

## Chapter 2: Alternatives

This chapter describes various alternatives or actions that could be implemented as part of the trail system in the Park. The National Environmental Policy Act (NEPA) governs the process of decision-making when a federal agency proposes any action that has the potential to affect the human environment. In the Environmental Impact Statement (EIS) process, alternatives will form the basis for the analysis of environmental impacts. NEPA requires that the process include the consideration of a range of alternatives. In addition, NPS must consider a No Action Alternative, along with any Action Alternatives. This chapter describes the development of the Alternatives and description of the alternatives that were evaluated for the EIS.

### 2. 1 Development of Alternatives (Methodology)

The alternatives reflect information and input from a variety of sources during the planning process. The following factors were considered in the development of all the alternatives.

*Goals & Objectives.* Alternatives were designed to meet the goals and objectives of the Plan. The goals and objectives are outlined in Chapter 1.

*GMP Management Zones.* The Park's General Management Plan (NPS 1977) designated Natural Resource Management Zones to guide overall management of natural environment and identified general suitability and prescriptions for park management. The Zones were identified as Preservation Management, Protection/Maintenance Management and Enhancement Management. These Zones fit closely to the Park's major physiographic regions of floodplain, steep terrain and plateau. These general management zones and physiographic regions were a component in the development of the alternatives.

*Park Resources.* The proximity of potential trails to sensitive resources was considered during development of the alternatives. Sensitive resources included the presence of water resources, terrain conditions, cultural resources, and plant and animal habitats.

*Program Elements Identified during Public Scoping.* Alternatives address five primary categories of trail design development that were identified during public scoping. They include improvements to existing trails, new trails of varying distances and challenges, new trail uses, a variety of trail user experiences, including connections, and facility improvements that serve the trail network.

*Cuyahoga Valley National Park's role in Outdoor Recreation and Resource Stewardship.* The alternatives include the consideration of the Park's role in outdoor recreation experiences and resource stewardship within a metropolitan region. The Park's distinctive and leading role to both of these activities are considered in the development of the alternatives.

*General Planning Considerations.* Physical and social factors were examined as part of the development of the trail alternatives including but not limited to: conditions of existing trails, property ownership, trail user patterns, and visitor safety trends. These planning considerations are outlined further in the Affected Environment and Environmental Consequences Chapters of this document.

## **2.2 Actions Common to All Alternatives**

The following actions and policies will apply to all alternatives.

### **2.2.1 NPS Policies, Protocols and Monitoring**

All alternatives will adhere to the policies, protocols and monitoring described in Chapter 1 of this document and any others set forth by the NPS and Department of Interior that are applicable to the Park.

### **2.2.2. Special Designations**

All alternatives will adhere to the requirements and policies set forth for the Special Designations within the Park as described in Chapter 1 of this document.

### **2.2.3 Trail Projects Completed, Currently Planned or Underway**

The Park is currently managing trail-related projects that are in various stages of planning and development. These projects have completed or will soon undergo environmental review and will therefore not be evaluated in this Environmental Impact Statement. They are considered as common elements of all alternatives of the Trail Management Plan.

#### **2.2.3.1 Planning and Environmental Compliance Completed**

Planning and compliance have been completed on four trail projects. Construction began on one project in 2011.

*Rockside Station to Towpath Pedestrian Connector Bridge.* A pedestrian and bike bridge is proposed to connect Rockside Boarding station to Lock 39 trailhead, which then connects to the Towpath Trail. Environmental compliance and design are completed and the Park received funding in 2012 for implementation.

*Bike & Hike Trail and Brandywine Parking Lot Improvements.* In 2011, Metro Parks, Serving Summit County initiated the construction phase of providing an off-road bike route for the Bike and Hike trail near Brandywine Falls, expanding the Brandywine Falls parking lot and making improvements to the Brandywine trailhead. The project will include 1.4 miles of new off-road multi-use trail of the Bike and Hike trail, connection to the Stanford Trail, and expanded parking with a total of 90 car spaces and one bus parking space.

*Happy Days Lodge Parking Expansion.* Due to events and programs offered at the Happy Days Lodge, the Park has proposed the expansion of the existing parking area adjacent to the Boston Run trailhead. The addition of 70 parking spaces is being proposed in preliminary drawings.

### **2.2.3.2 Planning and Environmental Compliance Underway**

*Hemlock Connector Trail.* A separate Environmental Assessment is underway by the City of Independence evaluating alternatives for the development of a 1.5 mile multi-use connector trail from Brecksville Road, following primarily along Stone Road, to the Towpath Trail. The project includes construction of a pedestrian/bike bridge across the Cuyahoga River and connection to the Towpath near Stone Road, approximately one mile south of Rockside Station and one mile north of Canal Visitor Center.

*Old Carriage Trail Repair/Rehabilitation.* In 2009, the bridges on the Old Carriage Trail were closed due to unsafe conditions. In 2012, the Park will be working towards a design if funding becomes available for the bridges. Design options may include repair of existing bridges, replacement with new bridges, re-routing of trail, and other options that may be developed. Options will be evaluated based upon many factors, including feasibility, sustainability, support of the park's mission and environmental impacts. Estimated costs of different options will also be determined.

*Old Carriage Trail Connector Repair.* Slumping of the hillside has caused the connector trail to fall in disrepair and adverse conditions for visitor use. In 2010, park staff improved the surface of the trail sections that were in poor condition. Additional stabilization work will be evaluated and developed in 2012 as funding becomes available.

*Boston Mills Area Conceptual Development Plan.* The Park is currently working on a plan and Environmental Assessment for the Boston Mills area to improve parking, circulation and visitor services. Nothing in that Plan is expected to conflict with the proposals within this Trail Plan for the Boston Mills Area (i.e., river access and new trail connections).

*Stanford Road New Parking Area.* In 2011, the Stanford House was reopened as a new facility for overnight accommodations in the Park. With its new use and the adjacent campsites, current parking is inadequate to address the new use while minimizing conflicts. As part of the Boston Mills Area Conceptual Development Plan, a new parking area near Stanford House is being considered and evaluated to partly address this issue.

*Peninsula Pedestrian Planning.* The Park continues to work to improve pedestrian safety and circulation of park visitors between park facilities and non-park facilities of the Lock 29 area in Peninsula.

### **2.2.4 Park Sustainability Practices**

The Park's current sustainability practices for providing recycling, energy efficient lighting, and 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.

### **2.2.5 User Carrying Capacity Standards for Trails**

The NPS defines user capacity as the type and level of visitor use that can be accommodated while sustaining the quality of park resources and visitor opportunities consistent with the purposes of the park (NPS, 2006a). The Park's GMP outlined general user capacity levels for park areas (NPS 1977). These, however, are largely outdated and predate the current trail system. User capacity guidance for the social and ecological changes on trails will be established to ensure the integrity of park resources is maintained. Preliminary development of user capacity standards is outlined in Appendix C and will be updated during the implementation phase of the Trail Plan.

### **2.2.6 Accessibility and Use of Personal Mobility Devices**

The Park will provide accessibility and use of personal mobility devices to its trails and trail facilities to the highest level of compliance under the applicable laws, rules and guidelines. Appendix C outlines recommendations to address accessibility and power driven mobility devices and compliance with applicable laws, rules and guidelines.

### **2.2.7 Trail Signage**

The Park will continue to update its Sign Plan and upgrade park and trail signs utilizing the UniGuide Sign Standards that includes identity signs, motorist guidance signs and the visitor information system. As trail signs are updated, trail accessibility information for each trail will occur. The update will also include evaluating the use of alternative technology applications to enhance visitor experience and orientation such as mobile applications. General guidance for Trail Signage is provided in Appendix C, Sustainable Trail Guidelines. Updating trail maps and other trail orientation tools for visitors and content management will be required as implementation of the Selected Alternative occurs.

### **2.2.8 Partnerships**

Partnerships between the public park agencies, local communities and the three primary Park Partners will continue as part of all alternatives. Proposed actions involving partners, especially public park agencies are described in the Operations Sections of Chapters 3 and 4 of this document.

*Public Park Partnership Land Ownership and Management.* The Cleveland Metroparks and Metro Parks, Serving Summit County have served as cooperative partners and advisors throughout the Trail Planning process. In accordance with the park's legislation regarding activities on land not owned in fee title by the NPS, any trail recommendations included in the Preferred Alternative that are located on non-NPS owned lands may be implemented at the discretion of the public property owner.

*Local Jurisdiction for Trail Elements.* Trail elements including connector trails and bike lane improvements identified in some alternatives are recommendations to create a system-wide experience for trail users and visitors to the Park and region. As with the Metroparks organizations, the proposed trail elements on land owned by local jurisdictions within the boundaries of the Park may be implemented at the discretion of the public property owner with the opportunity to enhance cooperative partnerships with the Park.

*Trails Forever.* One of the significant aspects of Partnerships that will be common among all of the alternatives will be the Trails Forever Program administered by the Park in partnership with the Conservancy for Cuyahoga Valley National Park. The program is focused on five primary activities; providing trail experiences, volunteer stewardship, planning, trail system enhancement and establishing an endowment as part of the TRAILS FOREVER Legacy Fund. The Trails Forever program is further described in Section 3.8.3.1 of the Plan. The Trails Forever Program will be a critical component in the development, implementation and sustainability of the trails in the Park. While the levels of funding may differ among the alternatives, the role of the Trails Forever Program will not differ. The Trails Forever Program will advance its role in the coming years as a primary component for Trail Plan funding. The Trails Forever program will prioritize trail projects annually and identify applicable funding sources, both private and public. As part of the initial implementation phase of the Trail Plan, the Park will evaluate the Trails Forever program for staffing, program coordination, and program direction to ensure its future success and its alignment with the goals of the Trail Plan.

*Use of Volunteers.* Volunteers for trail work at the Park will continue to be a vital component of trail stewardship in the Park and will remain under all alternatives. Management and coordination of volunteers will continue through the joint Volunteer program office of the Park and the Conservancy for Cuyahoga Valley National Park. This will include direct coordination with the Division of Maintenance through a Trails Volunteer Coordinator position. Each alternative may identify different priorities, new opportunities for additional volunteer groups, and new trail stewardship tasks, practices, and training. The use of the existing volunteer trail groups will continue.

## **2.2.9 Implementation**

Under all alternatives, the NPS will conduct the following activities to implement the Trail Plan effectively. Upon the approval of the Plan, the Superintendent shall assemble a Trail Plan Implementation Team to lead and coordinate these activities.

- *Additional Planning.* The Park will develop additional plans and standards within initial years of the Trail Plan implementation including but not limited to an updated signage strategy for visitor accessibility information and the establishment of a comprehensive monitoring program.
- *Prioritization and Review of Trail Projects and Park Facility Management System Rankings.* The Park will establish a committee of Park staff and Park partners to identify and rank Trail Plan elements for implementation. Ranking criteria will be developed to assist with the decision-making process.
- *Implementation Strategy Plan.* An Implementation Strategy Plan will be developed to prioritize trail projects and assemble the additional planning, funding, staffing, project management and monitoring that will be needed to accomplish them successfully.
- *Progress Report.* The Park will develop a progress report in cooperation with the Trails Forever Program every five years on the status of the Trail Plan implementation and its goals.

## 2.3 Alternative 1: No Action

Under the No Action Alternative, the trails, authorized uses and facilities addressed in this plan would remain as they currently exist. The Park would continue evaluating the implementation of the 1985 Trail Plan (NPS, 1985). The Park would continue trail management under current park policies, protocols and monitoring as described in Chapter 1. A continuation of trail projects would occur on an individual basis and as opportunities arise with separate planning and compliance. The future of trails and trail facilities would continue to be developed but without the benefit of a comprehensive plan for the Park's entire trail system.

Alternative 1 is depicted in Figure 4. Four trail categories designated in the 2001 Park's Trail Standards are identified in this alternative (NPS, 2001). These include Multi-Use, Hiking only, Equestrian-Hiking and Cross-Country Ski-Hiking. The Park and its Park Partners would maintain, repair and manage the 175 miles of trail within the Park as they currently exist as generally described in Chapter 1 and further detailed in Chapter 3, Section 3.6 of this document. In addition, the trails common to all including the Hemlock Connector and Hike and Bike Connector are included in total existing trail miles.

## 2.4 Actions Common to All Action Alternatives

The following actions and policies will be part of all the Action Alternatives.

### 2.4.1 Sustainable Trail Guidelines

The Trail Management Plan provides an opportunity to step back and review the current trail system and evaluate its sustainability for user enjoyment, resource protection and park management operations. One of the primary objectives identified during public scoping of the Trail Plan was to establish a Trail Program that will be systemic in providing stewardship of the CVNP trails for years to come. To ensure that the implementation of the Trail Plan is accomplished successfully, the Park would establish Sustainable Trail Guidelines. The Sustainable Trail Guidelines will serve as the primary **Standard Operating Procedure** document for trails management in CVNP and their long-term sustainability. The Guidelines focus on the following topics to incorporate best planning, design and management practices for trail sustainability among all trails in the Park:

- *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, identifying 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 recommend 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.

The Sustainable Trail Guidelines are included in Appendix C of the Trail Management Plan and will be available as a separate document for field use. The Action Alternatives and their trail elements are predicated on applying these Guidelines during implementation.

#### **2.4.2 Restoration of Existing Trail Network**

The historical practice of converting old carriage trails, farm roads and informal paths to trails, their subsequent overuse, and insufficient trail maintenance staffing have diminished trail quality and sustainability in some areas of the park. These challenges result in a less-than optimal visitor experience, increased resource damage, and increasing demands on park staffing and funding. Therefore, 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.

Two primary resource issues were identified during scoping that correlate with highly damaged trail areas; 1) the proximity of trails to water resources such as floodplains, streams or wetlands, and 2) trails located on steep terrain or their placement on fall lines which are typically the paths of least resistance for water flow (IMBA, 2004). Other resource damage issues relate to specific trail uses, seasonal trail conditions, and the proximity of trails to sensitive species and habitats.

In addition, social trails (trails not designated or created by the Park) are causing resource damage. These are prevalent in all parts of the Park but not documented or comprehensively mapped. The proposed Sustainable Trail Guidelines (Appendix C) will establish recommendations to evaluate actions to restore or eliminate existing trails and manage non-designated trails in the Park where conditions are adverse to park resources and the long-term sustainability of the trail system.

The NPS has identified some site specific actions where conditions are known to be problematic or exist within a sensitive resource and proposes alternative routes or alternative trail management actions. Additionally, some trails are redundant or run parallel to one another while also having little use and the NPS proposes to change or close such segments to reduce the overall footprint of trails where possible. These proposed actions are identified on Figure 2 and listed below. These actions may differ slightly among alternatives, but they do not change significantly.

Existing Trails that would be removed or rerouted due to sensitive resource and siting concerns include the following:

- *Ledges Trails*. Removal of 0.10 miles where trails currently exist near rare plant species and where alternative parallel routes are present.
- *Lake Trail portion*: Removal of 0.17 miles of trail where rare plant species have been identified.
- *Dickerson Trail*: Removal 1.17 miles of trail due to its current location along an existing stream with multiple stream crossings.
- *Tabletop Trail*: Reroute of 0.70 miles of trail due to its current location along steep slopes.

- *Perkins Trail portion*: Removal of 1.0 miles of trail due to its current location along a streambed and its traversing of trail grades greater than 15 percent. This section is proposed for rerouting.
- *Buckeye/Trail Valley Trail portion near Brecksville Reservation*: Both the Buckeye Trail and Valley Trail cross through an identified wetland and the Buckeye Trail is routed on multiple fall line and steep slope runs. This section is proposed for removal and rerouting.
- *Buckeye reroute north of Snowville Road*: Reroute 1.0 miles of the Buckeye Trail due to its current location in identified wetlands.
- *Reroute of Valley Bridle Trail near Ohio Turnpike*. Reroute approximately 0.5 miles of the Valley Bridle Trail in conjunction with the consolidation of the Valley and Buckeye Trails above the Stumpy Basin region. This section is proposed for rerouting due to its current location on steep terrain and proximity to the interstate that can distract horses.

Existing trails that would be removed due to redundancy or parallel placement with low trail use include the following:

- *Buckeye Trail duplicate of Valley Bridle in lower Bedford Reservation*. Removal of 2.0 miles of the Buckeye Trail or Valley Bridle Trail. The specific trail use removed from this segment would be reassigned as a permitted trail use type on the segment that remains.
- *Buckeye Trail duplicate of Valley Bridle Trail in Brecksville Reservation*. Removal of 3.3 miles of the Buckeye Trail where it parallels the Valley Bridle Trail and reassigned as a permitted trail use type on remaining trail segment.
- *Buckeye duplicate of Valley Bridle Trail north of Old Akron Peninsula Road and Ohio Turnpike Bridge*: Removal of 0.30 miles of the Buckeye Trail where it parallels the Valley Bridle Trail. The Buckeye Trail would be reassigned as a permitted trail use type on the Valley Bridle Trail segment.

### 2.4.3 New Trails

Several proposed trails are common to all Action Alternatives because they provide improvements to the existing trail network under all circumstances. These include:

#### New Interpretive Hike Trails

- *Horseshoe Pond Perimeter Loop Trail at Tree Farm Unit*. 0.20 miles of accessible trail around Horseshoe Pond connecting to the Tree Farm loop.
- *Ira River Trail*: Utilize existing undesignated trail from Towpath Trail at Ira Trailhead access to the Cuyahoga River. The trail would be approximately 0.15 miles. Boardwalks and river overlook may potentially be part of trail features.

#### New Hiking Trails

- *Connector trail from Towpath Trail to Valley Picnic area and Plateau-Oak Hill Trail system*. 0.10 miles of connector trail utilizing existing road bed from Towpath Trail crossing Riverview and add new trail from the road bed to Valley Picnic Trailhead.
- *Connect Valley Bridle Trail with Salt Run Trail*. A 0.20 mile connection of Salt Run Trail to Valley Bridle trail to provide link for long-distance hiking trail experience from Happy Days to Hunt Farm.



#### New Equestrian Trails

- *Reroute of Valley Bridle Trail near Brecksville Reservation.* 0.10 miles of new trail to replace trail removed out of existing wetland area.

#### New Multi-Use Connectors

- *Sagamore Connector Trail from Canal Road to Bike and Hike Trail.* Examine closing and vacating 1.2 miles of existing Sagamore Road that includes a portion for conversion to a multi-use path and a portion for off road multi-use path to the Bike and Hike on Cleveland Metroparks land.
- *Stanford Connector Trail from Brandywine Falls to Stanford-Towpath Connector.* Utilize the newly vacated portion of Stanford Road from Brandywine Falls to the existing lower gate, east of Latta Lane and examine the closing of Stanford Road from the current vacated section to the Stanford-Towpath Connector Trail for a 1.0 mile multi-use connector trail, when residential uses on this portion of Stanford Road no longer exist. If road closure is not feasible, consideration of a trail along the road right of way is considered.

#### New Cross-Country Ski Trails

- *Armington Trail:* New loop from Cross-Country Trail to Little Meadow Trailhead of 1.2 miles of trail utilizing, where feasible, existing service roads for an outer loop connection between the existing Cross-Country trail and Little Meadow parking with access to Quick Road.

### 2.4.4 New Trail Facilities

The scoping process identified various uses and associated facilities that will complement and support the trail network and trail visitors. The facilities include water trails, including paddle launch sites for non-motorized boat access to the Cuyahoga River and associated facilities, trailside and riverside campsites, parking at trailheads, and trail amenities such as benches and drinking water. This section outlines the general guidance and policy for each type of facility. Potential locations are provided in Figure 3. The trail facilities are presented as a suite of sites that were considered under all action alternatives with minor additions or changes among the alternatives. The changes among the action alternatives are described under each alternative.

Applicable NPS Management Policies (2006) include:

*9.2.2.5 Water trails.* Water access and use may be provided when consistent with resource protection needs. Appropriate locations and levels of use will be determined in the Park's general management plan.

*9.2.4 Parking Areas.* Parking areas and overlooks will be located to not unacceptably intrude, by sight, sound, or other impact on park resources and values. Permanent parking areas will be sized for the use anticipated on the average weekend day during peak season of use.

*9.3.2.1 Campgrounds.* Boating campgrounds may be provided in parks with waters used for recreational boating. The need for campgrounds and their sizes, locations and numbers, will be determined by 1) the type of water body, 2) availability and resiliency of potential campsites, 3) feasibility of providing and maintaining docking, camping and sanitary facilities, and 4) the potential for unacceptable impacts on park resources and values.

*9.3.2.2 Backcountry and wilderness campsites.* Backcountry and wilderness campsites may be permitted but only within the acceptable limits of use determined by the park's wilderness management plan, resource management plan or other pertinent planning document.

#### **2.4.4.1 Water Trail**

##### **General Description**

A water trail would be established and designated as part of the Cuyahoga River Water Trail system. The segment in the Park would be defined from the Bath Road bridge to the Rockside Road bridge, consisting of 22 river miles on the main stem of the Cuyahoga River.

##### **Guidelines for Water Trails**

The following guidance is recommended for the water trail and associated facilities and recreational use of the Cuyahoga River. These guidelines were developed in consideration of local conditions, need for facilities, safety, resource protection and visitor experiences.

- River Use Management Plan. Additional planning and development of the water trail may be directed through the development of a River Use Management Plan by the Park.
- Regulations. The NPS would establish regulations for river use activities. Regulations may include items related to safety, permitting, use restrictions, water level conditions, waste management and carrying capacity.
- Use. Water Trail designation for the purpose of this Plan is associated with use of non-motorized boats including kayaks and canoes. Additional non-motorized boats will be reviewed by the Superintendent for consideration.
- State of Ohio Regulations. Adherence to all Ohio Boating regulations would be required.
- Water Quality Monitoring and Reporting: Water Quality Monitoring will most likely continue at several sites on the mainstem of the Cuyahoga River during the recreation season. (May-October). Additional water quality monitoring sites on the river will be evaluated. Improvements to public education and information regarding water quality conditions will continue.
- Skill Classification. The water trail segment within the Park is considered Class I and II skill levels of river difficulty as defined by the American version of the International Scale of River Difficulty. However, a final skill classification would be determined prior to establishment of the water trail. Class II level is defined as "straightforward rapids with wide, clear channels which are evident without scouting. Occasional maneuvering may be required, but rocks and medium-size waves are easily missed by trained paddlers. Swimmers are seldom injured and group assistance, while helpful is seldom needed. Rapids that are at the upper end of this difficulty range are designated "Class II+" (American Whitewater, 2005).
- Site Planning. Site-specific resource evaluations, planning and design of any paddle launch site included in the selected alternative will be conducted prior to construction.
- Livery or Other Commercial Operations. The NPS would establish an initial set of paddle launch sites to evaluate use patterns and demand. Should use and demand be significant, a feasibility study and Environmental Assessment for a commercial canoe livery or other commercial operation on the Cuyahoga River within the National Park boundary may be considered.

- Visitor Map. The NPS will develop a Water Trail Map in cooperation with regional and state water trail partners.

*Paddle Access Sites.* Designated paddle access sites would provide access for non-motorized boat use on the main stem of the Cuyahoga River. Potential river access sites were selected based upon general review of locations, conditions, river access, visitor facilities, river conditions, and park resources, as well as input received during public scoping.

Ten sites within the Park are being evaluated for paddling access sites. The site locations are approximate with the potential area of construction 200' feet upstream or downstream of the proposed locations. The launch facility will consist of an access path from a designated parking area, signage on water resource conditions and safety information, and an improved area, including structures (e.g., steps) where required, at the river's edge to accommodate launching or taking out a canoe or kayak. Extensive paddle access site structures are not preferred, due to the high fluctuation of river levels annually. The site would typically be no greater than 2,500 square feet but may vary by length of access path and local terrain. Because of the high fluctuations of river levels, no landing structures will be utilized as part of the design. Railings to launch vessel into river may be included in the design. The launch sites will utilize existing parking areas including some areas recommended for expansion or relocation. One new parking facility for the Ira launch site is recommended. The ten sites are described generally below and identified in Figure 4 of this document. The location descriptions also include the approximate river mile.

While any of these launch sites could be developed in the future under the correct conditions, the impact analysis in Chapter 4 has allowed us to characterize these sites based on their potential for development. River Paddling Access sites were characterized as Primary, Secondary and Future Potential based on their ease of implementation, level of impacts and potential obstacles for development. Primary sites would be developed first, Secondary sites developed next, and the Future Potential sites may or may not ever be developed, depending on future needs and conditions. These levels of development implementation are included in the description below which is organized geographically along the River within the Park boundary from south to north.

#### South Region of the Park (Boston Store to South Park Boundary near Bath Road)

- Lock 29, RM (River Mile) 29 Future Potential Access Site: Provide a facility on the east side of the River, downstream of the existing lowhead dam, adjacent to the Lock 29 Parking Area and trailhead, to serve as a put-in for paddlers. The Lock 29 trailhead would serve as the parking area.
- Hunt Farm, RM 33.0, Future Potential Access Site: Provide a facility on west side of the river along the public road right of way of Bolanz Road, to serve as a put-in or takeout for paddlers. The Hunt Farm trailhead would serve as the parking area.
- Ira I, RM 35.0, Secondary Access Site Provide a facility on the west side of the River, with access from the existing Ira trail head.
- Ira II, RM 35.5, Primary Access Site. Provide a facility on the east side of the River adjacent to Ira Road with a new proposed parking area, exclusively for paddle users.

#### Central Region of the Park (Frazee to Boston Store)

- Station Road, RM 21.0, Primary Access Site: Provide a facility upstream of the existing lowhead Brecksville dam, south of the Station Road Bridge, adjacent to the Station Road Bridge and adjacent to the Station Road Parking lot, as a paddle access site.
- Red Lock, RM 24.0, Future Potential Access Site: Provide a facility on the west side of the River, opposite side of the river from the Towpath Trail and Red Lock trailhead to serve as a put-in and take-out for paddlers.
- Boston Mills, RM 26.5, Secondary Access Site: Provide a facility on the east side of the River, southwest of the Boston Store Visitor Center parking area, to serve as an access site for paddlers.

#### North Region of the Park, (North Park Boundary at Rockside Road to Frazee)

- Rockside Station, RM 13.0, Primary Access Site: Provide a facility adjacent to the Rockside Station boarding parking area on the west side of the river. The Lock 39 trailhead may also serve as a parking area for access. This facility can serve as a put-in and take-out for paddlers.
- Canal Visitor Center, RM 15.5, Secondary Access Site: Provide a facility adjacent to the Canal Visitor Center on the east side of the river. This facility can serve as a put-in and take-out for paddlers.
- Fitzwater, RM 17.0, Future Potential Access Site: Provide a facility adjacent to the Fitzwater Bridge on Fitzwater Road, located on the west side of the river. This facility can serve as a put-in and take-out for paddlers.

#### **2.4.4.2 Campsites**

##### **General Description**

Trailside and riverside campsites would provide an opportunity for a new and expanded experience in the Park. For the purpose of this plan, campsites are defined as facilities connected to the Park's trail network and that are accessible for designated use by paddlers, hikers and bicycle users. Campsites would not have any associated parking and are intended for single-day or multi-day trail use along the longer trail systems within Ohio & Erie Canal Corridor and the Buckeye Trail.

The Park is evaluating two types of campsite types:

- Dispersed camping. Dispersed camping areas are being considered for less developed trails along the Buckeye Trail. Dispersed camping would create campsite zones, but no designated tent-pads in primitive areas of the Park. Campsite zone areas of no greater than 10 acres would be delineated along the Buckeye Trail. No facilities would be provided at these sites. Campsite areas within each zone would be rotated and monitored for change in conditions. Two to three campsites would be permitted within each zone during the designated seasonal use period of May through October.

- Designated campsites. Designated campsites would have defined tent-pads and are located within more developed portions of the Park near or adjacent to the Cuyahoga River and the Towpath Trail. These sites would comprise facilities with 2-3 tent-pads for each campsite (1,500 square feet per campsite). Each site would have connector paths from the river or adjacent trail corridor with a tread width of 3 feet and basic signage for direction to the campsite. All riverside and trail side campsites would be set back a minimum of 100 feet from the river's edge or Towpath Trail and the riverside campsites would include overnight boat tie-ups.

Proposed campsite locations were selected based on appropriate terrain, avoidance of sensitive resources, proximity to existing or proposed trails, prior history of disturbance, and distance from existing roads, park facilities and private lands.

Three types of campsites are considered under the action alternatives based upon their use and access; riverside developed, trail-side developed and trail-side dispersed.

### **Guidelines for Campsites**

The NPS would follow the following guidelines for any campsites. This guidance was prepared to address local conditions, facilities, safety, resource protection and visitor experiences.

- Site-specific Planning: Site-specific evaluation, planning and design for any campsite will be conducted prior to construction.
- Firewood: Firewood would not be provided nor collection of firewood allowed, except for at the current Stanford camping area.
- Campfires: Fires would be permitted only in designated camping areas where grills or fire rings and firewood are provided. Personal, self-contained portable grills/stoves may be used off the ground and away from overhanging vegetation.
- Water: No water will be provided for the sites. Only water available for park visitors obtained from park water systems can be assumed safe to drink. All water from streams, lakes or other natural sources must adhere to guidance set forth in NPS Visitor & Resource Protection Directorate, Reference Manual 83F (NPS, 2008c).
- Permit: Use of the campsites will require a permit with defined length of stay per site, group size limits, season of use, and other applicable policies from the Park and/or its Park Partner, Conservancy for CVNP.
- Leave No Trace: All campsite users would be required to follow, where applicable, Leave No Trace program principles that provide guidance on minimizing impacts from outdoor recreational use (Leave No Trace, 2008a).
- Human waste: Human waste management would be determined for each site prior to any campsite installation. Developed campsites would identify existing restroom facility access or new vault toilets. Campers at dispersed campsites would have to utilize a portable toilet or adhere to the "Leave No Trace" Front Country Program guidance where applicable (Leave No Trace, 2008b).
- General Campsite Regulations: The NPS would review and revise its existing park policies for campsite use as applicable. The NPS would complete any revisions prior to the implementation of any campsites in the Selected Alternative including but not limited to Leave No Trace practices, maximum number of campers per site, length of stay, human waste management, pets, noise and safety precautions.

- General Park Maintenance: The NPS would establish a maintenance and management program for the campsites including staffing levels, budgetary requests, and maintenance activities on an annual basis.
- Public Education: Park maps would identify campsite locations, directions to each campsite from significant trail corridors, and rules and guidelines for camping in the Park. Additional signage would be developed to provide direction to the campsites and would be designed to provide a positive camping experience in the Park.

## **Campsite Locations**

The following campsite locations are proposed under all action alternatives. Some alternatives may establish conditions for their development (e.g., type of campsite, user demand). Additional sites are added under some of the alternatives. All proposed campsites Common to All Action Alternatives, are identified on Figure 3.

*Riverside Campsites Developed.* Two sites are proposed as developed riverside campsites. These sites would be accessible for paddlers, hikers and bicyclists.

### North Park Region

- Frazee- East side of River. Trail access would be provided from the Towpath Trail near Frazee House and the Cuyahoga River near River Mile 17.75.

### South Park Region

- North of Hunt Farm - West Side of River. Trail access would be provided from the Towpath Trail near River Mile 32.

*Trailside Campsites Developed.* Two sites are considered for developed trailside campsites. These sites would be accessible to hikers and bicyclists.

### Central Park Region

- Old Carriage North. A campsite located between Old Carriage Trail and the Station Road Trailhead on the east side of the Towpath Trail.

### South Park Region

- Robinson Field. Robinson Field will remain as a Special Use Permit staging area for equestrian use and other events as directed by the Superintendent.

*Trailside Campsites Dispersed.* Three areas are proposed for dispersed trailside camping areas. These sites would be accessible by hikers only on the Buckeye Trail.

- Buckeye Trail - West: between Boston Mills Road and Columbia Road.
- Buckeye Trail - Dugway: between Old AP Road and I-271/I-80 highway bridges.
- Buckeye Trail - O'Neill Woods: between Bath Road and Ira Road.

### **2.4.4.3 Parking**

#### **General Description**

The NPS proposes new parking areas, relocation of existing parking areas, new uses at existing parking areas, or expansion of existing parking areas to serve trail users in this Trail Plan. Parking was considered for all types of motor vehicles, including cars, buses, recreational vehicles, and vehicles that pull horse trailers. Potential new parking areas were proposed after considering the following conditions:

- New parking areas would be sized and located to serve new trail users or trail areas.
- New parking would be similar to existing trailhead parking areas within the Park.
- The current level of use during peak season and program events. Goals and objectives of the Trail Plan and the location of proposed trails in the action alternatives.
- Improving visitor experience for trail users through facility design.
- Connection to or augmentation of existing parking areas.
- The presence of past disturbed land in proximity to potential new parking areas or existing parking areas.
- The proposed expansion of existing parking areas is based upon existing parking area use, areas where roadside parking occurs during peak use periods, where parking lots are now typically full during average weekend summer days, or where significant proposed changes in use may occur.

#### **Guidelines for Parking Areas**

The following guidance is recommended for any of the parking areas that become part of the Selected Alternative.

- Site-specific resource evaluations, planning and design would be performed for all parking areas prior to construction.
- General design guidelines for parking areas are outlined in the Sustainable Trail Guidelines in Appendix C.
- Parking area use and design parameters would be monitored and determined by trail user carrying capacity measures and use monitoring during average peak seasonal use.

#### **New Parking**

Eleven new, expanded or relocated parking areas are proposed for all action alternatives (Table 2). This includes expansion of six existing parking areas, relocation/redesign of two parking areas, one new parking area, and two areas for expansion or new equestrian parking. These areas are depicted on Figure 4.

##### Expansion of existing parking areas.

- *Canal Visitor Center.* Expansion and redesign for an additional 10 spaces along the south side of the existing parking area would be evaluated.
- *Coliseum.* Expansion and improvement of the existing parking area for 10 spaces is proposed.
- *Lock 39 Overflow.* Expansion along the northern section of the existing parking area for an additional maximum 40 spaces is proposed.
- *Jaite Wayside.* Expansion along the eastern section of the existing parking area.

- *Horseshoe Pond*. Expansion along the eastern section of the existing parking near the current trailhead entrance.
- *Hunt Farm*. Expansion along the eastern section of the existing parking area.

#### Relocation/Re-Design.

- *Blue Hen*. The Blue Hen parking area will be relocated and redesigned for a single and expanded parking area on the north side of Boston Mills Road. The current parking areas would be removed and restored.
- *Indigo Lake*. The Indigo Lake Parking area would be redesigned north of the existing parking area.

#### New Equestrian Parking

- *Pine Lane*. Designate equestrian trailer parking area, south of the existing trailhead entrance drive.
- *Old Orchard*. Designate a new equestrian trailer parking area in the Riding Run park unit north of Everett Road, in an existing open field area.

**Table 2. Proposed Parking Common to All Action Alternatives**

<b>Parking</b>	<b>Expand or New</b>	<b>Additional Car Parking Spaces</b>	<b>Equestrian Spaces</b>	<b>Approximate Number of Acres of Disturbance</b>
Canal Visitor Center	Expand	10	-	0.25
Blue Hen	New/Relocate	15	-	0.35
Coliseum	Expand	10	-	0.35
Lock 39 Overflow	Expand	40	-	1.0
Pine Lane	Expand for Equestrian Use	-	10	0.50
Jaite Wayside	Expand for Vehicle	20	-	0.5
Old Orchard Equestrian Trailer Parking	New		10	1.0
Horseshoe Pond	Expand	20	-	0.50
Hunt Farm	Expand	40	-	0.50
Indigo Lake	Expand/Relocate	12	-	0.50
Ira Paddle	New	10	-	0.25

#### **2.4.4.4 New Trail Amenities**

##### **General Description**

New or improved trail amenities to serve trail users are proposed in the plan, including restrooms, lighting, parking gates for night closure, water for drinking (where feasible), bicycle racks (where bicycles are permitted) and horse hitching posts (where equestrians are permitted). Specific trail amenities for each trailhead location will be identified during detailed site planning and design for all areas. Specific locations for such amenities are not outlined in this Plan, with the following exception:



*Environmental Education Center Trail Shelters.* To support the growing environmental education experiences on the Park's Environmental Education Center (EEC) trails and the adjacent Oak Hill and Plateau trails, all Action Alternatives will consider the inclusion of overhead trail structures at 2-4 locations along the existing EEC trails where feasible and one small shelter adjacent to the existing Oak Hill-Plateau Trailhead. The EEC shelters shall be designed to accommodate groups of 15 and provide an overhead feature to protect groups from adverse weather conditions on the non-public trails within the EEC facility. The Oak Hill shelter would accommodate groups of 30 and provide seating for programming activities. Site-specific resource evaluation, siting and design would be conducted according to the Sustainable Trail Guidelines prior to implementation.

Any additional shelters in the Park will need to be identified and considered in a separate compliance process as trail demand and park programming require additional areas for facilities.

### **Guidelines for Trail Amenities**

The following guidance is recommended for any of the trail amenities that become part of the Selected Alternative.

- Site-specific resource evaluation, planning and detailed design will be conducted on all trail amenities prior to construction.
- Design guidelines for trail amenities are outlined in the Sustainable Trail Guidelines in Appendix C.

## **2.5 Action Alternatives**

### **2.5.1 General Description**

The NPS has developed seven action alternatives for the use, stewardship and management of the Trail system within the Park.

In addition to the No Action Alternative (Alternative 1) which represents maintaining the status quo, action alternatives provide different approaches to meet the goals and objectives of this Plan. Initially, three action alternatives were proposed and organized by three trail experience themes: ReUse, Recreation, and Destination. Many elements of each alternative would meet all or more than one of these themes. The alternatives were designed to include all trail elements suitable for the Park as identified during public scoping.

Mountain biking is the only proposed new use being evaluated that is not currently permitted in the Park. For the purposes of this Plan, mountain biking is defined as cross-country off-road bicycle use on a singletrack natural surface trail. Downhill and freeride mountain biking is not included in this use. The regulations at 36 CFR 7 would require additional federal authorization for this off-road bicycle use if the use becomes part of the Selected Alternative. Additionally, any new selected multi-use connector trail in undeveloped areas of the Park, allowing bikes as a designated use would adhere to this regulation and would require the Park to conduct these procedures.

Each action alternative was evaluated both with and without this new use. The alternatives are paired into a version “A” that has no mountain biking and “B” that includes mountain biking (e.g., 2A and 2B). All other elements are generally the same for paired “A” and “B” alternatives (any exceptions are noted in the descriptions).

After completing an impact analysis for the No Action Alternative (Alternative 1) and the initial set of six action alternatives (Alternatives 2A & B, 3A & B, and 4A & B), a hybrid Preferred Alternative (Alternative 5) was developed and evaluated which combines trail elements from the other alternatives that best fit the Park while reducing impacts on park resources.

Trail types proposed in the action alternatives are an expansion of the Park’s existing types with the addition of mountain bike trail. These trail types are defined and described in the proposed Sustainable Trail Guidelines for all action alternatives.

The trail names utilized for this Plan reflect geographic or historical features. Final names of trails will be chosen as part of the site planning and design process for each proposed trail within the Preferred Alternative.

Estimated mileages and layout of proposed trails were calculated and developed from an NPS geographic information system (GIS) database. All proposed trails are conceptual and only provide a general alignment. Given the general layout of proposed trails, impact analysis for proposed trails reflects a corridor width of 50 feet around proposed trails. Site-specific resource evaluation, planning and design for each trail identified in the Preferred Alternative will occur prior to construction.

A brief summary of the alternatives is presented below. Details of each alternative follow the brief summary.

**Alternative 2A - ReUse (*Environmentally Preferable Alternative*):** In Alternative 2A, the trail system would be developed and redeveloped with the concept of ReUse, using existing trail system elements, being its foundation. Alternative 2 emphasizes the importance of enhancing the existing trail system’s sustainability for future generations.

**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.

**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 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 short loop routes.

**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.

**Alternative 4B - Destination Focus with Mountain Bike Trails:** Alternative 4B is the same as Alternative 4B 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.

**Alternative 5 - ReUse, Recreation & Destination (Preferred Alternative):** Alternative 5 (Preferred Alternative) combines the best elements of all of the alternatives and proposed trail facilities that will best fit the park, provide a world class trail system, and can be sustained for generations.

### 2.5.2 Alternative 2A - ReUse

In Alternative 2A, the Park trail system would be developed and redeveloped with the concept of ReUse, use of existing trail elements as its foundation. Alternative 2 emphasizes the importance of enhancing the existing trail system and its ability to be sustained for future generations to enjoy. Trails in this alternative are focused on four items; 1) Eliminating existing trails that are in sensitive natural resource areas that include wetlands, streams and habitat for rare plant species, 2) Eliminating redundant parallel trails, where trail use is low and resource damage has occurred. 3) Utilizing existing trail routes that are not officially designated by the Park, and 4) Improving connections between the Bike and Hike trail and the Towpath Trail for hikers and bicyclists. Alternative 2A is depicted in Figure 5.

**Trails.** Alternative 2A would add a total of 17 miles of new trails to the park's trail system and removes 11 miles of existing trails. This alternative would add 183 parking spaces requiring approximately 6.0 acres of land for construction. Alternative 2A would include a net increase of the amount of developed land for trails and trail facilities by approximately 12 acres.

Alternative 2A (including the Common to All actions described earlier) would include the general actions summarized below.

- 11 miles of existing trail removed from sensitive resources or removed due to the presence of duplicate/parallel trails that are have low visitor use.
- 2.3 miles of new Interpretive hiking trails
- 1.1 miles of new hiking trails
- 2.9 miles of new equestrian trails
- 4.5 miles of new cross-country ski trails
- 5.9 miles of new multi-use trails
- 183 expanded and new parking spaces including 10 new equestrian trailer parking spaces
- new paddle launch sites
- new riverside campsites
- new trailside campsites.

#### New Interpretive Hike Trails

- *Terra Vista Loop Trail with connection to the Towpath Trail at Tinkers Creek Road.* A 1.75 mile hike trail that would utilize the existing trail routes that are used currently for access for scientific study, where feasible. Additionally, a hike connector trail from Terra Vista to the Towpath Trail along Tinkers Creek road would connect the two trail systems.

- *Coliseum Birding Boardwalk Trail: 0.25 miles of new boardwalk trail for bird viewing along southern edge of Coliseum site.*

#### New Equestrian Trails

- *New trails at Perkins Trail and Riding Run Trail to reroute alignments of removed trail segments. 2.60 miles of reroutes to minimize stream crossings and fall line uphill sections.*

#### New Multi-Use Connectors

- *Fitzwater Road Connector Trail from Towpath to Riverview Road.* Designate multi-use on existing Fitzwater Road from Towpath to its end near the maintenance yard and construct 0.25 mile of additional multi-use path to Riverview Road.
- *Old Carriage Road Connector Extension to Bike and Hike Trail.* Extend existing Old Carriage Road connector 0.35 miles to existing Bike and Hike Trail.
- *Old AP Road Connector Trail from Peninsula-Lock 29 to Bike and Hike at Boston Mills Road.* Utilize abandoned road section where feasible and new off-road or shared-path trail.

#### New Cross-Country Ski Trails

- *South Carriage Trail, south of existing Old Carriage Trail.* Utilize existing undesignated trails for 3.0 mile loop connecting off of proposed Old Carriage Trail Connector extension where feasible.
- *Boston Run Trail reroute and connection to Hike and Bike Trail.* Reroute 0.3 miles of trail away from Route 303 and construct 350 feet of a connector trail between existing Bike and Hike and Boston Run Trail.

**Campsites.** Three additional campsites aside from the sites common to all Action Alternatives, are proposed under Alternative 2A:

- *North of Stone Road.* East side of River. Trail access would be provided from the proposed Hemlock Connector Trail via the abandoned section of Stone Road.
- *Ira Road.* West Side of River, 0.10 miles from the Towpath Trail and the Ira Trailhead. Trail access would be provided by a trail from the Towpath Trail across from the existing Ira Parking Trailhead access. This site would be accessible for paddlers, hikers and bicyclists.
- *Lock 29 North.* A campsite located north of the Lock 29 trailhead and accessed from the Towpath Trail in the area on a plateau south of the railroad bridge tunnel. This site would be accessible to hikers and bicyclists.

**Parking.** Table 3 outlines proposed new and expanded parking areas specific to Alternative 2A. Parking areas specific to Alternative 2A include:

- Terra Vista. Improve and expand where existing parking area exists.
- Red Lock. Expand and redesign along the western section of the existing parking area.
- Jaite Wayside. Expand and redesign the existing parking area to accommodate equestrian trailers.

**Table 3: Additional Proposed Parking Alternative 2A**

Parking	Expand or New	Additional Car Parking Spaces	Equestrian Spaces	Approximate Number of Acres of Disturbance
Terra Vista	Improve/Expand	10	-	0.25
Red Lock	Expand	16	-	0.50
Jaite Wayside	Expand for Equestrian Use	-	5	0.5

### 2.5.3 Alternative 2B - ReUse with Mountain Bike Trails

Alternative 2B would include all proposed elements described in Alternative 2A with the addition of authorizing Mountain Bike use in designated areas. Alternative 2B is depicted in Figure 6.

**Mountain Bike Trails.** Alternative 2B proposes to ReUse existing trails and authorize use of mountain bikes on a segment of the Buckeye Trail between Boston Mills Road and Station Road that consists of approximately 10 miles. This designation would prescribe for improvements and reroutes within 200 feet of the existing Buckeye Trail where opportunities exist to improve the sustainability of the trail for hike and mountain bike use. The proposed mountain bike route is a point to point linear route between existing trailheads with no loop options included in the route. The authorized trail proposed under Alternative 2B includes 4.5 miles on Cleveland Metroparks property, 0.40 miles on Metro Parks, Serving Summit County property and 5.20 miles on NPS property. The amount of net increase of developed land for trails would be the same as Alternative 2A, twelve acres.

### 2.5.4 Alternative 3A - Recreation Focus

Alternative 3A expands the trail network to reach new locations within the Park. The emphasis of Alternative 3A is to provide trail hubs to serve as centers for multiple recreational trail options, including small loop trails off of the Towpath Trail, longer distance primitive trails between trailheads, and new loop trails adjoining existing trails for expanded recreational experiences. Existing trailheads or visitor centers will serve as the trail hubs. Facilities at trail hubs will not change significantly but will be considered for facility improvements to enhance visitor experience. Alternative 3A includes many of the restorative recommendations in Alternative 2A and 2B, and connector trails, but expands on interpretive trails, distance trails and new loop trails off of existing trails. Alternative 3A is depicted in Figure 7.

**Trails.** 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 recommended improvements of roadways in the Park for on-road bike use. It would add 208 parking spaces requiring six acres of land for construction. Alternative 3A would include a net increase of the amount of developed land for trails and trail facilities of approximately 25.0 acres.

Alternative 3A (including the Common to All actions described earlier) would include the general actions summarized below.

- 11 miles of existing trail would be removed from sensitive resources due to the presence of duplicate/parallel trails that have low visitor use.
- Addition of 4.75 miles of Interpretive hiking trails
- Addition of 11.75 miles of hiking trails
- Addition of 8.0 miles of equestrian trails
- Addition of 10.5 miles of cross-country ski trails
- Addition of 8.0 miles of multi-use trails
- Addition of 35 miles of bike lanes on existing roadways within Park boundary
- 208 additional parking spaces within the expanded and/or new parking areas and trailheads.
- New paddle launch sites
- New riverside campsites
- New trailside campsites

#### New Interpretive Hike Trails

- *Rockside Boarding Station Walking Loop Trail:* 0.40 mile trail connecting at proposed Rockside Connector to Towpath Path and around perimeter of Rockside Boarding Station site. The trail would be accessible and may require a boardwalk adjacent to wetlands.
- *Canal Visitor Center Upper Loop Trail:* 0.50 miles of a wilderness loop hiking trail starting at Canal Visitor Center, crossing the Scenic Railroad along Hillside Road and establishing a new trail south of Hillside.
- *Reroute Jaite Loop Trail:* Provide a connection from the Towpath Trail utilizing the existing Jaite Bridge or new bridge across Cuyahoga River and realign the existing trail as a loop trail to the Jaite Historic District. The trail loop and connection would total approximately 1.0 miles.
- *Hines Hill Trail:* Establishes 0.50 miles of hiking trail from existing Stanford Trail along Hines Hill Road and returning to the Stanford House to establish a new loop that connects into the Hines Hill Conference Center facilities and the Stanford House.
- *Re-design of Blue Hen Falls Trail.* Provide a 0.5 mile hiking trail loop at Blue Hen Falls through a re-design of the current trail. The re-design will respond to the current trail's increasing popularity of viewing Blue Hen Falls. Boardwalks may be utilized.
- *Lock 29 Hike Loop Trail:* Provides a .75 mile hiking trail loop north of Lock 29 and south of Stumpy Basin between the Towpath Trail and the Scenic Railroad.
- *Hunt Farm River Loop Trail:* Provides a 0.30 mile hiking trail from Hunt Farm to the Cuyahoga River south of the Furnace Run stream. This would provide a small loop near the River and single route for the remainder of the trail.

#### New Hiking Trails.

- *Rockside to Hemlock Loop Trail:* Provides 2.70 miles of hiking trail connecting Rockside Station-Towpath to proposed Hemlock trail and new small hiking loop adjacent to Hemlock trail. Portions of the proposed trail are located on Independence School Board and City of Independence owned property.
- *West Rim Trail:* This trail was identified in the 1985 Trail Plan. The proposed five mile trail would begin at Canal Visitor Center and travel between the Scenic Railroad tracks and Riverview Road on NPS and Cleveland Metroparks property to Station Road Trailhead.

- *Five Falls Trail:* This 1.5 mile hiking trail was recommended in the 1985 Trail Plan and would provide a multiple loop option connection to Brandywine Falls and the proposed Highland Connector Trail to the Bike and Hike and the Towpath Trail.
- *Coordinate improvements with Village of Peninsula to connect trail users from Lock 29:* Towpath Trail to Upper Dugway Trail through, improved sidewalks, off-street trails, vacating Old AP Road near the Village maintenance building and improving for trail use.
- *Lower Furnace Run Trail:* Provides a trail from Everett Trailhead to existing Furnace Run trail west of Oak Hill Road.
- *Reroute Buckeye Trail:* With an addition of 0.7 miles to Buckeye Trail north of Bath Road, remove current on-road route to off-road to connect to existing trail north of Ira Road.

#### New Equestrian Trails

- New trails at Perkins and Riding Run to reroute alignments of removed trail segments (2.25 miles).
- Utilize proposed route for Jaite Loop trail and extend for equestrian use to cross Highland Road and connect to existing Valley Bridle near the Jaite Wayside Parking area.
- Establish 4.5 miles of new equestrian trail north of the Old Akron Peninsula and south of Boston Mills Road. This would be connected to the existing Valley Bridle Trail.
- *Everett to Hale-Howe Trail:* A new trail between Everett Covered Bridge and the Hale Connector Trail and improvements to existing natural surface trails to Howe Meadow.

#### New Multi-Use Connectors

- *Highland Road Connector Trail:* New multi-use connector from Bike and Hike to Towpath on south side of Highland Road. Extend on north side of Highland Road from Towpath to Vaughn overflow parking area.
- *Gateway Trail:* A multi-use trail adjacent to Route 303 on the north side of the road, between the Bike and Hike Trail and the Towpath Trail through connection at the Pine Lane Trailhead. This would provide 2.50 miles of new multi-use trail to the Park. The connector would be a separate path from the roadway.
- Change use designation of Old Carriage Connector Trail to Ski-Hike Only.

#### New Cross-Country Ski Trails

- *High Meadow Trail:* As recommended in the 1985 Trail Plan, a new trail to provide 5-kilometers (3.1 miles) for cross-country training and competitive purposes would be located west of Blue Hen Falls, near the existing Kurowski fields. The trail would link to the Buckeye Trail for hike connections.
- *Tree Farm Trail expansion:* Provide an additional 2.75 miles of trail west of the existing Tree Farm trail.

#### Bike Lanes

A network of bike lanes and routes would be recommended on roadways within the Park for bicyclists riding at higher speed. This network would include bike lanes as shared lanes, paved shoulders or established bicycle lanes as defined by AASHTO and meeting the specifications required for individual roadways as directed by the county, state and federal transportation agencies (AASHTO, 2010).

The following existing roads are considered for improvements for bike lane routes amounting to approximately 38 miles of improved roadway within CVNP for bicycle use. Bike lane options may

include designated bike lane in existing roadway or adjacent separated bike multi-use path within road right of way. Because these roads are largely not owned by NPS, coordination with local, county and state agencies for these improvements will be necessary. Consideration of these options will be determined on designated routes included in the Preferred Alternative.

- Riverview Road – North of Route 303
- Riverview Road – South of Route 303
- Akron Peninsula Road – South of Peninsula to Bath Road
- Snowville Road - Western Park boundary to Riverview Road.
- Highland-Vaughn Road - Riverview Road to eastern Park Boundary, near Boyden Road intersection and, Bike and Hike crossing.
- Pleasant Valley Road – Western Park Boundary to Eastern Park Boundary.
- Truxell Road – Eastern Park boundary to Akron Peninsula Road
- Brush Road from Furnace Run Metropark to Black Road to Route 303 to Major Road to Riverview Road.
- Wheatley Road- West Park Boundary to Riverview Road
- Everett Road - Western Park boundary to Wheatley Road
- Bath Road – Yellow Creek Road to Akron Peninsula Road.
- Steele’s Corners Road from Akron Peninsula Road to Chart Road.

**Campsites.** The campsites for Alternative 3A are the same as described in Alternative 2A with the addition of two sites with access from the West Rim Trail.

- *West Rim - Upper CVC:* A campsite approximately 0.75 miles from CVC Visitor Center. The campsite would be located near the proposed West Rim Trail. This would be accessible to hikers only.
- *West Rim:* A campsite near the historic Hrabak House adjacent to the proposed West Rim Trail between Route 82 and Pleasant Valley Road.

**Parking.** New, expanded or relocated parking areas for Alternative 3A are generally the same as what is described for Alternative 2A, except for the omission of the Terra Vista proposed parking area, and the addition of one new parking area and the expansion of an existing area.

Table 4 outlines proposed new and expanded parking areas specific to Alternative 3A. Parking areas specific to Alternative 3A include: expansion and addition of parking and equestrian parking at the Vaughn Road East Parking area, a new parking area for the proposed High Meadow Trail and a new equestrian parking area, Old Orchard, near Riding Run trail.

#### New Parking

High Meadow. A new parking area for the new trails proposed in this area. Access would be proposed near existing unpaved park access roads.

#### Expanded Parking

Bike and Hike Trail. Expand the existing parking area on Boston Mills Road, adjacent to the Bike and Hike Trail. This lot is managed by Metroparks, Serving Summit County.



**Table 4. Additional Proposed Parking Areas 3A**

<b>Parking</b>	<b>Expand or New</b>	<b>Additional Car Parking Spaces</b>	<b>Equestrian Spaces</b>	<b>Approximate Number of Acres of Disturbance</b>
High Meadow	New	20	-	0.50
Boston Mills – Bike & Hike	Expand	20	-	0.50

### **2.5.5 Alternative 3B - Recreation Focus with Mountain Bike Trails**

Alternative 3B includes all of the trail elements identified in Alternative 3A with the exception of the following additional mountain bike trails and changes in their uses. Alternative 3B is depicted in Figure 8.

**Trails.** 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.

- *West Rim Loop Trail:* 7.5 miles of mountain bike trail use would be established utilizing portions of proposed trail elements in Alternative 3A and additional trails for mountain bike use. The West Rim Loop trail would utilize the proposed High Meadow Trail (3.1 miles) as its southern point, then run north on a newly established 4.4 mile trail loop between Columbia Road and Snowville Road. New trailheads on each end of the system would be recommended to accommodate mountain bike trails users. This Loop would provide approximately 5.25 miles of new trail mountain biking and hiking, and 2.25 miles for cross-country skiing on the High Meadow portion.
- *East Rim Loop Trail:* The East Rim loop would be established utilizing portions of proposed trails in Alternative 3A and additional proposed trails for mountain trail use. The East Rim would utilize the proposed Five Falls Trail and South Carriage Trail and extend south parallel to the Bike and Hike Trail near Hines Hill Road. A newly established loop trail of approximately four miles, around the perimeter of the east portion of the former Krejci Dump site would be proposed for this mountain bike trail system. Approximately 10 miles of new mountain bike trail would be provided that would also include hiking on all sections and-country skiing use on the South Carriage Trail section.

**Campsites.** The campsites for Alternative 3B are the same as described in Alternative 3A.

**Parking.** Parking areas are the same as described for Alternative 3A with the addition of a parking area on Snowville Road on an existing disturbed site. The parking would serve as a north trailhead for the West Rim mountain bike trail. The Snowville parking area proposes 20 new spaces and 0.50 acres in an existing disturbed area on the south side of Snowville Road, on NPS lands.

## 2.5.6 Alternative 4A - Destination Focus

Alternative 4A would provide the most comprehensive trail expansion of all of the alternatives. The focus would be on utilizing trails to provide visitors access to the Park's unique scenic, historic and/or experiential features. These destinations are focused on two components: 1) emphasis of the unique trail experience the Park provides for primitive long-distance trails, and 2) shorter trails that provide a "single-stop" destination. Alternative 4A is depicted in Figure 9.

**Trails.** Alternative 4A would add a total of 53 miles of new trails and remove 11 miles of existing trails covering 36 trail acres and also proposes improvements to 39 miles of roadways for bicycle use within the Park boundary. It adds 213 parking spaces requiring 6.5 acres of land for new construction.

Alternative 4A (including the Common to All actions described earlier) would include the general actions summarized below.

- 11 miles of existing trail removed from sensitive resources or removal of trails that duplicate trails with lower visitor use.
- Addition of 6.5 miles of Interpretive hiking trails
- Addition of 40.7 miles of hiking trails
- Addition of 5.4 miles of equestrian trails
- Addition of 11.5 miles of cross-country ski trails
- Addition of 8 miles of multi-use trails
- 35 miles of improvement for bikes on existing roads within Park boundary.
- Addition of 213 parking spaces with either expanded or new parking areas/trailheads.
- new paddle launch sites
- new riverside campsites
- new trailside campsites

### New Interpretive Hike Trails

- *Canal Visitor Center Boardwalk Loop:* 0.60 miles of a riverside loop hiking trail starting at Canal Visitor Center, adjacent to the Cuyahoga River on the east side of the river and linking into the Towpath at Tinkers Creek Road. Due to the proximity to the river, a boardwalk system would be utilized.
- *Reroute Jaite Loop Trail:* As described in Alternative 3A.
- *Hines Hill Loop:* As described in Alternative 3A.
- *Blue Hen Falls Loop Trail:* As described in Alternative 3A.
- *Lock 29 Hike Loop trail:* As described in Alternative 3A.
- *Hunt Farm River Loop Trail:* As described in Alternative 3A.
- *Buttermilk Falls Trail*—A 0.3 mile hiking trail between Blue Hen Falls and Buttermilk Falls along the perimeter of the riparian area. Boardwalks may be required.
- *Maplewood Overlook Trail:* This one mile trail would travel from the existing Maplewood picnic Area along the ridge east of the picnic area to an overlook area. The site would travel adjacent or near Camp Mueller.
- *Shady Grove Trail:* This trail would provide 0.30 miles of a small loop hiking trail from the Shady Grove picnic area, to the rim of the Boston Run and back to the parking area.

### New Hiking Trails

- *West Rim Trail* - As described in Alternative 3A.
- *Seven Falls Trail* - As described in Alternative 3A.
- *Upper Dugway Hiking Trail*: As described in Alternative 3A as a bridle trail.
- *Coordinate improvements with the Village of Peninsula to connect trail users from Lock 29*: Towpath Trail to Upper Dugway Trail as described in Alternative 3A.
- *Sagamore Hiking Loop Trail*: A 2.4 mile hiking loop south of Sagamore Road.
- *Mudcatcher Hiking Loop Trail*: A 3.0 mile hiking loop west of Chaffee Road, north of Route 82 and south of Valley View/Canal Road.
- Connector trail utilizing the existing roadway between Station Road trailhead to Route 82.
- 0.60 miles of hiking trail from Station Road Connector Trail to Towpath Trail, near Greenwood Village proposed connector trail.
- *Columbia Hiking Trail*: A 1.3 mile hiking trail from Columbia Picnic area to the Buckeye Trail and Blue Hen-Buttermilk Trail units.
- *Everett to Plateau Hiking Trail*: A 0.45 mile trail along east side of Oak Hill Road connecting the two trail systems.
- *Plateau to Tree Farm Hiking Trail*: A 1.20 mile trail between Plateau and Tree Farm connecting the two trail systems.
- *Tree Farm trail to Daffodil Trail Connector Trail*– Hiking trail connecting Tree Farm to Daffodil trail in Furnace Run Unit of MPSSC. The trail would travel north of Major Road cross at Route 303, travel the perimeter of the former Coliseum site, cross Black Road, travel along the south side of Brush Road on NPS and MPSSC property and into Daffodil trailhead.
- *Gateway Hiking Trail*: A 3.70 mile hiking trail between Pine Lane and Happy Days Lodge along the north side of Route 303.
- *Reroute of the Buckeye Trail*: Reroute the Buckeye trail from its existing on-road location to an off-road alignment starting north of Bath Road at the Towpath Trail and connecting to the existing Buckeye Trail, east of the O’Neil Woods Metropark. This reroute would be approximately 0.70 miles.
- *Ira-Howe Trail*: Establish a new hiking trail of 1.35 miles extending the primitive trail from the Buckeye Trail at Martin Road, west of Ira, crossing Ira south of Hale Farm and connecting to the Hale Farm Connector.
- *Ira-Hampton Trail*: Establish 2.50 miles of new hiking trail between the Towpath Trail and Hampton Hills Unit of MPSSC. The trail would run from the Towpath Trail, along Ira Road, either adjacent or vacating Ira Road, across to the Brown-Bender Barn site up onto the plateau above, heading south to the Grether Farm, then crossing Steele Corners Road to the north Hampton Hills MPSSC parking area.
- *Lower Furnace Run Trail*: As described in Alternative 3A.

### New Equestrian Trails

- *New trails at Perkins Trail and Riding Run Trail* to reroute alignments of removed trail segments, as described in Alternative 3A.
- *Everett to Hale-Howe Trail* as described in Alternative 3A.
- *Reroute of trail from Covered Bridge Trailhead to Riding Run Trail* to north side of Furnace Run along Everett Road. A bridge would be required to cross Furnace run near the existing Riding Run Trail access point on Everett Road.
- *New loop west of existing Riding Run trail* for an additional 1.85 miles.

#### New Multi-Use Connectors

- *Old Carriage Road Connector Extension*: As described in Alternative 2A.
- *Old AP Road Connector Trail from Peninsula-Lock 29 to Bike and Hike at Boston Mills Road*: As described in Alternative 2A.

#### New Cross-Country Ski

- *Five Falls Trail*: As described in Alternative 3A.
- *High Meadow Trail*: As described in Alternative 3A.

#### Neighborhood Connectors

- *Greenwood Village Hike Connector Trail*: Will provide an additional 0.10 mile hike route to the Towpath Trail from a common access point of Greenwood Village.
- *Echo Hills Connector trails*: Two trails including a 0.25 mile of hiking trail to existing Buckeye Trail and 0.50 miles of Multi-Use to Whaley Lane and crossing Parkview road and to existing Equestrian Center trails in Brecksville Reservation. These would both be on Cleveland Metroparks land and municipal roadways connecting into common areas of the Echo Hills Neighborhood.
- *Chart Road Connector Trail*: A 0.75 mile hiking trail beginning at Chart Road connecting to Hampton Hills Trails.

**Bike Lanes.** Recommendations for new or improved conditions for Bike Lanes within the Park would be the same as described in Alternative 3A.

**Campsites.** The campsites for Alternative 4A are the same as described in Alternative 2A with the addition of one additional site.

- South Truxell. A campsite located between Truxell Road and Quick Road east of the Lake and Kendall Lake cross-country trail systems. The site would be accessed from the proposed East Rim Trail in Alternative 4B. The site would be accessible for hikers and bicyclists.

**Parking.** New, expanded and relocated areas would be the same as described for Alternative 3A plus the expansion of the Cancasi parking area, near the intersections of Route 82 and Chafee Road at the existing NPS facilities. The Cancasi parking area expansion would serve as the Mudcatcher trailhead facility as outlined in Table 5.

**Table 5. Additional Park Areas, Alternative 4A**

<b>Parking</b>	<b>Expand or New</b>	<b>Additional Car Parking Spaces</b>	<b>Equestrian Spaces</b>	<b>Approximate Number of Acres of Disturbance</b>
Mudcatcher at Cancasi	New/Expand	15	-	0.50

### **2.5.7 Alternative 4B - Destination Focus with Mountain Bike Trails**

Alternative 4B would include all trail elements that are proposed in Alternative 4A with the addition of mountain bike trail routes and an additional parking area expansion. Alternative 4B is depicted in Figure 10.

**Trails.** Mountain bike trails are proposed on the east rim of the valley. The East Rim Mountain Bike Trail would provide 20.68 miles of trail for mountain bike use. The route would include a long distance option along the east boundary of the Park with smaller loops for shorter riding experiences within the route. The route would include a section adjacent to the Krecji restoration site, the Dugway Trail loop, approximately one mile of the existing and proposed rerouted Buckeye Trail north of Route 303, the proposed Gateway trail, approximately 4 miles between Route 303 and Quick Road and a portion of the proposed Armington Trail. The proposed alignment would add approximately 10 miles of trail from Alternative 4A. Three small loops of varying distances would be provided north of Armington Pond, on the Upper Dugway Trail portion and east of the Krecji restoration site. An additional trailhead would be developed near Hines Hill road to accommodate increased mountain bike trail users. This alternative would create a new trail between Pine Lane and the Old Akron Peninsula Road and eliminate either the Buckeye Trail or Valley Bridle Trail to reduce duplicate trails, particularly where steep terrain and wet conditions exist.

**Parking.** New, expanded or relocated parking areas for Alternative 4B includes the 17 areas proposed in Alternative 4A. In addition, one new parking area is proposed to accommodate the proposed mountain bike trails. This is the expansion of the existing lot located at Boston Mills Road and Akron-Peninsula Road, near the existing Bike and Hike Trailhead. In addition, the existing Little Meadow parking area would be utilized as the south trail head for the mountain bike trail.

### **2.5.8 Alternative 5 - ReUse, Recreation and Destination (Preferred Alternative)**

As a result of the impact analysis, the park assembled a “hybrid” of trail elements that best meets the goals of the plan and minimizes impacts to park resources. This preferred “hybrid” approach used Alternative 3B as its baseline concept. Elements causing significant impacts were removed and trail elements from all of the alternatives were combined to create the alternative that best suits the Park, its resource conditions and visitor use. Alternative 5 is depicted in Figure 11.

Trail elements were established in Alternative 5 based upon the following goals; 1) limit the increase of new trails to 30-35 miles, 2) establish a suite of new trail facilities, 3) establish a limited mountain bike trail area of approximately 10 miles, 4) limit expansion of equestrian trail, while improving facilities and existing trails for this use, and 5) provide trails that limit their overall impact to park resources.

Alternative 5 would increase total trail miles within CVNP by 37 miles from existing conditions if fully implemented. Trail elements included in the Preferred Alternative are listed below. “Conditional” trails are subject to the development of other facilities prior to implementation.

- All Restoration Trail Elements described under Common to All Action Alternatives with the exception of the Lake Trail removal. The removal of a portion of Lake Trail will not occur under this plan.
- Adoption of the Sustainable Trail Guidelines as described under Common to All Action Alternatives and provided in detail in Appendix C.

**Trails.** The following types of trails would be developed.

#### New Interpretive Hike Trails

- *Horseshoe Pond Perimeter Loop Trail at Tree Farm Unit:* 0.20 miles of accessible trail around Horseshoe Pond connecting to the Tree Farm loop, as identified in Common to All Action Alternatives.
- *Ira River Trail:* Utilize existing undesignated trail from Towpath Trail at Ira Trailhead as access to the Cuyahoga River. The trail would be approximately 0.15 miles. Boardwalks and river overlook may potentially be part of trail features, as identified in Common to All Action Alternatives.
- *Terra Vista Trail:* Use of the existing trail routes used currently for access for scientific study, where feasible, would occur for a 1.75 mile loop and hike only trail connector to the Towpath Trail as identified in Alternative 2a.
- *Canal Visitor Center River Trail:* 0.60 miles of a riverside loop hiking trail starting at Canal Visitor Center, adjacent to the Cuyahoga River on the east side of the river and linking into the Towpath at Tinkers Creek Road as identified in Alternative 4A.
- *Canal Visitor Center Upper Loop Trail:* A new trail loop crossing the Scenic Railroad along Hillside Road and utilizing the NPS lands south of Hillside as identified in Alternative 3A.
- *Jaite Loop Trail* (including new equestrian link to Highland Road and Valley Bridle): Provide a connection from the Towpath Trail utilizing the existing Jaite Bridge or new bridge across Cuyahoga River and realign the existing trail as a loop trail to the Jaite Historic District. The trail loop and connection would total approximately 1.0 miles as identified in Alternative 3A
- *Stanford-Hines Hill Loop Trail:* Establishes 0.50 miles of hiking trail from existing Stanford Trail along Hines Hill Road and returning to the Stanford House to establish a new loop that connects into the Hines Hill Conference Center facilities and the Stanford House as identified in Alternative 3A.
- *Blue Hen Loop Trail:* Provide a 0.5 mile hiking trail loop at Blue Hen Falls, through a re-design of the current trail as identified in Alternative 3A.
- *Buttermilk Falls Trail:* A 0.3 mile hiking trail between Blue Hen Falls and Buttermilk Falls along the perimeter of the riparian area. Boardwalks may be required as identified in Alternative 4A.
- *Lock 29 Loop Trail:* Provides a .75 mile hiking trail loop north of Lock 29 and south of Stumpy Basin between the Towpath Trail and the Scenic Railroad as identified in Alternative 3A.
- *Coliseum Boardwalk Trail:* 0.25 miles of new boardwalk trail for bird viewing along southern edge of Coliseum site as identified in Alternative 2A.
- *Hunt Farm River Trail:* Provide a 0.30 mile hiking trail from Hunt Farm to the Cuyahoga River south of the Furnace Run stream as identified in Alternative 3A.

#### New Hiking Trails

- *Connector trail from Towpath Trail to Valley Picnic area and Plateau-Oak Hill Trail system:* 0.10 miles of connector trail utilizing existing road bed from Towpath Trail crossing Riverview and add new trail from the road bed to Valley Picnic Trailhead as identified in Common to all Action Alternatives.
- *Connect Valley Bridle Trail with Salt Run Trail:* A 0.20 mile connection of Salt Run Trail to Valley Bridle trail to provide link for long-distance hiking trail experience from Happy Days to Hunt Farm as identified in Common to all Action Alternatives.

- *Mudcatcher Loop Trail*: A 3.0 mile hiking loop west of Chaffee Road, north of Route 82 and south of Valley View/Canal Road as identified in Alternative 4A.
- *South Carriage Loop Trail*: Utilize existing undesignated trails for 3.0 mile loop connecting off of proposed Old Carriage Trail Connector extension where feasible as identified in Alternative 2A.
- *Five Falls Trail*: A 1.5 mile hiking trail and connection to Brandywine Falls, the proposed Highland Connector Trail, Bike and Hike Trail, and Towpath Trail as identified in Alternative 3A.
- *Columbia Hike Trail*: A 1.3 mile hiking trail from Columbia Picnic area to the Buckeye Trail and Blue Hen- Buttermilk Trail units as identified in Alternative 3A.
- *Everett-Plateau Connector Trail*: A 0.45 mile trail along east side of Oak Hill Road connecting the two trail systems as identified in Alternative 4A.
- *Lower Furnace Run Loop Trail*: Provide a trail from Everett Trailhead to existing Furnace Run trail west of Oak Hill Road as identified in Alternative 3A.
- *Off-Road Buckeye north at Bath Road*: A 0.45 mile trail along east side of Oak Hill Road connecting the two trail systems as identified in Alternative 4A.
- *Ira-Howe* (Conditional, Subject to the future facility use at Cranz House): Establish a new hiking trail of 1.35 miles extending the primitive trail from the Buckeye Trail at Martin Road, west of Ira, crossing Ira south of Hale Farm and connecting to the Hale Farm Connector as identified in Alternative 4A.
- *Ira- Hampton* (Conditional, Subject to the future facility use at Brown-Bender House): Establish 2.50 miles of new hiking trail between the Towpath Trail and Hampton Hills Unit of MPSSC as identified in Alternative 4A.

#### New Equestrian Trails

- *Howe-Everett Connector Trail*: A new trail between Everett Covered Bridge and the Hale Connector Trail and improvements to existing natural surface trails to Howe Meadow as identified in Alternative 3A.
- *Jaite Connector Trail*: Utilize proposed route for Jaite Loop trail and extend for equestrian use to cross Highland Road and connect to existing Valley Bridle near the Jaite Wayside Parking area as identified in Alternative 3A.
- *Reroute of Valley Bridle Trail near Brecksville Reservation*: 0.10 miles of new trail to replace trail removed out of existing wetland area as identified Common to All Action Alternatives.
- *New trails at Perkins Trail and Riding Run Trail*: Reroute alignments of removed trail segments. 2.60 miles of reroutes to minimize stream crossings and fall line uphill sections as identified in Alternative 2A.

#### New Multi-Use Trails

- *Sagamore Connector Trail from Canal Road to Bike and Hike Trail*: Examine closing and vacating 1.2 miles of existing Sagamore Road that includes a portion for conversion to a multi-use path and a portion for off-road multi-use path to the Bike and Hike on Cleveland Metroparks land as identified in common to all action alternatives.
- *Stanford Connector Trail from Brandywine Falls to Stanford-Towpath Connector*: A 1.0 multi-use connector trail between Brandywine Falls and the Stanford Connector as identified in Common to all action alternatives.
- *Old Carriage Connector Extension*: Extend existing Old Carriage Road connector 0.35 miles to existing Bike and Hike Trail as identified in Alternative 2A.

- *Highland Connector Trail*: New multi-use connector from Bike and Hike to Towpath on south side of Highland Road. Extend on north side of Highland Road from Towpath to Vaughn overflow parking area as identified in Alternative 3A.
- *Old Akron-Peninsula Connector Trail*: Utilization of abandoned road section and new off-road or shared-road trail as identified in Alternative 2A.

#### New Cross-Country Trails

- *High Meadow Trail*: A new 5-kilometer (3.1 miles) trail located west of Blue Hen Falls, near the existing Kurowski fields as identified in Alternative 3A.
- *Armington Trail Connector Loop* : A new loop from Cross-Country Trail to Little Meadow Trailhead of 1.2 miles of trail utilizing, where feasible, existing service roads for an outer loop connection between the existing Cross-Country trail and Little Meadow parking with access to Quick Road as identified in Common to all action alternatives.

#### New Mountain Bike Trails

- A portion of the Dugway section of the route described in Alternative 4B route combined with Krejci Loop section identified in Alternative 3B. (approximately 10 miles)
- *High Meadow Loop + ReUse/Reroute of Buckeye Trail from Boston Mills to Station Road* : (Conditional, Subject to implementation of Portion 4B route and future planning of Cleveland Metroparks.) This is a combination of a portion of the West Rim Loop described in Alternative 3A and the reuse portion described in Alternative 2B.

#### Bike Lanes

- All described in Alternative 3A except Wheatley Road.

#### Neighborhood Connectors as described in Alternative 4A.

- *Greenwood Village Hike Connector Trail*: Will provide an additional 0.10 mile hike route to the Towpath Trail from a common access point of Greenwood Village.
- *Echo Hills Connector Trail*: 0.50 miles of Multi-Use Trail on Cleveland Metroparks lands to Whaley Lane and crossing Parkview road and to existing Equestrian Center trails in Brecksville Reservation
- *Chart Road Connector Trail*: A 0.75 mile hiking trail beginning at Chart Road connecting to Hampton Hills Trails.

#### Trail Facilities

Paddle Launch Sites: Alternative 5 would include the three Primary paddle access sites (Ira II, Station Road and Rockside). The secondary paddle access sites would be conditional to the successful management and determination of visitor use from the implementation of the primary paddle access sites.

Campsites: Campsites in Alternative 5 would include sites described under Actions Common to All Alternatives and Alternative 3A. Given the expansion of a new use throughout the park, Alternative 5 contains primary sites and secondary sites. Secondary sites would be implemented upon the completion and subsequent evaluation of management and visitor use at the primary sites. Additionally, all campsites would be designated campsites with defined tent-pads. All campsites described as dispersed would be proposed in Alternative 5 as designated. Alternative 5 proposes



three primary campsites with a total of six to nine camping tent-pads and four secondary campsites with an additional eight to twelve camping tent-pads.

Primary Campsites (as described in Actions Common to All Alternatives):

Frazee: Riverside and Towpath Trail-side campsite.  
North of Hunt Farm: Riverside and Towpath-trail side campsite.  
Buckeye Trail West – Trail-side campsite

Secondary Campsites (subject to operations and demand of use from primary campsite implementation) All secondary campsites are described under Actions Common to All Action Alternatives unless otherwise noted.

Upper CVC campsites (trail) as described in Alternative 3A.  
Old Carriage North (trail)  
Buckeye – Dugway (trail)  
Buckeye – O’Neil (trail)

Parking. Alternative 5 proposes the expansion, improvements and additions of parking areas as described in Actions Common to All Alternatives and individual parking areas described in Alternatives 2A, 3A and 4A. Alternative 5 identifies 15 parking areas that include the expansion of existing parking spaces with 175 additional spaces, redesign of two parking areas with 27 parking spaces, three new parking areas with a total of 40 spaces, and two new equestrian parking areas with 20 horse-trail parking spaces. The parking lot totals are predicated on all proposed lots being completely built to maximum recommended capacity. Monitoring of parking area carrying capacity will be continued to determine final number of parking spaces for each lot.

Parking Areas Common to All Action Alternatives identified in Alternative 5.

Expand Jaite Wayside  
Expand/Relocate Blue Hen  
Expand Lock 29 Overflow  
Expand Hunt Farm  
Expand/Relocate Indigo Lake  
Expand Pine Lane for Equestrian Use  
Expand/Improve Coliseum  
Expand Tree Farm  
New Ira Paddle  
New Old Orchard Equestrian Only Parking Area.  
Expand Canal Visitor Center (conditional on use demand increasing)

Parking Areas as described in Alternative 2A identified in Alternative 5.  
Improve/Expand Terra Vista

Parking Areas as described in Alternative 3A identified in Alternative 5.  
Expand Bike & Hike – Boston Mills Lot (MPSSC)  
New High Meadow

Parking Areas as described in Alternative 4A identified in Alternative 5.  
Expand Cancasi (as Mudcatcher trailhead)

## 2.5.9 Alternatives Considered but Dismissed

The public scoping planning process described in Chapter 1 generated many proposed elements and modifications of the trail system. All proposals were examined and evaluated as part of the development of the alternatives. Some elements or alternatives were considered but dismissed due to one or more of the following factors.

*Property ownership.* During public scoping, trails were proposed within the CVNP boundary on lands not owned by NPS or the two metropolitan park districts. Additionally, there were trails brought forth to re-evaluate from the 1985 Trail Plan which in 2012, have a variety of private or otherwise incompatible ownership for trail development, limiting their feasibility. Many of these trails would require the assemblage of multiple land parcels for acquisition. As the Park moves towards investing in the improvements of its existing lands, land acquisition for the sole purpose of recreational use is a limited priority. These are largely removed for consideration in the alternatives due to the current private or public use of the lands and additional acquisition costs that would be required in these locations.

*Shared Trail Uses.* The concept of shared trail use among all trail user groups was considered and evaluated. Input from users that could potentially have conflicting uses was sought. Due to the lack of applicable locations and to provide the best quality visitor experience for all trail user groups, shared use between two groups that may experience particularly high conflict levels (equestrians and mountain bike users) was considered, but dismissed in the alternatives.

*Trails in Sensitive Areas.* Trails were proposed in high quality large forested areas, particularly in the upper Furnace Run region, managed and owned by Metro Parks, Serving Summit County, and the newly acquired Blossom Music Center property. Given the challenging terrain, very limited connectivity to other elements in the Park, size, current level of undisturbed land, and their high resource sensitivity, these areas were considered but dismissed for trail development.

*Significant Expansions of Trails for Specific Uses.* During public scoping, many of the trail user groups, particularly the mountain bike and equestrian trail users, desired significantly expanded trail miles within CVNP for their particular use. Given the current use, limitations of land ownership and resource conditions, and current, planned or projected regional trail systems available to these user groups, significant expansions were not included in the final alternatives. Additions and moderate expansions of some uses were included in some of the alternatives.

*Other New Uses.* During the public scoping period, the public was invited to provide ideas regarding the future trail system in the Park. Some proposals are prohibited by NPS Management Policies (off-road motorized vehicles) or are outside the scope of a Trail Plan (i.e., rock-climbing; all-terrain and gravity-oriented/downhill bike areas). These will not be considered further.

## 2.5.10 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, preserve and enhances historical, cultural and natural resources. Alternative 2A has been selected as the environmentally preferable alternative because it is the alternative that best meets this guidance. This is accomplished through the adoption of the Sustainable Trail Guidelines, restoration and removal

of trails in sensitive areas, and 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.

## **2.6. Comparison of Alternatives**

The alternatives provide opportunities to examine the trail options in the Park for a variety of visitor experiences on the trails and their impacts to Park resources and relationships to activities within or adjacent to the Park boundary. A comparison of alternatives was conducted for their level of development, environmental consequences, Plan goals, and NEPA goals. This section provides a summary of these comparisons.

### **Comparison of Trail Development**

Table 6 provides a comparison of the alternatives by trail miles by trail use. Total trail mileage includes all trails within CVNP including trails owned and managed by NPS, Cleveland Metroparks, Metroparks Serving Summit County, and the Buckeye Trail Association.

### **Comparison of Cost Estimates/Budget**

As part of the Trail Management Plan, conceptual cost estimates were developed for the alternatives (Table 7). NPS and industry cost estimating were used as the general guidance. The cost estimates are intended to demonstrate the relative change in costs by the change in levels of trail development. Once a plan is approved, specific costs should be determined as part of detailed planning and design of each trail element in the approved plan. The approval of the plan will not guarantee funding. Staffing will be dependent on NPS funding levels, park and service wide priorities and partnership funding initiatives. Costs may be reduced by site conditions, sustainable practice methods and use of volunteers and other partnerships for the Trails Program. Conceptual costs estimates outline costs for the two core activities: 1) Planning, design, construction, and implementation costs for the alternatives and their various trail elements and 2) Operations and long term maintenance to sustain the trails on an annual basis.

### **Comparison of Alternatives by 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, with direct, indirect and cumulative effects considered. Intensity and duration of effects are also considered in the analysis. Effects are both adverse and beneficial and will vary depending on the affected resource and the proposed action. Chapter 4, Environmental Consequences, includes the impact analysis methodology and findings for each issue topic identified for this Plan. Table 8, provides a summary comparison that shows the type of impacts expected with each alternative by impact topic.

### **Comparison of Alternatives by Plan Goals**

Utilizing the goals and objectives established for the Plan outlined in Section 1.1.3, a general comparison of the alternatives and how they meet the Plan's five primary goals is summarized in Table 9.

## Comparison of Alternatives by NEPA Goals

The alternatives were evaluated on how they meet the goals stated in section 101 of the National Environmental Policy Act. Table 10 summarizes a general comparison of the alternatives by NEPA goals.

**Table 6. Comparison of Trail Miles**

<b>Trails Subtotals</b>	<b>Alt 1</b>	<b>Alt 2A</b>	<b>Alt 2B</b>	<b>Alt 3A</b>	<b>Alt 3B</b>	<b>Alt 4A</b>	<b>Alt 4B</b>	<b>Alt 5</b>
Total Existing Trails	174.9	174.9	174.9	174.9	174.9	174.9	174.9	174.9
Total Common to All	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
New Trails Total	-	17.05	17.05	30.76	40.53	64.03	77.90	46.05
Trails Removed	-	-11.06	-11.06	-11.06	-11.06	-11.06	-12.80	-12.63
Net Additional Trails	-	6.0	6.0	19.7	29.47	52.97	65.10	37.65.
Bike Lanes	-	-	-	38.0	38.0	38.0	38.0	37.0
<b>Total CVNP Boundary Trails</b>	176.63	180.59 (3.5% increase)	180.59 (3.5%)	195.44 (11.5%)	205.21 (16%)	228.68 (30%)	240.81 (37%)	213.36 (21% )
<b>NPS</b>	107.1	112.08 (+5)	112.08 (+5)	126.93 (+19.84)	136.7 (+29.61)	160.17 (+53.08)	172.3 (+65.21)	138.22 (+31.13)
<b>Trail Acres (trail miles x trail type tread width)</b>	112	120 (+8)	120 (+8)	137 (+25)	134 (+22)	148 (+36)	153 (+41)	133 (+21)
Trail Parking Areas (in acres)	20.82	24.97	24.97	26.42	26.92	26.92	27.42	28.77

**Table 7. Cost Estimates**

	<b>Alternative 1</b>	<b>Alternative 2A</b>	<b>Alternative 2B</b>	<b>Alternative 3A</b>	<b>Alternative 3B</b>	<b>Alternative 4A</b>	<b>Alternative 4B</b>	<b>Alternative 5</b>
<b>Planning, Design and Construction Costs</b>								
<b>Proposed Removal-Revegetation</b>	-	\$144,521	\$144,521	\$144,521	\$144,521	\$144,521	\$144,521	\$144,521
<b>Proposed Trails Installation</b>	-	\$1,814,805	\$2,130,705	\$3,629,458	\$3,754,858	\$4,162,231	\$4,494,331	\$3,336,750
<b>Bicycle Lanes Installation</b>	-	-	-	\$1,925,590	\$1,925,590	\$1,925,590	\$1,925,590	\$1,781,980
<b>Water Trail Launch Sites</b>	-	\$3,627	\$3,627	\$3,627	\$3,637	\$3,627	\$3,627	\$2,000
<b>Campsites</b>	-	\$5,628	\$5,628	\$5,628	\$5,628	\$5,628	\$5,628	\$2,800
<b>Proposed Parking</b>	-	\$256,649	\$289,847	\$321,937	\$390,543	\$368,412	\$368,412	\$324,188
<b>Subtotal</b>	-	\$2,225,230	\$2,574,328	\$3,960,650	\$4,154,666	\$4,539,898	\$4,871,998	\$3,810,259
<b>25% design/planning /admin</b>	-	556,307	\$643,582	\$990,162	\$1,038,666	\$1,134,974	\$1,217,999	\$952,564
<b>10% Contingency</b>	-	\$222,523	\$257,432	\$396,065	\$415,466	\$453,989	\$487,199	\$381,025
<b>Subtotal with Bike Lanes</b>	-	-	-	\$7,272,467	\$7,534,388	\$8,054,451	\$8,502,786	\$6,925,828
<b>Subtotal without Bike Lanes</b>	\$0.00	\$3,004,060	\$3,475,342	\$5,346,877	\$5,608,798	\$6,128,861	\$6,577,196	\$5,143,848
<b>Operations and Maintenance Annually</b>								
<b>2011 Operating Maintenance Budget</b>	\$279,360	\$279,360	\$279,360	\$279,360	\$279,360	\$279,360	\$279,360	\$279,360
<b>Annual Maintenance of proposed trails</b>	-	\$42,814	\$71,098	\$111,548	\$114,234	\$164,487	\$194,758	\$99,758
<b>Trail Management (FTE @40k per year)</b>	-	\$120,000 (3 FTE)	\$120,000 (3 FTE)	\$240,000 (6 FTE)	\$240,000 (6 FTE)	\$400,000 (10 FTE)	\$400,000 (10 FTE)	\$240,000 (6 FTE)
<b>Subtotal Operations and Management</b>	\$279,360	\$442,174	\$470,458	\$630,908	\$633,594	\$843,847	\$874,118	\$619,118
<b>Totals</b>								
<b>Construction</b>	\$0.00	\$3,004,060	\$3,475,342	\$5,346,877	\$5,608,798	\$6,128,861	\$6,577,196	\$5,143.848
<b>Operations &amp; Management</b>	\$279,360	\$442,174	\$470,458	\$630,908	\$633,594	\$843,847	\$874,118	\$619,118
<b>Total without Bike Lanes</b>	<b>\$279,360</b>	<b>\$3,446,234</b>	<b>\$3,945,800</b>	<b>\$5,977,785</b>	<b>\$6,242,392</b>	<b>\$6,972,708</b>	<b>\$7,451,314</b>	<b>\$5,762,966</b>

**Table 8. Summary Comparison of Alternatives by Environmental Consequences**

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>IMPACT TOPIC: WATER RESOURCES</b>							
<b>Riparian Buffers and Stream Crossings</b>							
Long-term minor to moderate adverse from 94 miles of all trails within buffer zone and 400 stream crossings.	Long-term negligible adverse riparian buffers from decrease of trail miles in riparian zone. Long-term beneficial to stream crossings from decrease in number of stream crossings.	Long-term negligible adverse riparian buffers from decrease of trail miles in riparian zone. Long-term beneficial to stream crossings from decrease in number of stream crossings.	Long-term, minor to moderate adverse from an increase of 35.94 trail miles within riparian zone and potential increase of 71 stream crossings.	Long-term minor to moderate, adverse from an increase of 42 trail miles within riparian zone and potential increase of 136 stream crossings.	Long-term moderate and adverse from increase of 44 trail miles within riparian zone and potential increase of stream crossings by 94.	Long-term moderate and adverse from increase of trail miles within riparian zone by 48.55 and a potential increase of stream crossings by 143.	Long-term minor to moderate, adverse from increase of 37.94 trail miles within riparian zone and potential increase of stream crossings by 84.
<b>Floodplains</b>							
Long-term minor to moderate adverse from 22 miles all trails within floodplain.	Long-term negligible adverse to floodplains from increase of 0.69 trail miles within floodplain.	Long-term negligible adverse to floodplains from increase of 0.69 trail miles within floodplain.	Long-term minor, adverse from an increase of 4.88 trail miles within floodplain and small boardwalk systems in floodplains.	Long-term minor, adverse from increase of trail miles by 4.88 within floodplain and small boardwalk systems at two sites. Mountain bike trails are not within floodplain.	Long-term minor and adverse from increase of trail miles by 4.29 within floodplain and small boardwalk systems at three sites. No mountain bike trails are within floodplain.	Long-term minor and adverse from increase of 4.29 trail miles within floodplain and small boardwalk systems at three sites. No mountain bike trails are within floodplain.	Long-term minor, adverse from increase of 3.77 trail miles within floodplain and potential small boardwalk systems at two sites. Mountain bike trails are not within floodplain.

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>Wetlands</b>							
Long-term minor adverse from 37 all trail miles within 25' buffer of wetlands and 20 miles within 125' wetland buffer.	Long-term negligible adverse to wetlands from reduction of trails within 25' wetland buffer and minor increase of 2.8 of all trail miles within 125' wetland buffer.	Long-term negligible adverse to wetlands from reduction of trails within 25' wetland buffer and minor increase 2.8 of all trail miles within 125' wetland buffers.	Long-term minor to moderate adverse from an increase of 2.27 trail miles within 25' wetland buffer and an increase of 12.33 trail miles within 125' wetland buffer.	Long-term minor to moderate adverse from an increase of trail miles by 2.77 within 25' wetland buffer and an increase of trails miles by 20 within 125' wetland buffer.	Long-term minor to moderate adverse from an increase of 3.9 trail miles within 25' wetland buffer and an increase of 26 trail miles within 125' wetland buffer.	Long-term minor to moderate adverse from an increase of 5.2 miles within 25' wetland buffer and an increase of 30.8 trail miles within 125' wetland buffer.	Long-term minor to moderate adverse from increase of 2.67 trail miles within 25' wetland buffer and an increase of 19.66 trail miles within 125' wetland buffer.
<b>Water Quality</b>							
Long term, minor adverse from trail conditions where increased sedimentation to streams occurs.	Long term negligible to minor adverse from minimal increase of trail miles in one cold water habitat watershed.	Long term moderate adverse from minimal increase of trail miles in one cold water habitat watershed and increase of trail use in sensitive water resource areas.	Long term minor to moderate adverse from increase of trail miles in two cold water habitat watersheds and increase in trails, high quality watersheds.	Long term minor to moderate adverse from increase of trail miles in two cold water habitat watersheds and increase in trails in, high quality watersheds.	Long term minor to moderate adverse from increase of trail miles in three cold water habitat watersheds and increase in trails in less disturbed, high quality watersheds.	Long term minor to moderate adverse from increase of trail miles in three cold water habitat watersheds and increase in trails in, high quality watersheds.	Long term minor to moderate adverse from increase of trail miles in two cold water habitat watersheds and increase in trails in, high quality watersheds.
<b>Cumulative Impacts</b>							
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.							
<b>Trail Facilities Common to All Action Alternatives (Water Resources)</b>							
Long-term, negligible adverse from minimal change in footprint within riparian zone and no required stream crossings. Long-term, negligible to minor impacts from the proximity of three launch sites, three campsites and four parking areas. Long-term negligible to minor 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.							

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
IMPACT TOPIC: VEGETATION							
Habitat Fragmentation and Spread of Invasive Plants							
Long-term, minor to moderate and adverse from vegetative disturbance from 186 acres of total trail footprint within the primary vegetation communities, presence of exotic plants along main trail corridors, and trails in areas of rare or special status plant species.	Long-term, negligible to minor and adverse from minimal reduction of two trail acres within the primary vegetation communities and limited expansion of trails that would increase spread of invasive plants.	Long-term minor and adverse from minimal reduction of two trail acres in the primary vegetation communities, increase of trail use in an isolated region of the Buckeye Trail, and limited expansion of trails that would increase spread of invasive plants.	Long-term, minor to moderate and adverse from additional 25 acres of trail corridors in primary vegetation communities including expansion of trails in some new areas. Potential for increased exotic plant proliferation may occur for high use interpretive trails and new trailhead entry areas.	Long-term, moderate and adverse from additional 36 acres of trail corridors in primary vegetation communities, including new mountain bike trails in upland forest areas of the central east and west rim of the Park. Potential for increased exotic plant proliferation may occur for high use interpretive trails and new trailhead entry areas.	Long-term, moderate and adverse from additional 38 acres of trail corridors in primary vegetation communities including expansion of trails in areas throughout the park. Potential for increased exotic plant proliferation may occur for high use interpretive trails, new trailhead entry areas and expanded primitive trails in undisturbed upland forest areas.	Long-term, moderate and adverse from additional 50 acres of trail corridors in primary vegetation communities including expansion of trails in areas throughout the park and new mountain bike trails along the central and southern eastern rim of the park. Potential for increased exotic plant proliferation may occur for high use interpretive trails, new trailhead entry areas and expanded primitive trails in undisturbed upland forest areas.	Long-term, minor to moderate and adverse from additional 31 acres of trail corridors in primary vegetation communities including expansion of trails in areas throughout the park. Potential for increased exotic plant proliferation may occur for high use interpretive trails, new trailhead entry areas and expanded primitive trails in undisturbed upland forest areas.



Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>Cumulative Impacts:</b>							
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.							
<b>Trail Facilities</b>							
Long-term, negligible to minor adverse impacts on the primary vegetation communities from minor ground disturbance in isolated regions of the park.							
<b>IMPACT TOPIC: WILDLIFE</b>							
<b>Habitat Fragmentation and Disturbance</b>							
Long-term, minor and adverse due primarily from the overall continued fragmentation of forest habitats in the Park.	A minimal change of less than 10 acres in affected forest blocks and vegetation communities will likely maintain the existing long-term, minor adverse impacts on wildlife and their habitats.	A minimal change of less than 10 acres in forest and shrubland vegetation communities, zero affected change in forest blocks greater than 100 acres, and the addition of mountain biking on one trail will likely maintain the existing long-term, minor adverse impacts on wildlife and their habitats.	Long-term, minor to moderate adverse impacts on wildlife primarily from increased habitat fragmentation and loss with an increase of 35 acres of affected forest and shrubland and change in five forest blocks greater than 100 acres.	Long-term, minor to moderate adverse impacts on wildlife primarily from increased habitat fragmentation and loss with an increase of 45 acres of affected forest and shrubland and change in four forest blocks greater than 100 acres.	Long-term, moderate adverse impacts on wildlife from a significant level of fragmentation of large forest habitat blocks in disturbance by an increase of 45 acres of affected forest and shrubland and change in four forest blocks greater than 500 acres.	Long-term, moderate adverse impacts on wildlife from a significant level of fragmentation of large forest habitat blocks and change in disturbance by an increase of 57 acres of affected forest and shrubland and change in four forest blocks greater than 500 acres.	Long-term, moderate adverse impacts on wildlife from a significant level of fragmentation of large forest habitat blocks and change in disturbance by an increase of 39 acres of affected forest and shrubland and change in three forest blocks greater than 100 acres.
<b>Cumulative Impacts:</b>							
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.							
<b>Trail Facilities Common to All Action Alternatives</b>							
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.							

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>IMPACT TOPIC: SOILS</b>							
<b>Soil Resources</b>							
Long-term, minor to moderate adverse impacts from 69 trail miles in areas of soils with high erodibility, 60 trail miles in soils very limited for recreational paths and 22 trails with segments with trail grades that exceed 15%.	Long-term, negligible adverse impacts from use of existing disturbed areas, no change in trail miles within soils with high erodibility or very limited for recreational trails. No trails proposed are on grades greater than 15%.	Long-term, negligible to minor adverse impacts from use of existing disturbed areas, no change in trails in limited suitable soils. No trails are proposed on grades greater than 15%. New mountain bike use will increase use on erosion-prone Buckeye Trail.	Long-term, minor adverse from 75 trail miles in areas of soils with high erodibility, 66 trail miles in soils very limited for recreational paths, and nine new trails with segments with grades that exceed 15%.	Long-term, minor to moderate and adverse from 84 trail miles in areas of soils with high erodibility, 70.5 trail miles in soils very limited for recreational paths, nine new trail segments with trail grades that exceed 15% and mountain bike trails where some steep grades exist.	Long term, moderate, adverse from 90 trail miles in areas of soils with high erodibility, 77 trail miles in soils very limited for recreational paths, and fourteen new trails with segments with trail grades that exceed 15%.	Long-term moderate, adverse from 105 trail miles in areas of soils with high erodibility, 83 trail miles in soils very limited for recreational paths, fourteen new trails with segments with trail grades that exceed 15%, and portions of the mountain bike trail where steep grades exist.	Long-term minor to moderate, adverse from 82 trail miles in areas of soils with high erodibility, 68 trail miles in soils very limited for recreational paths, seven new trails with segments where trail grades may exceed 15%, and portions of the mountain bike trail where steep grades may occur.
<b>Cumulative Impacts:</b>							
Short-term and long term minor to moderate adverse impacts from soil conditions during construction projects inside and outside of the Park and continued soil compaction and soil loss from present and continuing urbanization.							
<b>Trail Facilities Common to All Action Alternative</b>							
Short-term and long-term negligible to minor effects on soil resources are expected from temporary disturbance during construction and minimal area of disturbance from access and use of launch sites, campsites, and new and expanded parking areas.							

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>IMPACT TOPIC: CULTURAL RESOURCES</b>							
<b>National Register of Historic Places</b>							
Long Term negligible to minor adverse from vulnerability of ground disturbance in high use areas and unauthorized use on unmanaged social trails.	Long Term negligible to minor adverse from three additional NRHP listings, but no modifications or change in resource.	Long term, negligible to minor adverse from three additional NRHP listings, but no modifications or change in resource. No additional impacts from proposed mountain bike trails.	Long term, negligible to minor adverse from increased trail within or adjacent to six NRHP listings.	Long term, negligible to minor adverse from increased trail within or adjacent to six NRHP listings. No additional effect will occur from mountain bike trails.	Long term, negligible to minor adverse from increased trails within or adjacent to eight NRHP listings and proximity of mountain bike trail within one NRHP property.	Long term, negligible to moderate adverse from increase in proposed trails within or adjacent to eight NRHP listings.	Long term, negligible to minor adverse from increase in proposed trails within or adjacent to eight NRHP listings. NRHP sites are not within proximity to proposed mountain bike trails.
<b>Rural Landscapes and Scenic Values</b>							
Long Term negligible to minor adverse from vulnerability of ground disturbance in high use areas and unauthorized use on unmanaged social trails.	Long Term negligible to minor Adverse from proposed actions within proximity of three Countryside properties, but minimal disturbance.	Long term, negligible to Minor Adverse from proposed actions within proximity of three Countryside properties, but minimal disturbance. No additional impacts from mountain bike trails.	Long term, negligible to minor adverse from proposed trails within perimeter of five countryside properties. No additional effect from mountain bike trails.	Long term, negligible to minor adverse from proposed trails within perimeter of ten Countryside properties.	Long term, negligible to minor adverse from proposed trail within perimeter of ten Countryside properties and proximity of mountain bike trail within four properties.	Long term, negligible to minor adverse from proposed trail within perimeter of five Countryside properties and proximity of mountain bike trail within two properties.	

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>Archeological Resources</b>							
Long Term negligible to minor adverse vulnerability from ground disturbance in high use areas and unauthorized use on unmanaged social trails.	Long Term negligible to minor Adverse from two proposed trails in proximity to known or potential archeological resources.	Long term, negligible to minor adverse from two proposed trails in proximity to known or potential archeological resources. No additional impacts form mountain bike trails.	Long term, negligible to moderate, adverse, from thirteen proposed trails within proximity of known resources and potential surface disturbance.	Long term, negligible to moderate adverse from thirteen proposed trails within proximity of known resources and potential surface disturbance, including increase survey for mountain bike trail areas.	Long term, negligible to minor adverse from proposed trails within proximity of known resources and increase survey for areas not determined including for the mountain bike trail.	Long term, negligible to minor adverse from proposed trails within proximity of known resources and increase survey for areas not determined including for the mountain bike trail.	Long term, negligible to moderate adverse from thirteen proposed trails within proximity of known resources and increase survey for areas not determined including for the mountain bike trail.
<b>Cumulative Impacts:</b>							
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.							
<b>Trail Facilities Common to All Trail Facilities</b>							
Long-term, negligible to minor adverse impacts on NRHP properties, Countryside Initiative program elements and archeological resources. Impacts to archeological resources and will need to be evaluated through site-specific surveys to ensure mitigation of impacts.							

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
IMPACT TOPIC: VISITOR USE EXPERIENCE							
<b>Visitor Use Experience</b>							
Long-term, minor to moderate, adverse from overcapacity at high peak use areas, limited variety of trail experiences and potential for trail user conflict in high use areas. No effect from public health and safety or education and interpretation opportunities.	Long-term, beneficial from limited expansion of park facilities, and limited variety of new trail experiences and opportunities for programming. Long-term, minor to moderate adverse impacts from trail user conflicts and public health and safety on trail conditions on some trails.	Long-term beneficial from expansion of park facilities, limited variety of new trail experiences, including mountain bike and limited new areas for programming. Long-term, minor to moderate and adverse impacts from trail user conflict and public health and safety in some new trail areas.	Long-term beneficial impacts from expanded variety of trail experiences, from dispersal of uses in high use areas, and expansion of park areas for resource learning. Long-term, minor adverse from increase visitation patterns in expanded trail areas. Long-term minor to moderate and adverse from proximity of some trails to trail facilities.	Long-term beneficial impacts from expanded variety of trail experiences, Long term negligible and adverse impacts from increased education on new trails and uses. Long-term, minor to moderate adverse from increased trail user conflict on some portions of the new mountain bike trail, increased visitation patterns in expanded trail areas, and increased remote proximity of some trails to trail facilities.	Long-term beneficial impacts from expanded variety of trail experiences, expansion of areas for park resource learning, and separate primary user type trail systems to reduce trail user conflict. Long-term, negligible, adverse, from expansion of primitive, low use Trails. Long-term moderate adverse impacts from limited access to trail facilities from expanded primitive trail system.	Long term beneficial impacts from expanded variety of trail experiences. Long-term, negligible impacts from increased education on new trail uses and expansion of primitive trails and isolated expansion of mountain bike trail in low use areas. Long-term, minor to moderate adverse, from limited trail intersections and shared use. Long-term, moderate, adverse from trail facilities and limited access of expanded primitive trail system.	Long-term beneficial from expanded variety of trail experiences. Long-term, negligible from expansion of limited primitive, trails, interpretive trails, and isolated expansion of mountain bike trail in low use areas and increased education on new trail use. Long-term, minor adverse, from limited trail intersections and shared use and limited access of trail facilities from expanded primitive trails.

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>Cumulative Impacts:</b>							
Long-term beneficial impacts from regional trail and trail facility expansion and improvements on the Cuyahoga River to improve water resource conditions for recreational use.							
<b>Trail Facilities Common to All Action Alternatives</b>							
Trail facilities and amenities will provide long-term beneficial impacts to visitor use experience from the improvement of facilities for visitation, new and expanded trail user experiences and new opportunities for education and interpretation. Long-term minor to moderate impacts visitor use and experience from potential trail user conflict in high use areas by new uses and public safety and health issues associated with river conditions for human contact and human waste management at campsites.							

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>IMPACT TOPIC: SOCIOECONOMIC</b>							
<b>Local Governments, Residents and adjacent landowners</b>							
Long term, minor to moderate adverse impacts from unmanaged social trails and unimproved access to the park trails. No effects on business.	Long term, minor and adverse from proximity of three trails to adjacent land owners in a regional limited area of park and reuse of three public roads for trail use.	Long term, minor to moderate, adverse from use of Cleveland Metroparks and MPSSC land for mountain bike trail use. Proximity of three trails to adjacent lands owners reuse of three public roads for trail use, and increased road crossings for trails, including mountain bike trail use.	Long term, minor to moderate, adverse by use of other jurisdiction lands for trail placement, proximity of eight trails to adjacent land owners in isolated areas throughout park, reuse and of public roads for trail use and increase in trail crossings on public roads.	Long term, minor to moderate, adverse from use of other jurisdiction lands for trails, proximity of ten trails to adjacent land owners in isolated areas, reuse of public roads for trail use and increase in trail crossings on public roads.	Long term, moderate and adverse from use of other jurisdiction lands, proximity of ten trails to adjacent land owners in multiple areas, reuse of public roads, and increase in trail crossings on public roads.	Long term, moderate and adverse from use of other jurisdiction lands, proximity of ten trails to adjacent land owners in multiple areas, reuse of public roads, and increase in trail crossings on public roads.	Long term, minor to moderate, adverse from use of other jurisdiction lands for trail placement, proximity of eight trails to adjacent land owners in isolated areas throughout park, reuse and of public roads for trail use and increase in trail crossings on public roads.
<b>Local business</b>							
No effects by changes in use.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from limited trail expansion.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from limited trail expansion.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from trail expansion.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from trail expansion.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from limited trail expansion.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from limited trail expansion.	Short-term and long-term beneficial impacts from new construction opportunities and local business opportunities from limited trail expansion.

Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>Cumulative Impacts: (Socioeconomic)</b>							
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.							
<b>Trail Facilities Common to All Action Alternatives (Socioeconomic)</b>							
Trail facilities will have long-term negligible and adverse impacts on costs to visitors from marginal costs for water trail use permits, long-term minor and adverse from noise associated with some facilities and their proximity to non-NPS lands, long-term negligible and adverse 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 from new opportunities for business and construction activities associated with expanded trail facilities and uses.							
<b>IMPACT TOPIC: PARK OPERATIONS</b>							
<b>Park Operations</b>							
Long term minor adverse, from limited staff to meet current operations of trail management. No effect by no new facilities proposed.	Short and long term negligible to minor, adverse from reuse of current staff operations or minor increase of less than five new support staff and limited existing facility expansion.	Long term, minor, adverse from reuse of current staff operations or minor increase of less than five new support staff and limited existing facility expansion.	Long term, minor to moderate, adverse from additional staff support of 5-8% from current staff levels and expansion of operations for new and expanded facilities.	Long term, moderate, adverse from additional staff support of 8-10% from current staff levels and expansion of operations for new and expanded facilities.	Long term, moderate to major, adverse from significant increase of staff operation support of greater than 10% from current staff levels expansion of operations for new and expanded facilities.	Long term, major, adverse, from significant increase of staff operation support of greater than 10% from current staff levels and expansion of operations for new and expanded facilities.	Long term, moderate, adverse from additional staff support of 5-10% from current staff levels and expansion of operations for new and expanded facilities.



Alternative 1	Alternative 2A	Alternative 2B	Alternative 3A	Alternative 3B	Alternative 4A	Alternative 4B	Alternative 5
<b>Partner Operations</b>							
Long term negligible adverse from the increase role of Trails Forever for capital and ongoing maintenance support	Long term minor adverse, from limited support for expansion of trails.	Long term negligible, adverse from limited support for limited expansion of trails and support by new user groups.	Long term, minor to moderate, adverse, from increase of trail operational support.	Long term, minor to moderate, adverse from increase of trail operational support.	Long term, moderate adverse from significant increase of trail operational support.	Long term, moderate, adverse from significant increase of trail operational support.	Long term, minor to moderate, adverse from increase of trail operational support.
<b>Local Jurisdiction Operations</b>							
No effect, from no new facilities proposed.	Long term negligible to minor adverse, from multi-use connector trails and few trails involving localized jurisdictions.	Long term, minor, adverse, from multi-use connector trails and mountain bike trail on primarily non-NPS jurisdiction.	Long term, minor, adverse, from multi-use connectors, bike lanes and localized trails involving multiple jurisdictions.	Long term, minor to moderate adverse, from multi-use connectors, bike lanes, localized trails involving multiple jurisdictions and proximity of mountain bike trails to other jurisdiction trails.	Long term, moderate, adverse from multi-use connectors, bike lanes, localized trails involving multiple jurisdictions and proximity of mountain bike trails with access to other jurisdictional trails.	Long term, moderate, adverse from multi-use connectors, bike lanes, localized trails involving multiple jurisdictions and proximity of mountain bike trails to other jurisdiction trails.	Long term, minor to moderate adverse, from multi-use connectors, bike lanes, localized trails involving multiple jurisdictions and proximity of mountain bike trails to other jurisdiction trails.
<b>Cumulative Impacts:</b>							
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 on park operations and management. Long-term minor adverse impacts from increased river use by expansion of river use access facilities outside of park, and potential water quality improvements from Route 82 dam and reduction of combined sewer overflows.							
<b>Trail Facilities Common to All Action Alternatives</b>							
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, and increased coordination with local jurisdictions on new facilities, particularly river use.							

**Table 9. Summary Comparison of Alternatives by Plan Goals.**

<b>Plan Goal</b>	<b>Trail User Experience</b>	<b>Footprint on Park Resources</b>	<b>Sharing Park Resource Stories</b>	<b>Sustaining the Trail Network</b>	<b>Utilization of Trail Partnerships</b>
Alternative 1	Maintains current user experiences. Limits new uses and new experiences. Continue degradation of trail facilities may inhibit trail user experience.	Degradation of resources from trails and high use areas will continue to compromise park resources.	Provides opportunities along main corridors of park and limited on secondary trails.	Backlogged operations, degraded trail conditions and absence of sustainable trail management guidance in place limit the sustainability of the trail network.	Park has established partnerships through Trails Forever and Volunteer program.
Alternative 2A	Limited expansion of new trail experiences to regional greenway networks and short interpretive areas and minor connections between park trails.	Sustainable Trail Guidelines and minimal trail expansion will minimize trail footprint.	Limited expansion of sharing park resource stories.	Sustainable Trail Guidelines will incorporate practices and strategies to sustain the trail network.	Continuing trail partnerships with marginal increase in support.  Expansion of user groups to support trail network will occur.
Alternative 2B	Same as Alternative 2A plus the addition of mountain bike use for limited expanded new outdoor recreation experiences in the park.	Sustainable Trail Guidelines and minimal trail expansion will minimize trail footprint.	Limited expansion of sharing park resource stories.	Same as Alternative 2A  Some limitations may occur due to trail expansion and required resources to sustain.	Same as Alternative 2A  Additional expansion of user groups with mountain bike use to support trail network.
Alternative 3A	Expansion of trails in all regions of the park, utilizing the visitor contact centers as the primary starting point for long and short trail experiences. Multi-use connections to regional greenway networks and coordination of bike lanes provide alternative user experiences to access the park.	Expansion of trails in some areas of park will have a footprint on park resources but be minimized by Sustainable Trail Guidelines.	Some expansion of sharing park resource stories, particularly adjacent to existing visitor contact centers.	Same as Alternative 2A  Limitations will occur due to expansion of trails and additional required resources to sustain.	Expanded partnership resources will be required to support expanded trail system.  Expansion of user groups to support trail network will occur.

Plan Goal	Trail User Experience	Footprint on Park Resources	Sharing Park Resource Stories	Sustaining the Trail Network	Utilization of Trail Partnerships
Alternative 3B	Same as Alternative 3A plus the addition of new mountain trails in two park areas to expand new outdoor recreation experiences in the park.	Expansion of trails in some areas of park will have a footprint on park resources but be minimized by Sustainable Trail Guidelines.	Some expansion of sharing park resource stories, particularly adjacent to existing visitor contact centers	Same as Alternative 3A.	Same as Alternative 3A.  Additional expansion of user groups with mountain bike use to support trail network.
Alternative 4A	Expansion of trails in all regions of the park, including the expansion of intra-park long distance trails. Multi-use connections to regional greenway networks and coordination of bike lanes provide alternative user experiences to access the park.	Expansion of trails in many areas of park will have a footprint on park resources but be minimized by Sustainable Trail Guidelines.	Significant expansion of sharing park resource stories through destination trail systems adjacent to visitor contact centers and to primitive park resource features.	Same as Alternative 2A  Limitations will occur due to expansion of trails and additional required resources to sustain.	Significant partnership resources will be required to support expanded trail system.  Expansion of user groups to support trail network will occur.
Alternative 4B	Same as Alternative 4A plus the addition of a new mountain bike trail system through multiple regions of the park to expand new outdoor recreation experiences in the park.	Expansion of trails in many areas of park will have a footprint on park resources but be minimized by Sustainable Trail Guidelines	Significant expansion of sharing park resource stories through destination trail systems adjacent to visitor contact centers and to primitive park resource features.	Same as Alternative 4A.	Same as Alternative 4A.  Additional expansion of user groups with mountain bike use to support trail network.
Alternative 5 (Preferred Alternative)	Expansion of trail experiences for recreation and destination trails, including limited new mountain bike use.	Expansion of trails in many areas of park will have a footprint on park resources but be minimized by Sustainable Trail Guidelines	Expansion of trails to share park resource stories, near visitor contact centers and primitive areas of the park.	Sustainable Trail Guidelines will incorporate practices and strategies to sustain the trail network.	Expanded partnership resources will be required to support expanded trail system. Expansion of user groups to support trail network will occur.

**Table 10. Comparison of How Alternatives Meet Goals of National Environmental Policy Act**

<b>NEPA Goals</b>	<b>Goal 1: Fulfill the responsibilities of each generation as trustee of the environment for succeeding generation.</b>	<b>Goal 2: Ensure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings</b>	<b>Goal 3: Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or undesirable or unintended consequences</b>	<b>Goal 4: Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.</b>	<b>Goal 5: Achieve a balance between population and resource use that will permit high standards of living and wide sharing of life's amenities.</b>	<b>Goal 6: Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.</b>
Alt 1	Trails will continue to be degraded and compromise conditions of trail system that limit its long-term sustainability.	Visitor use conflict and visitor capacity occurs during peak seasonal use in some locations of the park.	Trails will continue to degrade park resources where use type and use frequency are causing impacts.	Trails provide opportunities for access and information on park resources related to our national heritage.	Some trails by overuse, resource conditions or trail design and limited connections. minimize a balanced approach.	Some sustainable practices are in place. Maximum extent of NPS sustainability goals has not been achieved.
Alt 2A	Incorporation of Sustainable Trail Guidelines will set forth measures to sustain park resources for generations to come.	Limited trail additions and trail facilities will assist in reducing visitor conflict and a limited variety of visitor experiences.	Utilize previously disturbed areas to minimize resource impacts and the introduction of Sustainable Trail Guidelines.	Limited expansion of trail provide limited new opportunities for access and information on park resources related to our national heritage.	A balanced approach is achievable by improved trail conditions and limited expansion, including community connections.	Sustainable Trail Guidelines in combination with parkwide sustainable goals will achieve NPS sustainability goals.
Alt 2B	Same as Alternative 2A.	Same as Alternative 2A.	Same as Alternative 2A.	Same as Alternative 2A.	Same as Alternative 2A. Mountain bike trail increases use in sensitive resource area.	Same as Alternative 2A.

NEPA Goals	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
Alt 3A	Same as Alternative 2A. Expansion of trails may limit resources to fully sustain trail network successfully.	Additions of trails and trail facilities for a variety of users throughout the park will assist in reducing visitor conflict and a limited variety of visitor experiences.	Use of Sustainable Trail Guidelines will minimize resource degradation. Increase in trail miles may increase resource disturbance.	New trails expand opportunities for access and information on park resources.	A balanced approach is achievable by improved trail conditions and community connections. Use of sustainable design will assist in meeting goal.	Same as Alternative 2A plus the addition of road bike facilities to increase alternative transportation options in the Park.
Alt 3B	Same as Alternative 3A.	Same as Alternative 3A.	Same as Alternative 3A with addition of mountain bike trails that may increase human conflict conditions.	Same as Alternative 3A.	Same as Alt 3A. A portion of mountain bike trail will increase use in sensitive resource area.	Same as Alternative 3A.
Alt 4A	Same as Alternative 3A.	Additions of trails and trail facilities for a variety of users throughout the park will assist to reduce visitor conflict and a variety of visitor experiences.	Use of Sustainable Trail Guidelines will minimize resource degradation. Increase in trail miles may increase resource disturbance.	New trails in a variety of regions of the park expand opportunities for access and information on park resources.	Same as Alt 3A.	Same as Alternative 3A.
Alt 4B	Same as Alternative 3A.	Same as Alternative 4A.	Same as Alt. 4A with addition of mountain bike trails that may increase human conflict conditions.	Same as Alt. 4A, Mountain bike trail will increase use in sensitive cultural resource area.	Same as Alt 4A.	Same as Alternative 3A.
Alt 5	Same as Alternative 3A.	Same as Alternative 3A.	Same as Alt. 3A. Mountain bike trails location will minimize resource degradation and human conflict.	Same as Alternative 4A.	Same as Alternative 3A.	Same as Alternative 3A.

Figure 2: Alternative 1, No Action

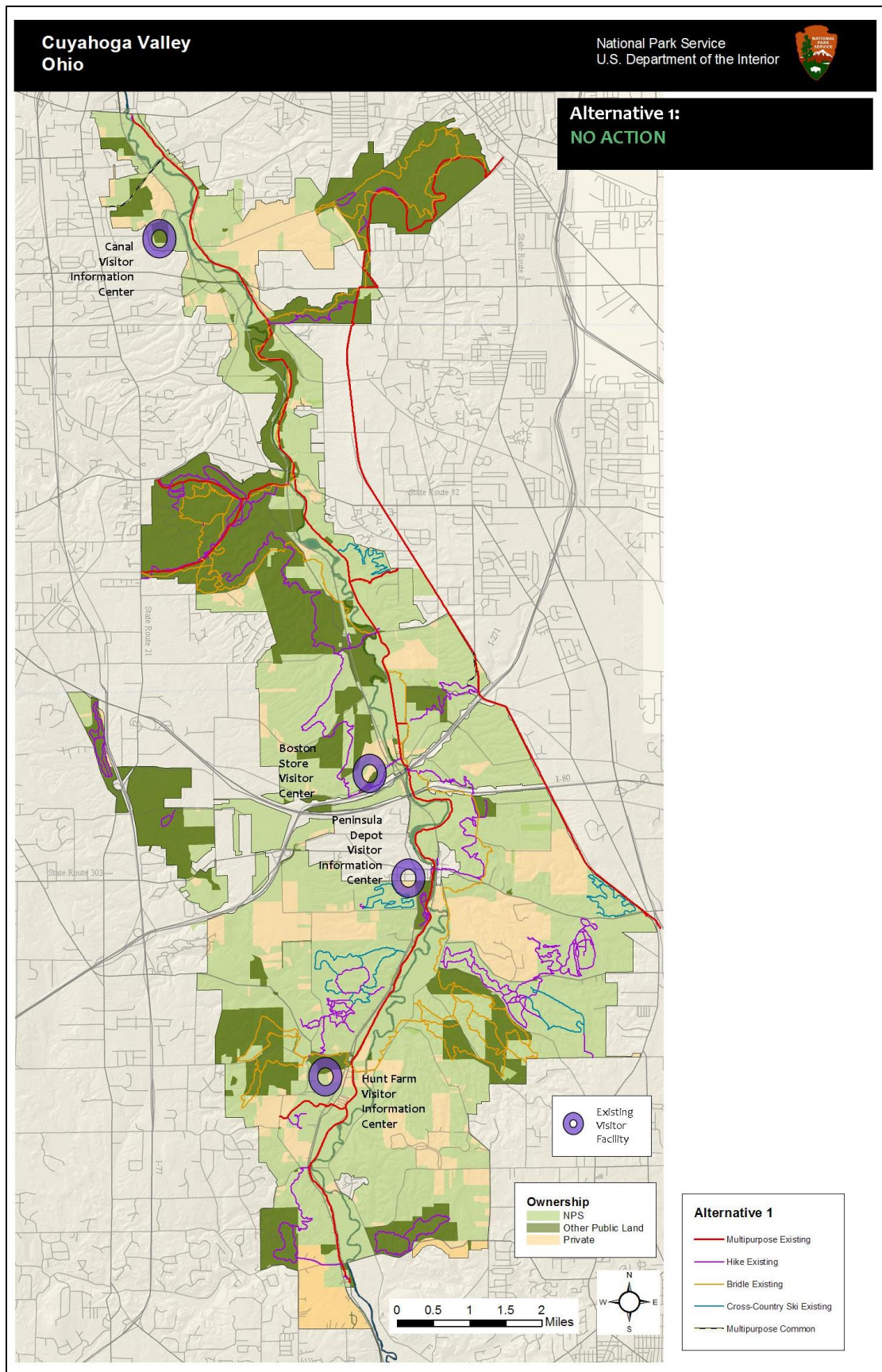




Figure 3: Restoration

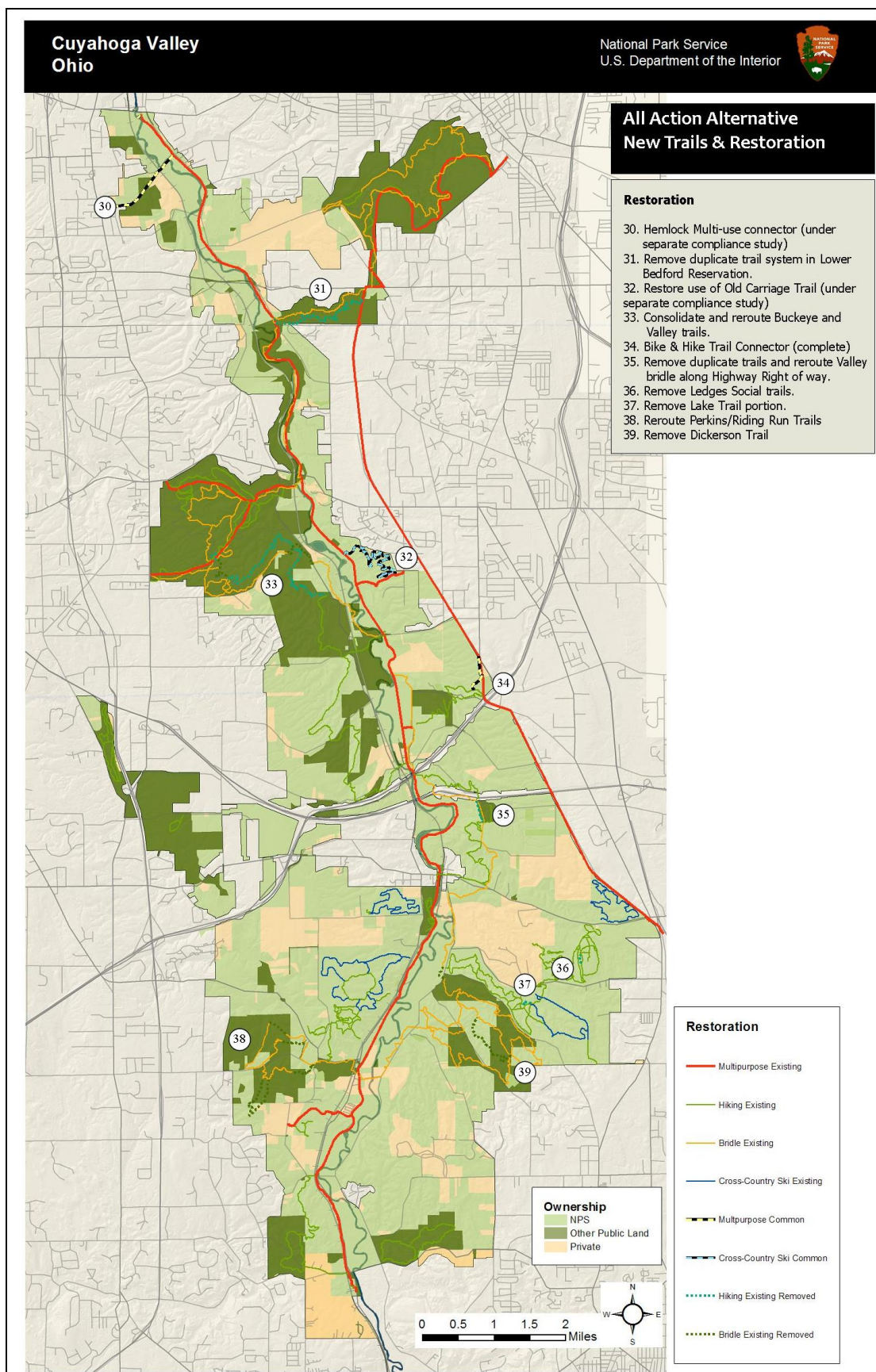




Figure 4: Trail Facilities

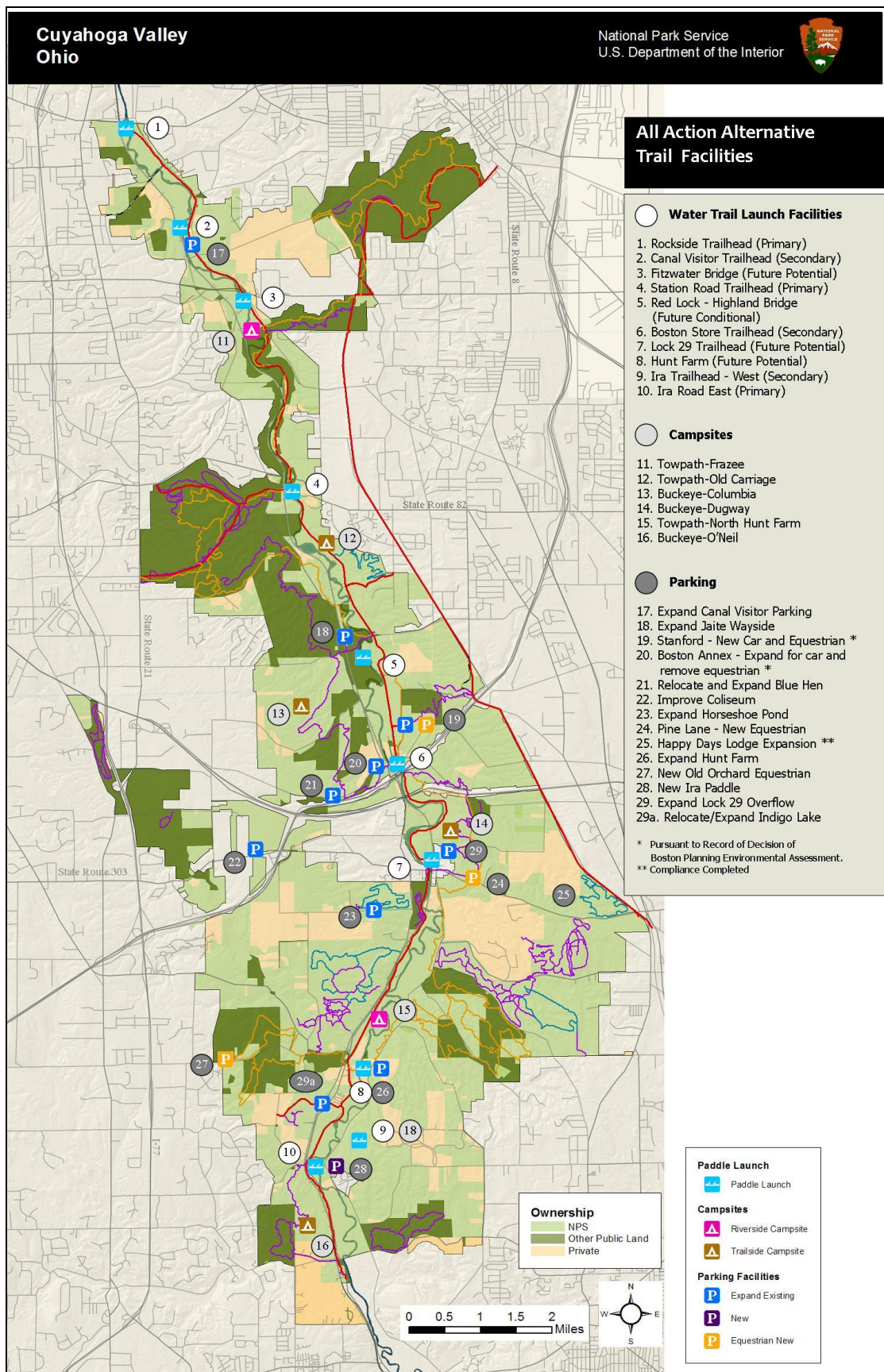




Figure 5: Alternative 2A, ReUse

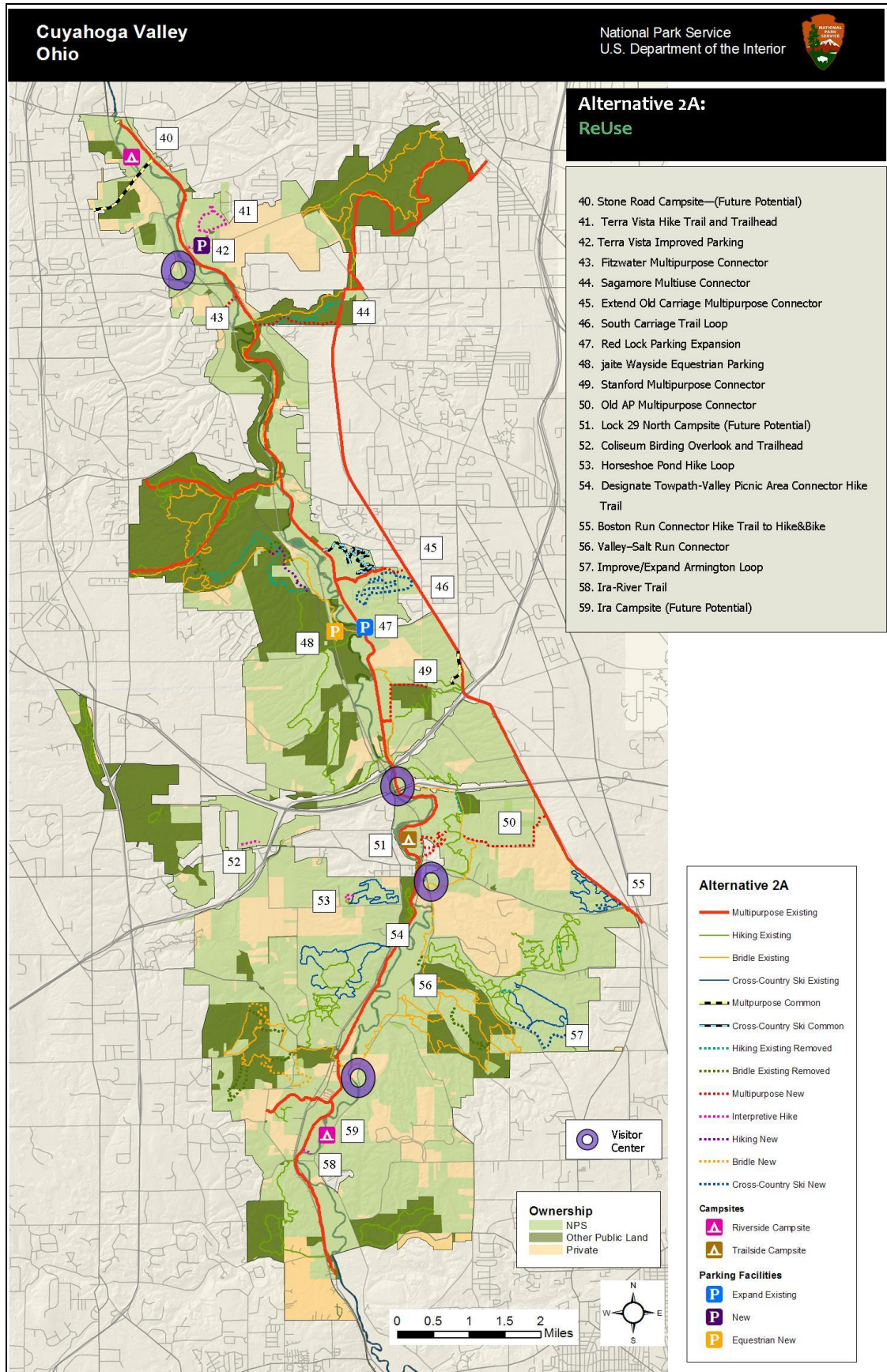




Figure 6: Alternative 2B. ReUse + Mountain Bike Trails

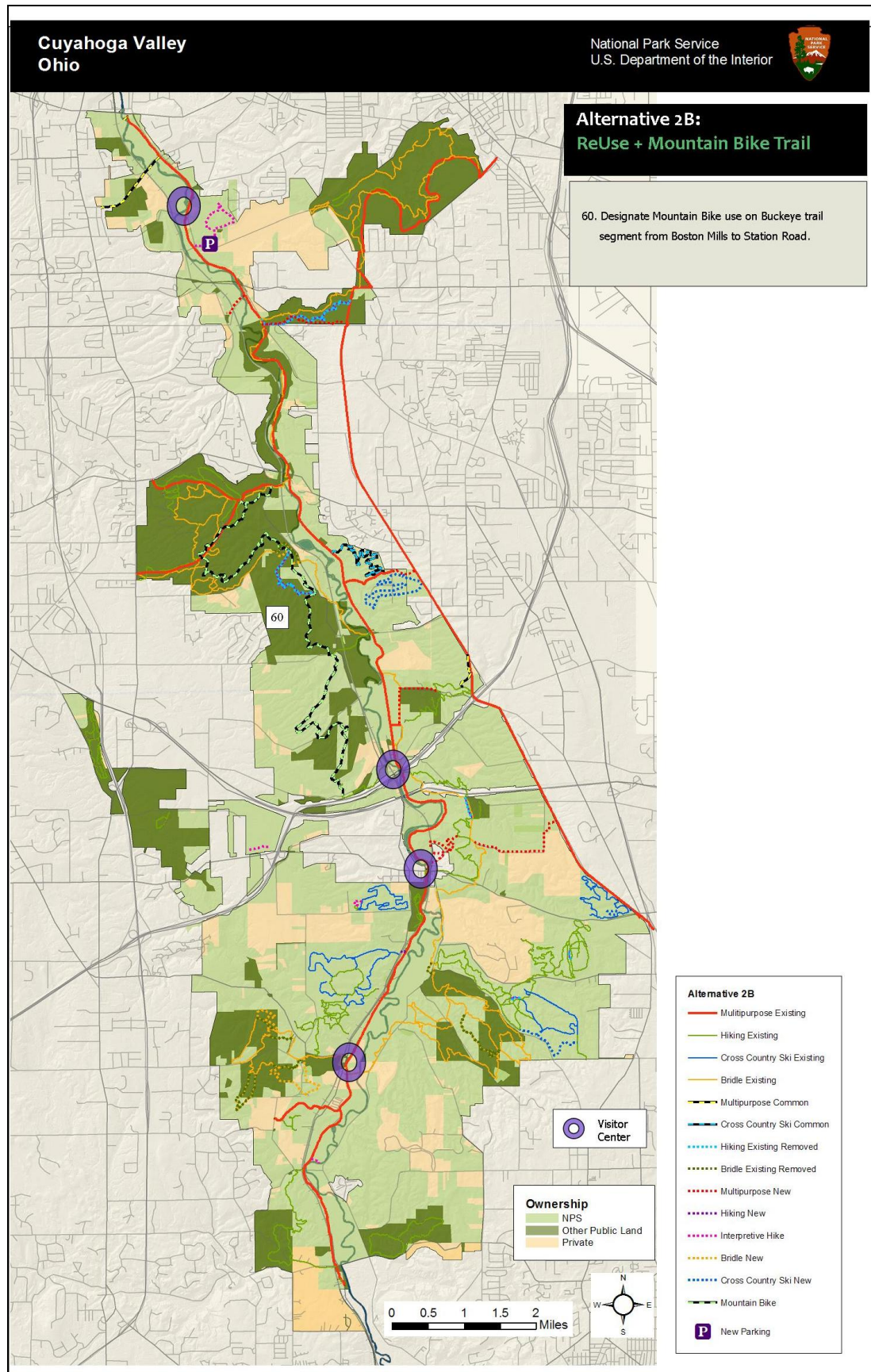




Figure 7: Alternative 3A. Recreation Focus

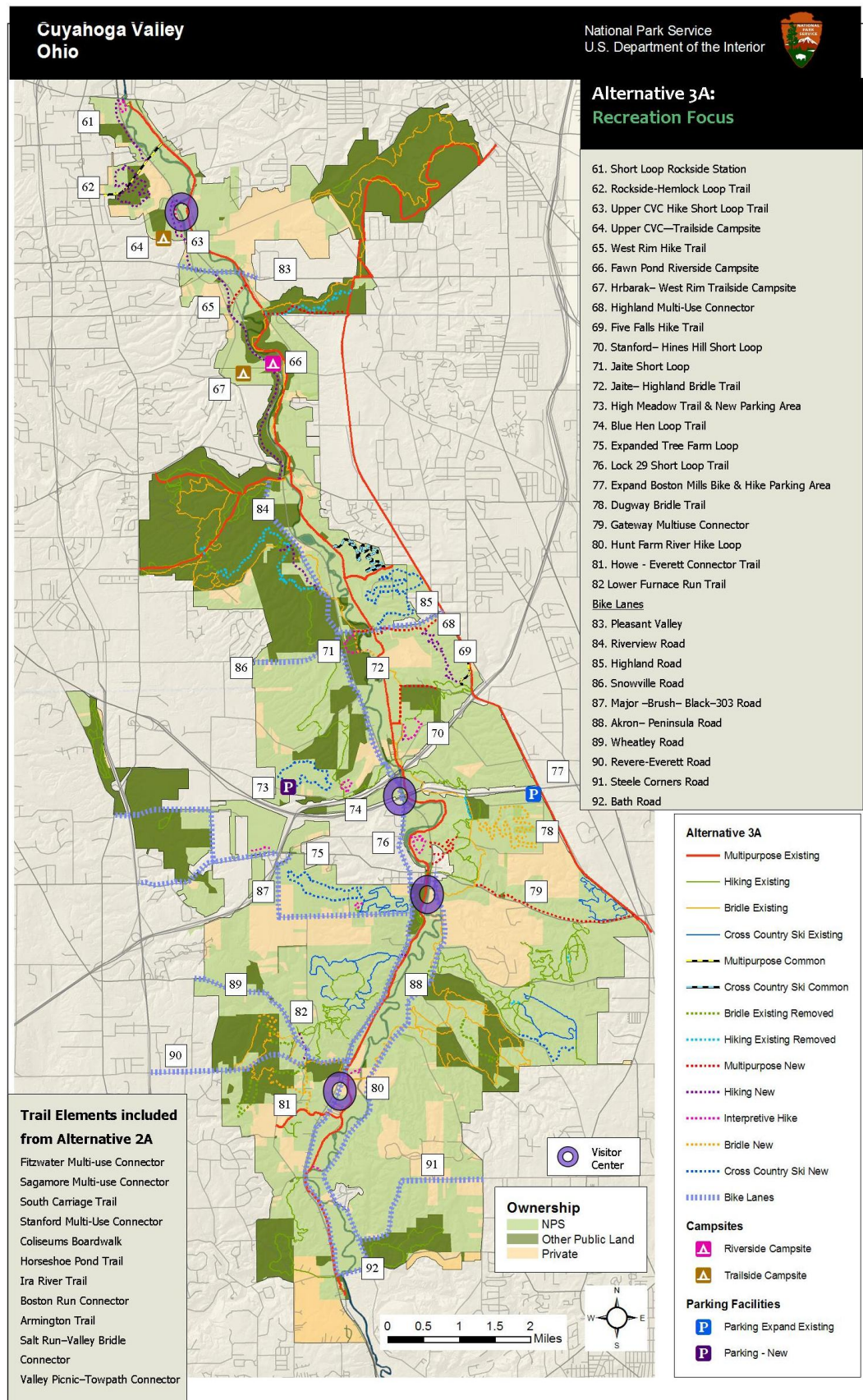




Figure 8: Alternative 3B. Recreation Focus + Mountain Bike Trails

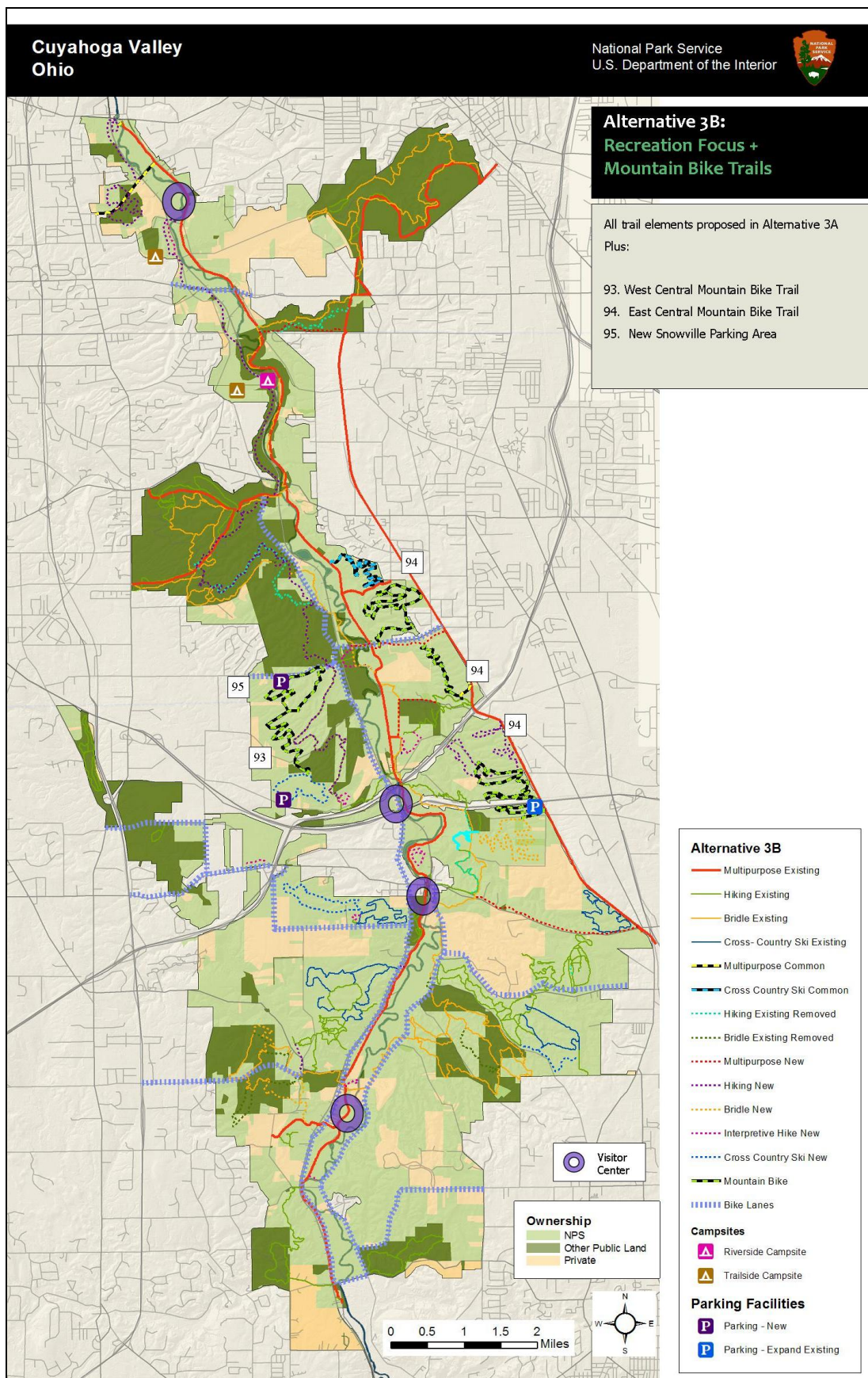




Figure 9: Alternative 4A. Destination Focus

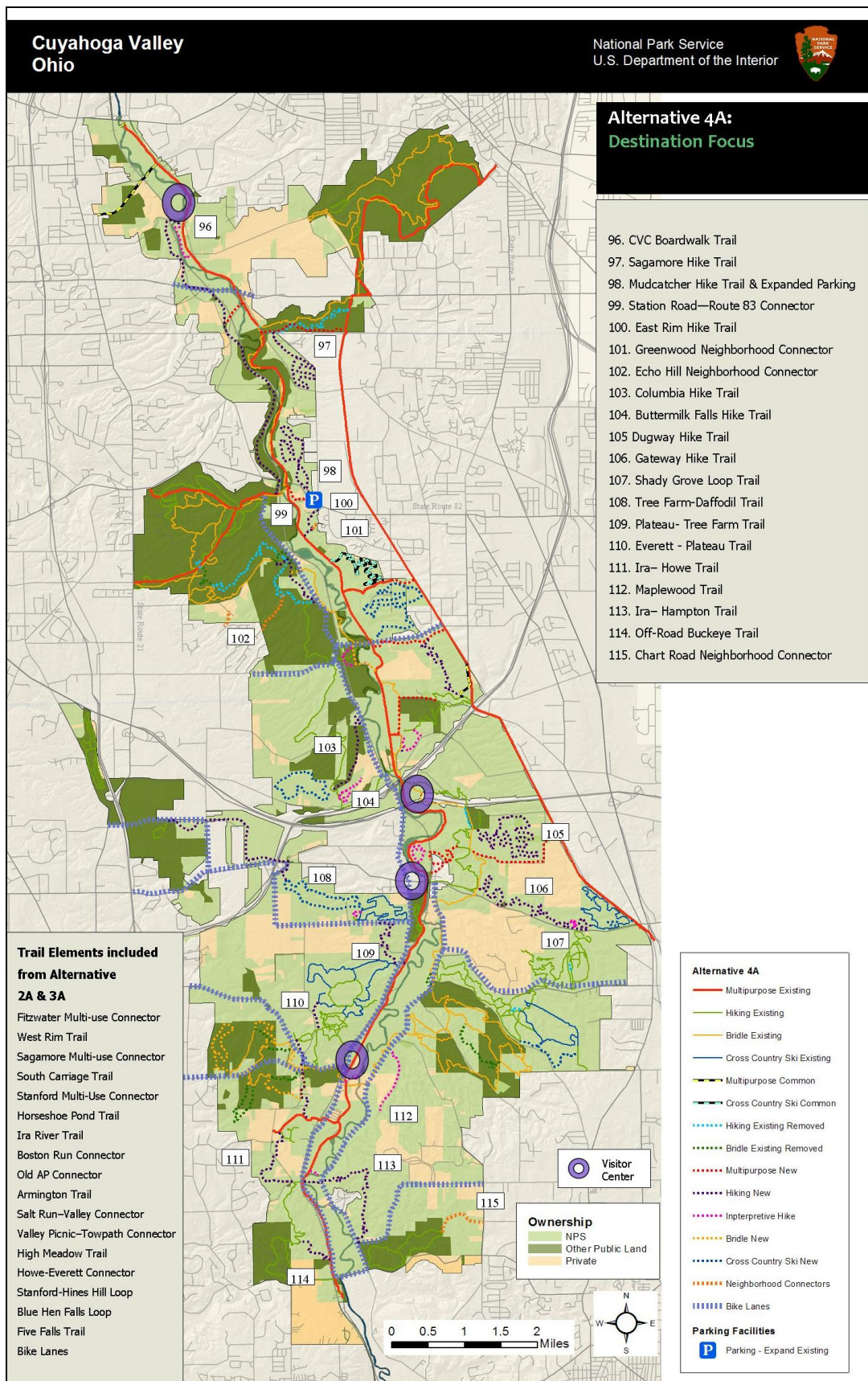




Figure 10: Alternative 4B. Destination Focus + Mountain Bike Trail

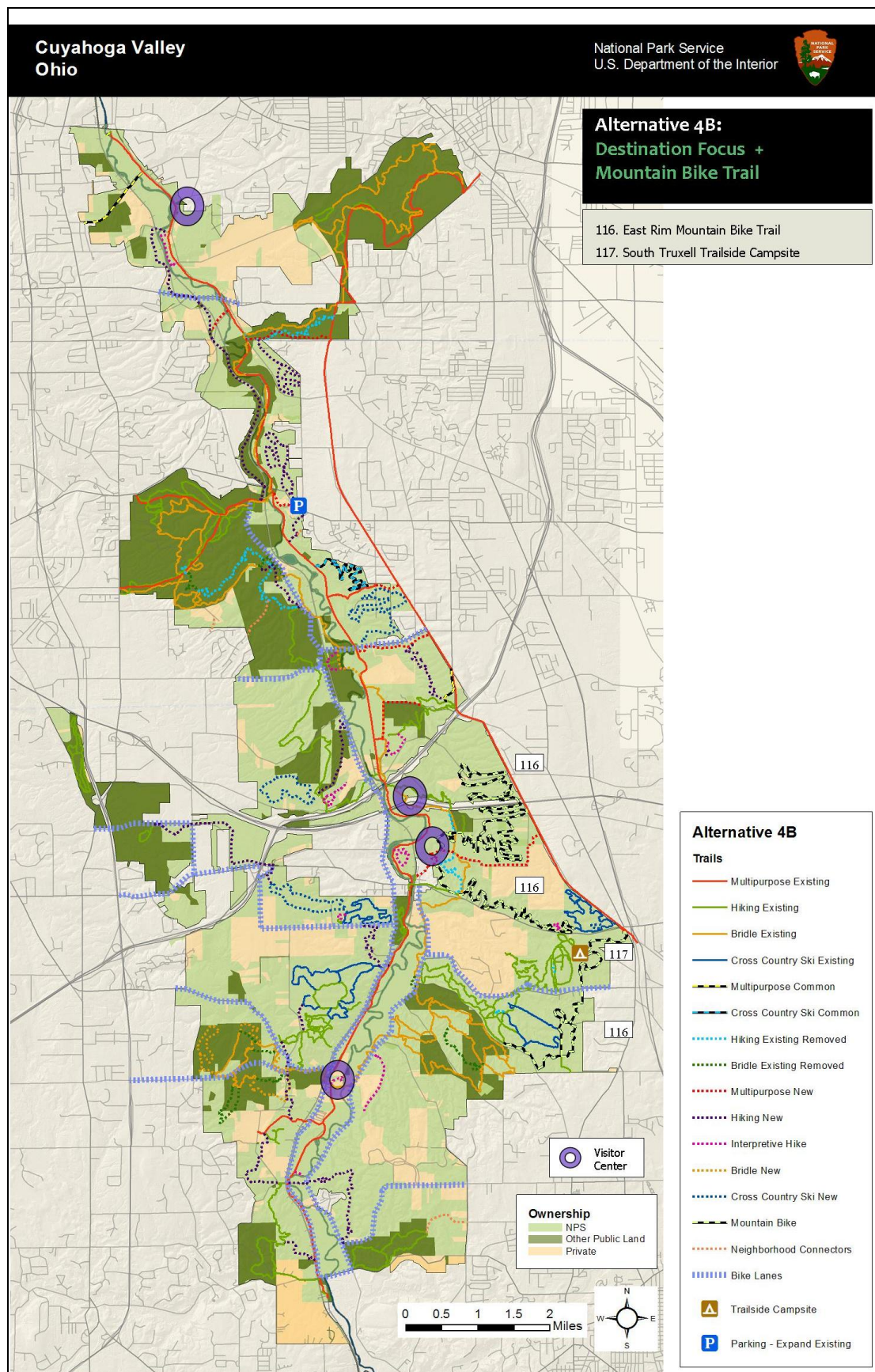


Figure 11: Alternative 5. ReUse, Recreation & Destination (Preferred Alternative)

