<p>Impacts are associated with the increase of trail miles within areas that have limitations for recreational trails that would require stabilization infrastructure to be sustainable. Additional impacts are associated with the number of trail miles where steep terrain is present that will create conditions that may lead to increased erosion.</p> <hr/> <p><i>Impacts to soils range from negligible to moderate and major adverse largely from increase in trail miles within the system.</i></p> <p><u>Alternative 1:</u> Long-term, minor to moderate, adverse from trails located in limited soil conditions and in areas with trail grades that exceed 15%.</p> <p><u>Alternative 2A:</u> Long-term, negligible, adverse, from a limited increase of trails and no additional trails on steep grades.</p> <p><u>Alternative 2B:</u> Long-term, negligible to minor, adverse from a limited increase of trails, new use increasing trail use on a natural surface trail, and no additional trails on steep grades.</p> <p><u>Alternative 3A:</u> Long-term, minor, adverse from a moderate increase of trail miles and minor increase of trails on steep grades.</p> <p><u>Alternative 3B:</u> Long-term, minor to moderate, adverse from a moderate increase of trail miles, increase of trail use types and minor increase of trails on steep grades.</p> <p><u>Alternative 4A:</u> Long-term, moderate, adverse, from a moderate increase of trail miles and moderate increase of trails on steep grades.</p> <p><u>Alternative 4B:</u> Long-term, moderate, adverse from a moderate increase of trail miles, increase of trail use types and moderate increase of trails on steep grades <u>Alternative 5:</u> (Preferred Alternative) Long-term minor to moderate, adverse from a moderate increase of trails miles, new trail use types and minor increase of trails on steep grades.</p> <p><u>Cumulative Impacts:</u> Short-term and long-term minor to moderate adverse impacts to soil conditions during construction projects inside and outside of the Park and continued soil compaction and soil loss from ongoing urbanization.</p> <p><u>Trail Facilities:</u> Short-term and long-term negligible to minor adverse effects on soil resources are expected from temporary disturbance during construction and minimal areas of disturbance from access and use of launch sites, campsites, and new and expanded parking areas.</p>
Cultural Resources Archeological National Register of Historic Places Rural Landscapes & Scenic Values	<p>Overall Cultural Resources are not affected by the proposed trail elements or have negligible to minor effects. Two areas where adverse impacts are identified are the removal of a portion of Lake Trail and the proposed mountain bike segment adjacent to the Duffy Farm. The general scale of the plan will require site evaluation on selected alternative elements for archeological resources.</p> <hr/> <p><i>Impacts to Cultural Resources range from negligible to minor adverse and minor to moderate adverse from resource impacts within limited areas of the park.</i></p> <p><u>Alternative 1:</u> Long-term, negligible to minor, adverse from increased ground disturbance in high use areas and use on unmanaged social trails.</p>

Impact Topic	General Analysis Results
	<p><u>Alternative 2A:</u> Long-term, negligible to minor, adverse from limited expansion of trails near Cultural Resources.</p> <p><u>Alternative 2B:</u> Long-term, negligible to minor, adverse from limited expansion of trails near Cultural Resources.</p> <p><u>Alternative 3A:</u> Long-term, negligible to moderate, adverse from a moderate expansion of trails near Cultural Resources.</p> <p><u>Alternative 3B:</u> Long-term, negligible to moderate, adverse from a moderate expansion of trails near Cultural Resources.</p> <p><u>Alternative 4A:</u> Long-term, negligible to minor, adverse from a minor expansion of trails near Cultural resources.</p> <p><u>Alternative 4B:</u> Long-term, negligible to moderate, adverse from a moderate expansion of trails near Cultural Resources.</p> <p><u>Alternative 5:</u> (Preferred Alternative) Long-term negligible to moderate, adverse from a moderate expansion of trails near Cultural Resources.</p> <p><u>Cumulative Impacts:</u> Continued use of neighborhood social trails will continue under this alternative, resulting in long-term, negligible to minor and adverse impacts on cultural resources. Impacts resulting from the Boston Mills Area Development Plan/Environmental Assessment may occur.</p> <p><u>Trail Facilities:</u> Long-term, negligible to minor adverse impacts on NRHP properties, Countryside Initiative program elements and archeological resources. Impacts to archeological resources will need to be evaluated through site-specific surveys to ensure mitigation of impacts.</p>
Visitor Experience Visitation Trail User Experience Trail User Conflict Education/ Interpretation PublicHealth/ Safety	<p>Impacts on visitor experience are largely beneficial to the visitor providing new and a wider variety of trail experiences in the park. Increased trail user conflicts may occur from an increase in shared trail use, new trail uses and the proximity of select new trails to existing high use areas. New trail facilities with limited access or associated resource issues, may affect the public health and safety of trail users.</p> <p><i>Impacts to visitor experience include beneficial impacts for new and expanded trail use experiences and opportunities for interpretation and education, and negligible to minor adverse impacts in some instances on trail use and experience, trail user conflict, and public health and safety.</i></p> <p><u>Alternative 1:</u> Long-term, minor to moderate, adverse from trail user conflicts in high use areas and limited connections to regional trail networks.</p> <p><u>Alternative 2A:</u> Long-term, beneficial from limited new trails and regional trail connections and long-term, minor to moderate adverse from minimum changes in visitor experiences.</p> <p><u>Alternative 2B:</u> Long-term, beneficial from limited new trails and regional trail connections and long-term, minor to moderate adverse from minimum changes in visitor experiences.</p> <p><u>Alternative 3A:</u> Long-term, beneficial from moderate increase of new trails and regional trail connections and long term, minor to moderate adverse from potential increase in trail visitation.</p> <p><u>Alternative 3B:</u> Long-term, beneficial from moderate increase of new trails, regional trail connections and new uses and long term, minor to moderate adverse from a potential</p>

Impact Topic	General Analysis Results
	<p>increase in trail visitation and trail user conflicts with new trail uses.</p> <p><u>Alternative 4A</u>: Long-term, beneficial from moderate increase of new trails and regional trail connections and long term, minor to moderate adverse from a potential increase in trail visitation.</p> <p><u>Alternative 4B</u>: Long-term, beneficial from moderate increase of new trails and regional trail connections and long term, minor to moderate adverse from a potential increase in trail visitation.</p> <p><u>Alternative 5</u>: (Preferred Alternative) Long-term, beneficial from a moderate increase of new trails and regional trail connections and long-term, minor to moderate adverse from potential increase in trail visitation.</p> <p><u>Cumulative Impacts</u>: Long-term beneficial impacts from regional trail and trail facility expansion and improvements on the Cuyahoga River that improve water resource conditions for recreational use.</p> <p><u>Trail Facilities</u>: Trail facilities and amenities will provide long-term beneficial impacts to visitor use experience by improving facilities for visitation, new and expanded trail user experiences and new opportunities for education and interpretation. Long-term minor to moderate impacts to visitor use and experience from potential trail user conflict in high use areas from new uses, and public safety and health issues associated with river conditions and human waste management at campsites.</p>
<p>Socioeconomic</p> <p>Land Ownership and Proximity to Other Adjacent Lands</p> <p>Public Roads</p> <p>Increased Visitation</p> <p>Commercial Business Construction Activities</p>	<p>The expansion of trails will result in some areas of adjacent lands within close proximity to projected low use primitive trails and medium to high seasonal use of new multi-use connector trails and some alternatives (3B, limited 4B) of mountain bike trails. Increased trail crossings on public roads and utilization of selected roads for bike lanes will likely require additional information regarding multiple uses in proximity to public roads. New uses offer potential beneficial impacts to business opportunities.</p> <p><i>Impacts to Socioeconomic conditions range from beneficial for increased and new business opportunities, new and expanded facilities to accommodate visitation, and new construction activities, to minor to moderate adverse from varying increases of select trails on other jurisdictional lands, select trails near adjacent lands and varying increases of non-motorized use on public roads.</i></p> <p><u>Alternative 1</u>: No effect and long-term, minor to moderate, adverse from no changes to socioeconomic conditions.</p> <p><u>Alternative 2A</u>: Long-term, beneficial impacts from limited opportunities to expand trail-based business opportunities and long term, minor and adverse from limited expanded trail system and its proximity to adjacent landowners, crossing of public roads.</p> <p><u>Alternative 2B</u>: Long-term, beneficial for business opportunities and long-term, minor to moderate, adverse from limited expanded trail systems, use of other jurisdictional lands, proximity of new trails to adjacent landowners, and crossing of public roads.</p> <p><u>Alternative 3A</u>: Long-term, beneficial for business opportunities and long-term, minor to moderate, adverse from expanded trail systems, use of other jurisdictional lands, proximity of new trails to adjacent landowners, and crossing of public roads.</p>

Impact Topic	General Analysis Results
	<p><u>Alternative 3B</u>: Long-term, beneficial for business opportunities and long-term, minor to moderate, adverse from expanded trail systems, use of other jurisdictional lands, proximity of new trails to adjacent landowners, and crossing of public roads.</p> <p><u>Alternative 4A</u>: Long-term, beneficial for business opportunities and long-term, moderate, adverse from expanded trail systems, use of other jurisdictional lands, proximity of new trails to adjacent landowners, and crossing of public roads.</p> <p><u>Alternative 4B</u>: Long-term, beneficial for business opportunities and long-term, moderate, adverse from expanded trail systems, use of other jurisdictional lands, proximity of new trails to adjacent landowners, and crossing of public roads.</p> <p><u>Alternative 5</u>: (Preferred Alternative) Long-term, beneficial for business opportunities and long-term, minor to moderate, adverse from expanded trail systems, use of other jurisdictional lands, proximity of new trails to adjacent landowners, and crossing of public roads.</p> <p><u>Cumulative Impacts</u>: Long-term beneficial impacts from potential increased business opportunities spurred by regional trail development. Long-term, minor and adverse impacts on local governments for additional services potential required on future regional and local greenways and trails.</p> <p><u>Trail Facilities</u>: Trail facilities will have long-term negligible and adverse impacts on costs to visitors for marginal costs for water trail use permits, long-term minor and adverse impacts from noise associated with some facilities and their proximity to non-NPS lands, long-term negligible and adverse impacts from increase uses and additional entry points from public roads for expanded trail facility uses from public roads, and short-term and long-term beneficial impacts on business for new opportunities for business and construction activities associated with expanded trail facilities and uses.</p>
Park Operations Staffing Facilities Partner Operations Other Jurisdiction Operations	<p>Park Operations increase as number of trail miles increase. Designated river access and associated increase in river use and expansion of campsites will require additional operations. Capacity to support the development and stewardship of trails will increase as trail miles increase.</p> <p><i>Impacts to park operations range from no change, less than a 5 percent increase, a 5-8 percent increase and greater than a 10 percent increase in staffing from current operations and identified as negligible up to major on the need for increased park operation, partner operations and other jurisdiction operations required to build, sustain and operate, proposed actions.</i></p> <p><u>Alternative 1</u>: No effect and long-term, negligible to minor, adverse impacts from limited staff to meet current operations of trail management, no new facilities and ongoing support from park partners and local jurisdictions.</p> <p><u>Alternative 2A</u>: Long-term, negligible to minor, adverse impacts from a minor increase of additional staff and partnership support from current operating levels.</p> <p><u>Alternative 2B</u>: Long-term, negligible to moderate, adverse from minor additional staff and partnership support from current operating levels.</p> <p><u>Alternative 3A</u>: Long-term, minor to moderate, adverse impacts from a moderate increase of additional staff and partnership support from current operating levels.</p> <p><u>Alternative 3B</u>: Long-term, minor to moderate, adverse impacts from a moderate increase</p>

Impact Topic	General Analysis Results
	<p>of additional staff and partnership support from current operating levels.</p> <p><u>Alternative 4A:</u> Long-term, moderate to major, adverse impacts from a major increase of additional staff and partnership support from current operating levels.</p> <p><u>Alternative 4B:</u> Long-term, moderate to major, adverse impacts from a major increase of additional staff and partnership support from current operating levels.</p> <p><u>Alternative 5:</u> (Preferred Alternative) Long-term minor to moderate, adverse impacts from a moderate increase of additional staff and partnership support from current operating levels.</p> <p><u>Cumulative Impacts:</u> Expanding residential and commercial development or redevelopment surrounding the Park may increase visitation and undesignated entry points into the Park, resulting in minor adverse, long-term impacts to park operations and management. Long-term minor adverse impacts from increased river use from expansion of river use access facilities outside of park, and potential water quality improvements from Route 82 dam and reduction of combined sewer overflows.</p> <p><u>Trail Facilities:</u> Short-term and long-term, minor to moderate adverse, from its increase for staffing and operations required for new facilities and long-term negligible to minor adverse from, increased design and contract service coordination, increased construction and ongoing maintenance for trail facilities, increased coordination with local jurisdictions on new facilities, particularly river use.</p>

Next Steps

A public comment and review period will be announced by the U.S. EPA for a minimum of 60 days. A formal notice of specific dates will occur when they are available. Upon the closing of the public review and comment period for the Draft Plan and EIS, the NPS will review and respond to all substantive comments received as part of the Final Trail Management Plan and EIS. A summary of the public comments will be provided in the Final Environmental Impact Statement. The NPS will assemble the Final Plan and EIS and will be made available for a 30-day no action period, before filing its final Record of Decision that includes a selected alternative. Once the Record of Decision is signed, implementation of the Plan and selected alternative could begin.

HOW TO COMMENT ON THIS PLAN

Comments on this plan are welcomed and will be accepted for 60 days after the Environment Protection Agency's notice of availability appears in the *Federal Register*. The formal closing date of this comment period will be made available on the project website once it is known. Public open houses for presentation of the Draft Plan will be announced in the local media and the project website when they are scheduled.

If you wish to comment on the material in this document, you may submit comments by the following methods:

1. Written comments can be provided and mailed to :

Superintendent
Cuyahoga Valley National Park
National Park Service
ATTN: Lynn Garrity
15610 Vaughn Road
Brecksville, OH 44141

2. Comments will be received through the National Park Service's planning website for the Trail Plan EIS. Website address is:

<http://parkplanning.nps.gov/cuyahogatrailplan>

3. Written comments will be received at public meetings to be announced in the media following the release of this document.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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Chapter 1: Purpose and Need for Action

1.1 Introduction

Cuyahoga Valley National Park (CVNP, Park) was designated as a unit of the National Park Service (NPS) in 1974 as a National Recreation Area, and subsequently redesignated as a National Park in 2000. Since the Park's establishment, the NPS and partners have transformed the Cuyahoga River Valley region with restored, thriving landscapes and retained and celebrated the cultural heritage and landscapes of the Ohio & Erie Canal Corridor, while creating a centerpiece for the region and beyond for outdoor recreation. These accomplishments are particularly significant, given the Park's location within a large metropolitan area boasting a human population of over 3 million people within 25 miles. The consequences of this transformation and urban proximity present new challenges of increased visitation in expanded high quality ecosystems, new trends in recreation and changes in how people use their leisure time for recreation and tourism activities.

The Park's *General Management Plan* (GMP; NPS 1977) noted that one of the significant purposes of the park is that "it preserves a landscape reminiscent of simpler times, a place where recreation can be a gradual process of perceiving and appreciating the roots of our contemporary existence (NPS 1977)." The GMP established the overall concept for management and development of the CVNP; resource preservation for compatible recreational use. In 1985, the Park's first Trail Management Plan (NPS 1985) was developed and served as the primary document to initiate many trails in the Park including the Towpath Trail and its completion in 1993. Today, 174 miles of trail within the Park boundary provide for biking, hiking, equestrian and cross-country skiing recreation opportunities.

Twenty-five years after the first Trail Plan, the NPS, in cooperation with local metropolitan park districts Cleveland Metroparks and Metro Parks, Serving Summit County, has developed an updated Trail Management Plan and Environmental Impact Statement for the Park. This ongoing planning process is in accordance with the requirements of the Council of Environmental Quality's "Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act" and NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis and Decision-making. Because of the Park's unique qualities of property ownership, proximity to human populations and opportunities for emerging ecological restoration of the Cuyahoga Valley, the Plan proposes a trail management strategy that meets these opportunities and challenges while maintaining the mission and resource values of CVNP.

Public involvement was and continues to be a critical component in every step of the *Trail Management Plan* process. The Park was established in part by the citizenry of its community. The spirit of public involvement tradition carries on in the Trail Management Plan and its ultimate implementation.

1.1.1 Purpose of the Plan/EIS

The purpose of the updated *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, while keeping with the purpose, mission and significance of the Park, over the next 15 years.

1.1.2 Need for Action

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.

1.1.3 Goals and Objectives

Goals and objectives assist in determining if the proposed actions being considered are successful in meeting the purpose of the plan. The goals and objectives for the Trail Management Plan have been developed with consideration of the park's purpose and significance, NPS policies and mission, and input from park staff, park partners, park stakeholders and the general public. The alternatives identified for analysis will need to meet the goals and objectives set forth for the Plan. 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 network.

Objectives have been developed and outlined for each goal and outlined in the following section.

Goal 1: A trail network that provides experiences for a variety of trail users.

- Create a trail network with a variety of distances and difficulties.
- Provide a variety of trail uses based on current and expected future demand.
- Facilitate accessible trails where feasible.
- Maintain and enhance the primitive trail experiences distinctive to the regional trail system.
- Create connections for trail users where feasible.
- Utilize the trail network to provide new park experiences.
- Support current and future trail use with compatible park facilities including the expansion of campsites and river access.
- Provide information on trail use and orientation of the trail system in a consistent format.

Goal 2: A trail network that shares the historic, scenic, natural and recreational significance of the Park.

- Integrate the trail network with features of park significance, where appropriate, and associated interpretive information.
- Provide trail experiences through the variety of natural and cultural landscapes of the Park.
- Integrate the trail network with park programs.
- Create trails that provide access to views of natural and cultural features.

Goal 3: A trail network that minimizes its footprint on the Park's historical, scenic, natural and recreational resource.

- Design the trail network utilizing sustainable design practices.
- Minimize and/or mitigate impacts to sensitive resources.
- Contribute to park and NPS overall environmental sustainability goals.
- Minimize unofficial "social" trails.
- Maintain and/or enhance "trail-less" areas in larger, sensitive landscapes of the park.

Goal 4: A trail network that can be sustained.

- Establish park management operations to provide monitoring, trail condition assessment and maintenance of the trail network efficiently.
- Identify funding opportunities for the management and maintenance of the trail network.
- Establish, monitor and manage the carrying capacity of the trail system.
- Provide a safe environment for the trail user and minimize user conflicts.

Goal 5: Cooperative partnerships that contribute to the success of the Cuyahoga Valley National Park trail network.

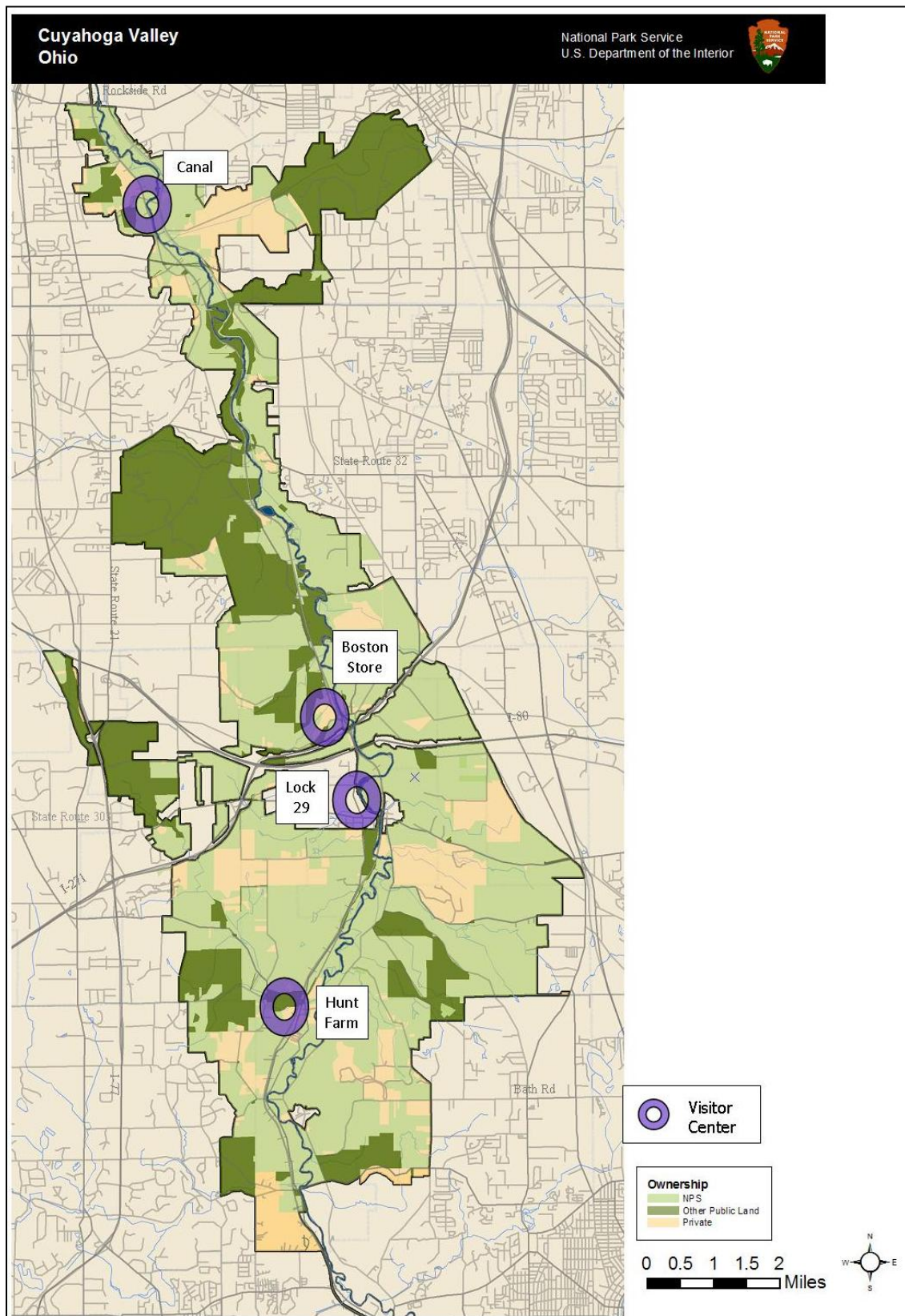
- Create viable connections to neighborhoods and community destinations where appropriate.
- Enhance and expand the Park's alternative transportation opportunities where feasible.
- Utilize current and new Trail Volunteer programs effectively.
- Utilize existing and new partnerships to implement the *Trail Management Plan*.

1.2 Background

1.2.1 Project Location and Brief Description of the Park

The Park is one of 397 park units in the NPS, one of 58 National Parks, and one of only 12 National Parks east of the Mississippi River. The Park encompasses approximately 33,000 acres in the Cuyahoga River Valley between the metropolitan areas of Cleveland and Akron, Ohio. The Park lies within Cuyahoga and Summit counties and part of 15 local municipalities. Within the legislative boundary, the NPS owns approximately 19,000 acres. The remainder of land is owned and under management by other public entities, quasi-public entities or under private ownership. Two primary owners include land managed by regional park districts of the Cleveland Metroparks and the Metro Parks, Serving Summit County.

Figure 1: Cuyahoga Valley National Park



Due to the distribution of trails throughout the entire Park and its adjacent land owners, the Trail Management Plan outlines a comprehensive park-wide vision for its trails. Therefore, project location for the purpose of this plan, is the entire Park with areas of focus identified for trail specific locations in the alternatives.

1.2.2 Purpose and Significance of Cuyahoga Valley National Park

In December 1974, President Gerald Ford signed legislation (Public Law 93-555) creating Cuyahoga Valley National Recreation Area. In 2000, the park was designated as a National Park. Its purpose as stated in the founding legislation:

“To preserve and protect for public use and enjoyment, the historic, scenic, natural and recreational values of the Cuyahoga River and the adjacent lands of the Cuyahoga Valley and for the purpose of providing for the maintenance of needed recreational open space necessary to the urban environment.”

The enabling legislation described the Park’s objective as “utilizing park resources in a manner which will preserve its scenic, natural and historic setting while providing for the recreational and educational needs of the visiting public.”

The Park was established during the era of the emerging importance of urban recreation. The NPS and the federal government had launched the “Legacy of Parks Program” designating urban “gateway” parks in New York (Gateway, NRA) and San Francisco, (Golden Gate NRA). During the process for the Park of becoming part of the NPS, Cuyahoga Valley was often referred to as the opportunity for a “Midwest Gateway Park” (Cockerell, 1992).

The Park contains three significant features; the Cuyahoga River Valley and its associated ecological functions, its cultural resources and landscapes, and its recreational history and outdoor use opportunities.

The Cuyahoga River is the ecological centerpiece of the Park with 22 miles of river traveling in Park boundaries. The Cuyahoga River is known globally for the widely publicized burning of the Cuyahoga River in 1969 which moved the country toward the birth and establishment of the Clean Water Act. The river valley, within the Park boundary, is biologically unique, a “botanical crossroads” situated in the transition zone between the Central Lowlands to the west and Appalachian Plateau to the east. The Park contains a diverse landscape including forests and wetlands which include over 1,300 plant species and 500 animal species (NPS, 2008b).

Primary cultural resource features of the Cuyahoga Valley include the Ohio & Erie Canal, Native American settlements and the works of the Conservation Civilian Corps. The Ohio & Erie Canal and its features symbolize early 19th century settlement and the westward expansion remains include the locks, towpath, and other structures associated with the canal; the Cuyahoga Valley railroad, the pastoral landscapes throughout the valley, three small villages along the canal and dozens of individual farmsteads and miscellaneous commercial and industrial sites (NPS, 2008b). Today, the Park continues to celebrate these cultural features through park programs, successful park partnerships, access to significant areas, and use of interpretive media and signage.

The recreational significance of the Cuyahoga Valley was recognized by many of the early park planners and landscape architects establishing parks in the region and throughout the nation in the early 20th century. Frederick Law Olmsted, a renowned landscape architect described the Cuyahoga Valley as “an impressive landscape with the many and varied wooded ravines running up from this main valley to the plateau land on either side, and large stretches of gently rolling pastoral landscape, streams and lakes, occasional gorges and picturesque ravines and some hills commanding broad outlooks over the countryside.” Olmsted, in 1925 as part of his study presented to the Akron Metropolitan Park Board, had identified the value and opportunities for recreation in the Valley. This vision of the Cuyahoga Valley as a passive recreational refuge has been an underlying thread over the past century. Today, the Park provides nearly 175 miles of trails for a variety of recreational experiences that draws visitors locally and nationally to a landscape distinctive from its nearby metropolitan cities (Cockerell, 1992).

1.2.3 History of Trails in Cuyahoga Valley National Park

The value of trails and recreational use in the park dates back to before 1900. Indeed, “by the dawning of the twentieth century recreation in the Cuyahoga Valley was an established tradition. Beginning in the 1870’s, city dwellers were venturing out to the countryside picnicking, boating, hiking and for nature study” (Cockerell, 1992).

By the 1930’s the Cuyahoga Valley was already an active respite for urban dwellers from Cleveland and Akron visiting places like Virginia Kendall State Park for hiking and sunbathing. During this time period, private estates in the Cuyahoga Valley had established trails and carriage roads for their private recreational enjoyment, that include places like Old Carriage trail area and the Wetmore trails. Over the years, these lands and other park units were incorporated in the Cleveland Metroparks and Metro Parks, Serving Summit County, and eventually part of the designated CVNP. Two significant trail corridors established that accelerated the recreational connections to the Valley included the conversion of an abandoned railroad bed to the Bike and Hike Trail in 1970 and the work of the Towpath Trail in the late 1980’s and early 1990’s.

Many of the trails from the earliest days of Cuyahoga Valley as a recreation destination remain today for today’s visitors to enjoy and share the experience that has remained for over a century.

1.2.4 General Management Plan & Other Relevant Plans

General Management Plan (1977). The General Management Plan (GMP) for Cuyahoga Valley National Park provides guidance for park management during the Park’s initial implementation stage. The overall concept for management and development of the Park is that of resource preservation for compatible recreational use. This was met by establishing three strategies for natural resource management; preservation, protection and maintenance and enhancement. The plan recognized the Park’s significant role of providing passive recreation within a large metropolitan region. The Park “preserves a landscape reminiscent of simpler times, a place where recreation can be a gradual process of perceiving and appreciating the roots of our contemporary existence” (NPS, 1977).

The GMP outlines general planning concepts for the Park and its recreational use. While created in the early stages of the Park’s existence, the following management guidance identified elements that are part of the Trail Management Plan being evaluated in this document (NPS, 1977).

- In a gradually deteriorating environment where fewer and fewer places allow us time and space to rediscover the beauty of nature, the peace of the countryside, or the substance of our past, the need to protect the landscapes that refresh the spirit and restore our perceptions has become one of the basic requirements of recreational planning. (p. 3)
- The visitor-use concept for the nation (park) stressed the expanded use of existing facilities, ranging from primitive hiking to golf courses – as well as opening of additional use areas to encourage people to disperse throughout the park and seek new recreational settings. Proposals are intended to promote uses that harmonize with the valley landscape and to provide opportunities that generally cannot be duplicated in the more urbanized surrounding region. Numerous recreational activities will be accommodated – hiking, biking, horseback riding, picnicking, camping – and many sites will be designed to encourage spontaneous recreation such as kite flying and impromptu concerts.(p.4)
- Primitive walk-in campgrounds and hostels designed to provide experiences rather than conveniences will be developed.(p.7)
- Inherent in the (visitor use/interpretation) concept, is the idea of providing unstructured open space and recreational settings that encourage people to disperse and explore further rather than concentrating in a few developed areas. (p.41)
- The concept of use is based on the natural separation of activities in the valley as determined by the landscape. To determine compatible uses, the GMP identified “visitor-use zones” to reflect the landscape capabilities and resource characteristics. (p.43)
- An important element in the successful implementation of the visitor-use/interpretive concept will be an internal transportation system adequate to permit circulation throughout the park’s core area without the need for an automobile. (p.55)

Primary Interpretive Themes. The Primary Interpretive Themes outlined in the Long Range Interpretive Plan, 2003 for the Park include the following (NPS, 2003a):

- *Parks to People.* Cuyahoga Valley National Park is a product of a national movement for the establishment of parks for use by people in an urban environment.
- *Cultural and Natural Interplay.* Understanding human interaction with the valley environment from prehistoric to present times can serve to generate inspiration and encourage discussion of a modern land ethic.
- *Watershed Connections.* The Cuyahoga River connects Cuyahoga Valley National Park to the largest system of freshwater in the world.
- *Natural Diversity.* The Park’s location in a transition zone between major regions of the country, combined with its glacial history and varied topography makes it home to a unique species composition.
- *Evolution of Transportation.* People have used the Cuyahoga Valley as a transportation corridor from prehistoric to modern times.
- *Impact of the Canal.* As part of the 19th century transportation infrastructure, the Ohio & Erie Canal was among the most successful of America’s canals. During the period, canals contributed to the growth of the nation.

Transportation Plan (1983). Because of the complex ownership and road network within the Park, one of the subsequent plans of the General Management Plan was a Transportation Plan (NPS, 1983). The Plan's focus was on three transportation issues, establishing concepts for 1) a hierarchy of road development and use within the park, 2) alternative mass transportation, such as the rail, and 3) the establishment of a bicycle trail network. The 1983 Transportation Plan developed the ideas derived in the GMP further and identified categories for management. The Transportation Plan identified initial bike routes.

Trail Plan (1985). The *Trail Plan and Environmental Assessment* (NPS 1985) was led by a Citizens Advisory Commission and outlined a plan to flesh out the general recommendations in the GMP and other previous general studies. The Commission included individuals representing a wide variety of outdoor recreational trail uses. The recommendations developed by the Commission were submitted to the Park staff and formed the foundation of the Plan.

The Trail Plan identified 105 miles of existing trails and 27 existing trailheads in 1985 and proposed an additional 115 miles of trail and 19 new trailheads for parking and trail facilities. An additional 46 miles of trails were identified in the Plan for future consideration but were not evaluated in the 1985 Trail Plan. The trails proposed focusing on four primary uses: hiking, horse-riding, cross-country skiing and bicycling on roads and primary long distance trails (NPS, 1985).

As part of the 2012 trail planning process, an evaluation of the implementation of the 1985 Trail Plan was performed. In 2012, 54 miles of 1985 proposed trails and 10 miles of the future trails proposed had been implemented. Thirteen of the nineteen proposed trailheads exist today as part of the Park's trail infrastructure. This includes the completion of the 22 miles of the Towpath Trail within the Park, completed in 1993 (NPS, 1985).

Some trails proposed in the 1985 Trail Plan but not yet implemented are part of the evaluation in this *Trail Management Plan*.

Survey of Potential Linkages to the Ohio & Erie Canal Towpath Trail and Cuyahoga Valley Scenic Railroad in the Cuyahoga Valley National Park (2002). A bike trail linkage report was developed by the Park in 2002 to survey potential bike trail linkages to the Towpath Trail and Cuyahoga Valley Scenic Railroad. The Plan identified 11 bike trail linkages, their classification of development, feasibility, priority and estimates of costs. The Hemlock Road linkage in Independence is the only bike trail linkage identified in the plan that has proceeded with more detailed planning and environmental review (*in process*).

River Use/Water Trails Studies. Over the past 15 years, interest in expanding the recreational use of the Cuyahoga River has continued to grow. This is due in part to improved water quality in the river the past two decades and expanding recreational use of the river north and south of the park.

In 1991, the Park developed a draft River Use Plan outlining a basic framework for recreational boating along the Cuyahoga River. The plan outlined conditions in 1991 of the river and "actions that must precede the encouragement of recreational boating in Cuyahoga Valley National Recreation Area" (NPS, 1991). The actions included issues related to water quality, river use limits, permitted vessels, physical facilities and other complementary operational items, such as camping, canoe livery and river use operational responsibilities.

In 1992, a survey of kayak and canoe owners was conducted within a ten county region of CVNP. Two findings of this study included that canoeing activity occurs relatively close to a user's residence and a typical outing consists of a single day visit. Of 24 Ohio rivers evaluated in the survey, the Lower Cuyahoga, including the portion within CVNP, was ranked 5th in the number of days survey respondents paddled in the selected rivers. Additionally, the survey asked respondents about barriers to the use of the Cuyahoga River between Akron and Cleveland. Barriers identified include not having enough information on paddling the river, poor water quality and lack of public access (Anderson, et al, 1992).

America's Great Outdoors Initiative. In 2011, President Obama released a vision to develop a conservation and recreation agenda for the 21st century. The vision for the nation included 1) Connecting Americans to the Great Outdoors, 2) Conserving and Restoring America's Great Outdoors and 3) Working together for America's Great Outdoors (NPS, 2011f). This Trail Management Plan embraces this vision.

Healthy Parks, Healthy People. In 2011, the NPS initiated the Healthy Parks, Healthy People Strategic Plan to serve as a blueprint for the role of the National Park System to promote health and well-being (NPS, 2011g). This plan assists in bringing the guiding principles and vision of this national initiative to the park level for implementation.

Call to Action. In 2011, the NPS embarked on initiating a strategy to prepare for a second century of stewardship and engagement. Call to Action identifies 36 actions to advance the mission of the National Park Service in its second century. The Trail Plan embodies many of these actions and will demonstrate their applicability through its implementation. (NPS, 2011h)

1.2.5 Current Status of Trails and Associated Facilities

Today, the Park contains 175 miles of trails, of which approximately 97 miles are managed by NPS. The trails provide for various uses including 64 miles for hiking and trail running only, 42 miles for multipurpose biking and hiking, 16 miles for cross-country skiing and 52 miles for equestrian riding. The NPS trail system is comprised of three long distance trails, the Towpath Trail, Buckeye Trail and Valley Bridle Trail, and eleven smaller localized trail systems with separate access points. The park currently has one limited community connector through the Old Carriage Trail connector trail in the northern portion of the park and has some portions of the primary roadways improved for bike use. NPS' Metropark partners provide five additional trail systems within their park units of CVNP. The Buckeye Trail, within CVNP, is managed by the non-profit partner, the Buckeye Trail Association. Currently, the Park provides access to all its trails through 25 trailheads and from the four primary Visitor Contact Centers.

1.2.6 Current or Recent Trail Planning by Other Organizations

Cleveland Metroparks Master Plan. In 2010, Cleveland Metroparks kicked off a two year planning effort to update its Master Plan for the Park District. The Plan will inventory existing conditions, evaluate issues and trends, identify strategic commitments, update Park reservation "Concept Value Plans" and develop strategies to monitor plan implementation. The Master Plan, referred as The Emerald Necklace Centennial Plan, is aimed to "set forth a vision to guide future decision-making and priorities for the Park District to 2020" (Cleveland Metroparks, 2011).

Summit Metroparks Trail and Greenways Plan. In 2000, Summit County developed the Trail and Greenway Plan, which provided a vision for proposed trails and greenways in the county. The vision included networks of trails providing linkages among communities, to the Towpath Trail and to other local and regional trails. The plan identified trails representing over 500 miles of proposed trails and greenways in the county (Ohio & Erie Canal Association, 2010). In 2011, an update to the plan was initiated.

Village of Richfield Land Use Study. In 2011, the Village of Richfield embarked on the Crossroads of Commerce & Community Study. The Study will include the development of bike and pedestrian plans that promote access to public transportation along Brecksville Road and safe connections across the interstates to reconnect areas of the community. There are also proposals for trail and street improvements to connect Richfield's Historic District, its school campus and the Park (AMATS, 2010).

Bath Greenway Plan. The Township of Bath has worked on identifying trail and greenway connections as part of its Comprehensive Planning efforts over the years.

Hudson Master Plan. In 2000, the City of Hudson completed its Comprehensive Master Plan that included goals for a trail network in the community and connections beyond (City of Hudson, 2000).

AMATS/NOACA Bike Plans. In 2008, the Akron Metropolitan Transportation Study (AMATS) developed the Bicycle and Pedestrian Needs Report in 2008 to identify and evaluate the bikeway and pedestrian needs for its planning region that includes Summit County. In 2011 and 2012, AMATS embarked on the development of a bike users map to establish "bikeability" scores for the region's roadways and established a regional Bike Plan. In 2008, the Northeast Ohio Regional Coordinating Agency (NOACA) developed a Regional Bicycle Plan for its region, including Cuyahoga County, identifying bikeway projects.

Cuyahoga Water Trail Plan. In 2010, a Cuyahoga River Water Trail Group was formed to collaborate among the various Cuyahoga River users and stakeholders to establish a state-designated water trail. In early 2011, the group held its first Water Trail workshop to discuss the opportunities and challenges for the water trail designation.

1.2.7 Special Designations

The Park has a number of designations established outside of its enabling legislation as a National Park. These designations identify unique resources within the Park and its affiliation with park and other associated federal programs.

National Recreational Trail. The National Trail System Act of 1968 (Public Law 90-543) authorized creation of a national trail system. National Recreation Trails, designated by the Secretary of Interior or the Secretary of Agriculture, recognize exemplary trails of local and regional significance. Through designation, these trails are recognized as part of America's national system of trails (NPS, 2009e). The Park contains two segments recognized as National Recreation Trails.

- 2.8 miles along the Towpath Trail (Station Road north to Canal Road)
- 0.50 miles Harriet Keeler Woodland Trail located in Brecksville Reservation.

Ohio & Erie Canal National Heritage Canalway. The Park is located within the Ohio & Erie Canal National Heritage Canalway. As part of the NPS National Heritage Areas Program, Canalway was designated through Public Law 104-333. The legislation states that the Canalway will “preserve and interpret for the education and inspirational benefit of present and future generations the unique and significant contribution to our national heritage of certain historic and cultural lands, waterways, and structures within the 87-mile Ohio & Erie Canal Corridor between Cleveland and Zoar” (OECA, 2000).

American Heritage River. The Park contains a section of the Cuyahoga River that is designated as an American Heritage River. Established under Executive Order, 13061, 1997, the American Heritage River Program recognizes rivers with distinctive characteristics and strong community involvement.

Nationwide Rivers Inventory. In partial fulfillment of Section 5(d) requirements of the National Wild and Scenic Rivers Act (16 U.S.C 1271_1287), the NPS has compiled and maintains a Nationwide Rivers Inventory (NRI) to register river segments that potentially qualify as national wild, scenic or recreational river areas. A portion of the Cuyahoga River in the Park is identified in the National Rivers Inventory.

National Scenic Byways. Established under the Intermodal Surface Transportation Efficiency Act of 1991, the U.S. Transportation Secretary recognizes certain roads as National Scenic byways due to their distinctive qualities. The Park contains approximately 18 miles of the Ohio & Erie Canal National Scenic Byway, including sections on Canal Road between Rockside Road and Pleasant Valley Road, and Riverview Road between Pleasant Valley Road and the southern boundary of the Park.

Area of Concern. The Park contains a segment of the Cuyahoga River that is included in the Area of Concern, under Annex 2, of the Great Lakes Water Quality Agreement, administered by the International Joint Commission. Annex 2 “directs Canada and the United States, working with state and provincial governments to develop plans that embody a systemic and comprehensive ecosystem approach to restore and protect beneficial uses in areas of persistent pollution as defined in Annex 3 of the Agreement, as Areas of Concern” (International Joint Commission, 2011).

National Historic Landmarks and Historic Districts. Inside the boundary of the Park, 34 sites are designated as National Historic Districts or landmarks as authorized by the National Historic Preservation Act of 1966. These sites are described further in the Cultural Resources section of Chapter 3.

Natural Study Area. In 2005, the Park designated 164 acres known as Terra Vista as a Natural Study Area. The Terra Vista Study area was established to recognize Terra Vista’s monitoring and visitor use management needs (NPS, 2005b).

1.2.8 National Park Service Laws, Management Policies and Regulations

Public Law 93-555. Cuyahoga Valley National Park Enabling Legislation and Amendments. Congress created the park in December, 1974. The Park’s legislation was amended from a national recreation area to a national park in 2000. The project and this Environmental Impact Statement are consistent with all acts of Congress that govern the management of the Park.

NPS Organic Act of 1916. The NPS Organic Act directs the NPS to manage the parks “to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” The Redwood National Park Expansion Act of 1978 reiterated this 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 1 a-1).

The resources of CVNP are protected under the authorities of the NPS Organic Act of 1916 (16 U.S.C. 1), the National Park System General Authorities Act (16 U.S.C. 1a-1 et seq.), Part 36 of the Code of Federal Regulations (CFR), and the Park’s enabling legislation. (Public Law 93-555).

National Environmental Policy Act of 1969, as Amended. NEPA is implemented through the regulations of the Council of Environmental Quality (CEQ) [40 CFR 1500-1508] that requires detailed and documented environmental analysis of proposed federal actions that may affect the human environment.

NPS Director’s Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making. Director’s Order 12 provides a planning process for NPS compliance with the National Environmental Policy Act (NEPA).

NPS Director’s Order 42. Accessibility for Park Visitors. Director’s Order 42 goal is to ensure the implementation of the highest level of accessibility that is reasonable to NPS programs, facilities and services through planning, construction and renovation of buildings and facilities and in provision of programs and services to the public and to NPS employees.

NPS Director’s Order 52C. Park Signs. Director’s Order 52C provides guiding principles for a consistent and effective sign program throughout all NPS units. The Order and its companion Sign Standards Reference Manual, sets forth standards for planning, design, fabrication, installation, inventory and maintenance of outdoor signs for national parks.

NPS Director’s Order 83 Public Health. Director’s Order 83 outlines what NPS will do to ensure compliance with prescribed public health policies, practices and procedures. Its companion guidance manuals, Reference Manual 83B1, Wastewater Systems and Reference Manual 83F, Backcountry Operations are pertinent to this Plan.

NPS Director’s Order 77. Natural Resource Protection, Reference Manual. National Resource Management. Director’s Order 77 sets forth guidance to NPS employees responsible for managing, conserving and protecting natural resources found in NPS units.

Part 36 of the Code of Federal Regulations (CFR) provides for the proper use, management, government, and protection of persons, property, and natural and cultural resources within areas under the jurisdiction of the NPS.

The following sections of Part 36 of the CFR apply specifically to Trail Plan elements in the alternatives being considered.

36 CFR 2 Resource Protection, Public Use and Recreation

- 2.1 Preservation of natural, cultural and archeological resources.
- 2.2 Wildlife Protection
- 2.10 Camping and food storage.
- 2.14 Sanitation and refuse.
- 2.16 Horses and pack animals.

36 CFR 3. Boating and Water Use Activities. This section provides applicability, regulations and requirements of boating and water use in park waters.

36 CFR 4. Vehicles and Traffic Safety, 4.30 Bicycles (b) Except for routes designated in developed areas and special use zones, routes designated for bicycle use shall be promulgated as special regulations.

36 CFR 7. Special Regulations, Areas of the National Park System. The NPS requires an issuance of a special regulation to designate routes for bicycle use when it will be off park roads and outside developed areas. If the selected alternative includes new off-road or reauthorized trails for bicycling, and then chooses to proceed on the action, the Park will need to proceed with the established rulemaking process set forth by the NPS.

Part 40. of the Code of Federal Regulations (CFR). 1500-1508 (Council of Environmental Quality, NEPA regulations of 1978). This section provides regulations for implementing the Procedural Provisions of NEPA.

Part 43 Code of Federal Regulations (CFR) 3 (Antiquities Act) This section establishes procedures to be followed for permitting the excavation or collection of prehistoric objects of federal lands.

Part 43 CFR 46 Implementation of the National Environmental Policy Act of 1969. A bureau proposed action is subject to the procedural requirements of NEPS if it would cause effects on the human environment and is subject to bureau control and responsibility.

National Historic Preservation Act of 1966, as Amended Through 2000. (16 USC 470), The Act declared historic preservation as a national policy and authorized the Secretary of the Interior to expand and maintain a National Register of Historic Places that would include properties of national, state and local historic significance. The Act recommends that federal agencies proposing action consult with the State Historic Preservation Office regarding the existence and significance of cultural and historical resource sites.

Endangered Species Act of 1978. As amended, the Act prohibits federal actions from jeopardizing the existence of federally-listed threatened or endangered species or adversely affecting designated critical habitat. Federal agencies must consult with the U.S. Fish and Wildlife Service to determine the potential for adverse effects.

Clean Water Act of 1977. The Act requires water quality standards and prohibits any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

Archeological Resources Protection Act (ARPA) of 1979. (P.L. 96-95; 93 Stat.712). The Act defines archeological resources, their excavation or removal regulations, preservation policies, cooperation with other parties and the development of plans for surveying public lands for archeological resources.

Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds. The Order directs actions of federal departments and agencies to implement the Migratory Bird Treaty Act.

Architectural Barriers Act of 1968 (ABA), the 1984 Uniform Federal Accessibility Standards (UFAS) and the American with Disabilities Act (ADA) of 1990. The Acts establish the requirements that buildings, facilities and programs be made accessible to people with disabilities. The set standards for NPS design and architectural access is the ADA-ABA Accessibility Guideline for Building and Facilities.

Native American Graves Protection and Repatriation Act (NAGPRA) of 1990. The Act requires federal agencies and institutions that receive federal funds to provide information about Native American human remains, funerary objects, sacred objects and objects of cultural patrimony to lineal descendants, Indian tribes and native Hawaiian organizations and, upon presentation of a valid request, dispose of or repatriate these objects to them.

NPS Management Policies, 2006. The basic Service-wide policy document of the NPS provides guidance and interpretation of laws, regulations, executive orders and directives.

1.2.9 Appropriate Use

According to NPS Management Policies (2006, Section 1.5) the NPS must ensure that park uses that are allowed would not cause impairment of, or unacceptable impacts on park resources and values. Section 8.1.1 of the NPS Management Policies outlines appropriate uses in the National Parks: “appropriate forms of visitor enjoyment emphasize appropriate recreation consistent with the protection of the park. In exercising its discretionary authority, the Service will allow only uses that are 1) appropriate to the purpose for which the park was established, and 2) can be sustained without causing unacceptable impacts.”

1.3 Scoping Process and Public Participation

As defined in NPS Director’s Order 12, “scoping is an early and open process to determine the scope of environmental issues and alternatives to be addressed in an EIS.” This section outlines the general activities and outcomes of the public involvement that were part of the planning process for the Plan. Detailed information on the scoping process and public participation is provided in Appendix B of this document.

1.3.1 Internal Scoping

Internal scoping involves the interdisciplinary participation and input from NPS staff to define issues, alternatives and data needs.

Interdisciplinary Team (IDT). An IDT was formed in 2009 including the Park, NPS Rivers, Trails, and Conservation Assistance (RTCA) staff and representatives from Cleveland Metroparks and Metro Parks, Serving Summit County. The IDT members, who served as the primary advisors to the development of the Plan, met throughout the planning process. Additionally, a subset of the IDT, the CORE team met regularly to advise and prepare materials for the IDT. A list of members for both of these teams is provided in Chapter 5 of this document.

Cooperating Agencies. Under NEPA, a cooperating agency is “any Federal agency other than the lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal.” In addition, a state or local agency of similar qualifications may also become a cooperating agency.

In 2009, the Park signed a Memoranda of Understanding with Cleveland Metroparks and Metro Parks, Serving Summit County to outline collaboration on the Trail Management Plan. Both of these regional park entities were part of the IDT and coordinated with the Park on all aspects of the Plan.

1.3.2 External Scoping – Public Involvement

External Scoping for the Trail Management Plan involved a variety of activities for the public to participate in the planning process. Activities included a stakeholder survey, public meetings, public outreach, and newsletters. Information on the specific public involvement activities is provided in Chapter 5 of this document.

1.3.3 Public Scoping

Through the public scoping process, five primary issues were identified for the Plan: park resources, visitor uses, facility uses, maintenance and administrative operations. Appendix B outlines general items for these issues that were identified during the scoping period.

1.4 Scope of Environmental Impact Statement

As required under NEPA, the Environmental Impact Statement must identify issues that may be affected by the proposed actions.

Impact topics were identified that may be 1) impacted by the proposed action 2) have an impact on the proposed actions in this Plan or 3) not relevant or impacted by the proposed action. Determination of topics for impact evaluations were identified based upon the following:

- Federal laws, regulations and executive orders, including NEPA guidance documents
- NPS Management Policies (NPS, 2006a)
- Public Scoping input
- Relevance of proposed actions to park resources.

1.4.1 Impact Topics Retained for Impact Analysis

The impact topics identified that may be impacted or have an impact on the proposed actions are listed below. Each impact topic is described further in Chapter 3 and impacts on each topic associated with the Trail Plan alternatives are described and analyzed in Chapter 4.

Water Resources. The presence of the Cuyahoga River system and its associated water resources may be affected by the location, use, construction and management of trails. Specifically trails and their associated facilities may affect watershed imperviousness, water quality, riparian buffers, floodplains and wetlands.

Vegetation and Invasive Plants. The Cuyahoga River Valley continues to transform itself with restored landscapes, but is continually challenged by its proximity to the urban environment. Trail impacts to vegetation communities can vary based upon trail location, resource sensitivity and level of trail development and its designated uses. These impacts may occur by changes in vegetative habitats through disturbance and fragmentation, and the introduction or spread of exotic invasive plants that limits native ecological diversity.

Wildlife. The diversity of wildlife and their use of the Cuyahoga Valley continue to evolve as the landscape continues to be restored. Disturbance of wildlife habitat can occur due to trail proximity to sensitive features and the level of noise and motion from trail users, causing changes in movement, distribution and composition of wildlife. Based upon their location and use levels, trails may change the size of habitats, create edge effects to sensitive species and create new movement corridors for new species interactions.

Soils. The steep valley walls and valley floor pose challenges to any suitable uses within the Park. Trails may affect soils and the terrain by their placement and design, causing soil erosion and compaction which can increase sedimentation and unstable conditions. The suitability of the soils and its terrain for trails placement will affect the investment and management of the trails and protection of soil resources.

Cultural Resources. The type and level of visitation to cultural resources can affect the quality of that resource. Cultural resources in CVNP include National Register Historic sites, cultural and scenic landscapes, and archeological resources. Trails can affect these specific cultural resources if the circulation of visitors is not designed properly, the level of visitor use creates impact to the resource, or the integrity of the cultural resource is minimized by a trail or trail facility.

Visitor Use and Experience. The Park's proximity within a large metropolitan area, poses it for recreational use by a wide variety of visitors. Trails can serve as one vehicle to experience the wide variety of park resources upon which the Park was created. Trails can also affect those experiences at varying levels for the visitor by the following issues; orientation, education and interpretation, visitor accessibility, visitor use conflict, human health and safety and noise caused by human use.

Socioeconomic. The Park boundary reflects a dynamic integration into the community and region. The mosaic of ownership and local governmental roles may be affected by trails and their proximity to other lands, their transportation connections to communities and their opportunities or impacts to the local and regional economies.

Park Operations. Without the proper Park operations in place, conditions may occur where trails become degraded, trail user conflicts increase, Park resources are impacted from their desired conditions and visitor safety is compromised. Park operations that may affect trails include the staffing for all divisions of the park, operation of park facilities, and staffing and coordination with Park partners and local jurisdictions.

1.4.2 Impact Topics Dismissed from Further Consideration

Director's Orders 12 requires an initial screening of a wide variety of resources and potential effects on park resources proposed actions may have. Through this initial screening, some impact topics were dismissed from further analysis as a result of a) the proposed alternatives would have negligible or no effects on the particular resource or b) the resource does not occur in the national park. The following resource topics were dismissed for further analysis for the reasons stated below.

Geohazards. NPS Management Policies (2006a) states the NPS will strive to avoid placing new visitor and other facilities in geologically hazardous areas that pose hazardous to humans and park infrastructure such as earthquakes, volcanic eruptions, mudflows, landslides, floods, shoreline processes, tsunamis and avalanches. While the park has experienced park facility closing and infrastructure damage from flooding occurrences, the proposed actions will not exasperate the flooding occurring or its frequency. During any new facility site planning, the park will adhere to NPS Management Policies (Section 9.1.1.5) and "strive to site facilities where they will not be damaged or destroyed by natural physical processes and where dynamic natural processes cannot be avoided, developed facilities should be sustainably designed."

Groundwater Resources. The Park is not located within the limits of a designated U.S. Environmental Protection Agency Sole Source Aquifer.

National Natural Landmarks. The National Natural Landmarks Program was established by the Secretary of the Interior in 1962 under the authority of the Historic Sites Act of 1935 (16 U.S.C 461 et seq.) to identify and encourage the preservation of a full range of geological and biological features that are determined to represent nationally significant examples of the Nation's natural heritage. Once a landmark is determined nationally significant, designation is recommended and if designated included on the National Registry of Natural Landmarks. The Park contains one National Natural Landmark, Tinkers Creek Gorge within the Cleveland Metroparks Bedford Reservation. None of the alternatives involve any action at this location and will not effect this designation as a result (NPS, 2009c).

Streamflow Characteristics. The NPS has established a Streambank Stabilization Program Management Plan for the Cuyahoga River. In addition, the Ohio EPA has established goals for the water quality of the river and its associated tributaries. Trails and trail facilities, specifically water trails will have interactions with the River and its tributaries but will not alter or change the stream flow characteristics of these natural water systems.

Lakes and Ponds. The Park contains approximately 70 lakes and ponds ranging in size from less than one-tenth of an acre to 10 acres. The Park's largest lake is Virginia Kendall Lake of 10 acres. Fifteen of the ponds are managed for visitor use within the Park's Pond Management Plan (NPS, 1993). While the proposed alternatives will have trails near or adjacent to four lakes and ponds, including Horseshoe Pond, Indigo Lake, Virginia Kendall Lake and Armington Pond, the lakes and ponds will not be altered or modified that would cause an effect to these resources.

Nationwide Rivers Inventory (NRI). In partial fulfillment of Section 5(d) requirements of the National Wild and Scenic Rivers Act (16 U.S.C 1271_1287), the NPS has compiled and maintains a Nationwide Rivers Inventory (NRI) to register river segments that potentially qualify as national wild, scenic or recreational river areas. In 1982, an eight mile reach of the Cuyahoga River from the vicinity of the confluence of Chippewa Creek upstream to Peninsula was listed on the Nationwide Rivers Inventory (NRI) with "Outstanding Remarkable Values (ORVs)" for Scenery, Recreation and Fish (NPS, 2009b).

The proposed trails in all alternatives will not affect the scenic values or resources conditions recognized in the NRI designation for the Cuyahoga River. Existing and proposed trails in the NRI designated section will not be along the River, with the exception of the current Towpath Trail. Two paddle launch sites are proposed within the NRI, which will enhance access for river use. No effect will occur on the Nationwide Rivers Inventory designation.

Air Quality. The Clean Air Act of 1963 (42 U.S.C. 7401 et seq.) was established to promote the public health and welfare by protecting and enhancing the nation's air quality. The act establishes specific programs that provide special protection for air resources and air quality related values associated with NPS units. Section 118 of the Clean Air Act requires a park unit to meet all federal, state, and local air pollution standards. The proposed actions in the Trail Plan promote non-motorized outdoor recreation activities and will not contribute to air quality conditions and potentially will be beneficial in the Park.

Marine and Estuarine resources. Due to its location, no marine or estuarine resources are present within the Park.

Unique ecosystems. The Park does not contain any biosphere reserves or World Heritage sites.

Ethnographic resources. NPS Director's Order 28, Cultural Resource Management Guidelines, defines ethnographic resources as any site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it. According to DO-28 and Executive Order 13007 on sacred sites, the NPS should try to preserve and protect ethnographic resources.

Ethnographic resources are not known to exist in the Park. In addition, Native American tribes traditionally associated with the Park were apprised of the proposed project during scoping and response was received from an affiliated tribe. This response confirmed their cultural affiliations with the area, but indicated that no impacts to significant ethnographic resources are expected.

Museum collections. No museum collections are involved in the proposed alternatives.

Prime and Unique Farmlands. As a result of a substantial decrease in the amount of open farmland, Congress enacted the Farmland Protection Policy Act (FPPA) (Public Law 97-98). In August 1980, the Council on Environmental Quality directed that federal agencies must assess the effects of their actions on prime or unique farmland soils classified by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, timber, and oil seed. Unique farmland soils are those that produce specialty crops such as fruits, vegetables, and nuts. Prime and unique farmland soils are those that are actively being developed and could be converted from existing agricultural uses to nonagricultural purposes, as described above. Urban or built-up land, public land and water areas cannot be considered prime farmland. Soils inside the Park cannot be considered prime and unique farmland soils because they are public lands unavailable for food or fiber production. Because there are no prime or unique farmlands in the Park, this topic was dismissed from further analysis.

Lightscape Management. NPS Management Policies (2006a) require the NPS to preserve the natural lightscapes within a park which include natural resources and the values that exist in the absence of human-cause light. The Park maintains minimum lighting within its park facilities to maintain the safety of park visitors and security of park facilities. The Park utilizes LED lighting, has designated areas of night closure and maintains lighting facilities that are sensoried on time restrictions to minimize the amount of artificial lighting within the park. The proposed actions may result in new or improved areas that may require lighting, but are minimal and will adhere to park lighting design practices identified in this section with the goal of continuing to maintain limited artificial lightscaping within the park. Due to the minimal or negligible impact to park resources and the park management practices in place, the lightscape and night sky impact is dismissed for detailed analysis.

Indian Trust Resources. Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by the Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

There are no Indian trust resources at the Park. The lands comprising the Park are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Because there are no Indian trust resources, this topic is dismissed from further analysis in this document.

Energy Resources. NPS Management Policies requires that Park resources and values will not be degraded to provide energy for NPS purposes and that all facilities, vehicles, and equipment will be operated and managed to minimize the consumption of energy, water, and non-renewable fuels. Alternative transportation programs will be encouraged where appropriate. The Trail Plan alternatives will have a negligible or minor impact on energy use within the park and may reduce energy demands within the park through energy efficiency updates to new and existing facilities and opportunities for alternative transportation for park operations and park visitors. Where energy resources are required for trail maintenance vehicles or trail facilities, the park will adhere to NPS sustainable energy design and energy management requirements and its Climate Friendly Parks program in compliance with Park's EMS program under Director's Order 13A.

Climate Change. The Council of Environmental Quality Draft Guidance on Consideration of Effects of Climate Change and Greenhouse Gas Emissions sets forth general guidance for proposed actions. Because the proposed actions will not contribute to the carbon footprint or increase greenhouse gas emissions, due to its non-motorized use and expansion to reduce greenhouse gas emissions through alternative transportation use, this issue is dismissed for further consideration.

Environmental Justice/Minority and low income populations. Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. The Park is not located within or adjacent to neighborhoods with high minority and/or low income populations. The proposed alternatives will not displace or travel through or near any low income populations due to their absence within or adjacent to the park boundaries. The proposed action would not have health or environmental effects on minorities or low-income populations or communities as defined in the Environmental Protection Agency's Environmental Justice Guidance (1997). Therefore, environmental justice was dismissed from further analysis.