



## Appendix I

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# Scoping Document

*For the Comprehensive Trail Management Plan (Draft) – 2007*

## APPENDIX I

### PROJECT SCOPE STATEMENT MAMMOTH CAVE NATIONAL PARK COMPREHENSIVE TRAIL MANAGEMENT PLAN SUMMER/FALL, 2006

#### History and Introduction

During early 2006, the Superintendent of Mammoth Cave National Park initiated the development of a Comprehensive Trail Management Plan relating to the hiking, biking, and equestrian trails within the park. The purpose of this plan is to make an overall assessment of the trail system to guide the management and use of park trails for the next 10 years. While the primary focus of Mammoth Cave National Park is the cave itself, an ever-increasing number of visitors also regularly utilize the park trails and backcountry for hiking, backpacking, camping, horseback riding, and bicycling.

When Mammoth Cave National Park was established, the intention was to provide for use and enjoyment of the surface area in addition to the famous cave below. One of the purposes for creating the park was to:

“...insure a great recreational ground...where...thousands of our people may find...the most delightful outdoor recreation in...traversing the picturesque and rugged hills and valleys and great forests of the region included in the proposed park area.”<sup>17</sup>

Shortly after the park was designated, improvements around the Mammoth Cave Hotel and Historic Cave Entrance began, including the development of several short trails in the vicinity of the hotel and cave entrance. Over the years, these were improved and expanded into a series of loops which now comprise the six-mile “frontcountry” trail system in general proximity of the Visitor Center and Green River nearby. A series of other trails, including trails at Sloan’s Pond, Turnhole Bend, Sand Cave, and Cedar Sink were also developed which provided additional opportunities for short hikes. The longest of these is the Cedar Sink Trail, which is slightly less than a mile in length. All of these trails are located along the entrance roads on the south side of the Green River, the high-use areas within the park.

In the early 1970s, the park planned and opened a series of trails in the park’s 20,000+ acre backcountry area on the north side of the Green River. In 1974, these trails were officially opened to hiking and horseback-riding. The core arteries of this 60+ mile trail system followed old and pre-existing dirt roads, with the remaining trails built as connections between these roads by making paths or following other old roads through the hollows and across the ridges. These connecting trails tied together to create numerous loops of up to several miles through the backcountry. Most of these trails were essentially just dirt roads or paths, being constructed prior to the advent of widespread sustainable trail design, but First Creek Trail and portions of McCoy Hollow Trail were laid out by a landscape architect. Throughout the 1980s and 1990s, the backcountry trails received occasional NPS maintenance, and saw some limited improvements including the addition of some bridges, water bars, and minor trail relocations. However, shrinking budgets and staffs eventually led to a lack of any significant regular maintenance, and by the late 1990s, the backcountry trails had reached a condition of considerable disrepair.

Since inception, the trail system has become an increasingly popular destination for hikers, backpackers, and horseback riders. Throughout the 1990s and early 2000s, yearly recreational visits to the trails, including overnight stays in the backcountry, were reported in the 3,000-6,000 range. (These figures were

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<sup>17</sup> Speech of Hon. Maurice H. Thatcher, 11. The same language appears in the Senate, Committee on Public Lands and Surveys, Report No. 823, May 10, 1926, and the House of Representatives, Committee on the Public Lands, Report No. 1178, May 12, 1926.

trail re-routes and improvements have also been completed, (originally planned in 1999) including portions of Raymer Hollow Trail, Wet Prong Trail, and Blair Springs Branch Trail. Four major stream crossings have been reinforced by installing Armor-lock block, an erosion-control technology which stabilizes stream banks and crossings. The park has installed new bulletin boards at trailheads, produced a new, up-to-date backcountry map and brochure, installed a number of hitching posts for horses, installed reflective trail markers on all backcountry trails, and installed 40 new reflective Carsonite trail signs at various trailheads and key intersections. The Maple Springs Road, trailhead, and parking area has also been redesigned, widened, and repaved, including having picnic tables and restrooms added.

Building upon this increased focus on the backcountry, the Superintendent initiated this Comprehensive Trail Management Plan in the spring of 2006, in order to make an overall assessment and updated plan for the management of the trail system in park. The first step in this process was to announce and hold a Public Scoping Meeting and public comment period regarding the scope of the plan, which was held in the park on June 29, 2006, with an open comment period ending on July 14, 2006. A total of 110 people attended this meeting, and presented written and oral comments directly to the Superintendent and park management team. A total of 94 written comments were received during this meeting and the comment period that followed; 59 from the horseback-riding community, 15 from the bicycling community, and 20 from hikers/backpackers. These individual responses essentially were a reflection of the submitter's orientation. The horseback riders stated they wanted all existing trails on the north side of the river, including Sal Hollow, open to horses and be maintained adequately, (they are also opposed to sharing trails with bikes, and prefer to see bikes restricted to the south side of the river.) The bikers stated they want to keep Sal Hollow open to biking, would like to see it remain closed to horses, and have additional single-track trails be considered on the south side of the river. The hikers generally stated the importance of continuing to provide opportunities for hikers and backpackers, and stressed the importance of maintaining existing trails and protecting the park as a natural area. A common theme among the comments was an emphasis on seeing the park service adequately maintain existing trails and facilities.

The park Backcountry Management Committee met on July 31, 2006, to outline the scope of this plan, based on input from all park divisions and public comments received. The committee also assembled all of the current and previous management documents which relate to the trails in the park, which have been compiled over the years, to be incorporated into this trail planning process. After analyzing these public comments, divisional inputs, and previous documents, four key issues have been identified as primary areas to be addressed, and which will form the basis for the scope of this plan: visitor use issues, facility issues, maintenance issues, and administrative issues. A more specific set of management questions relating to these issues were also identified. The intent of the Comprehensive Trail Management Plan is to fully address the four primary "scope" issues, along with the management questions. The plan will delve into much greater detail in evaluating the status, goals, and needs of all the trails in Mammoth Cave National Park.

## **PRIMARY ISSUES/SCOPE**

**I. Visitor Use:** The primary users of park trails are:

- Hikers/backpackers
- Horseback/equestrian riders
- Off-road bicyclists (bike trails and single-track)

### **Questions:**

- 1.) Do existing trails meet the needs and desires of the public?
- 2.) Which user group(s) should use which trails?

obtained through voluntary registration at trailheads and by the issuance of official backcountry camping permits.) Over the last 10 to 15 years, a growing interest in bike usage in the park has also been observed. In 1999, park management was approached by the Bowling Green League of Bicyclists, a local bicycling club, about the possibility of permitting bicycling on one or more trails in the park. After some discussions, approximately 13.7 miles of trails were opened to bicycling on an experimental basis, while continuing to allow the traditional hiking and horseback riding on the same trails. These trails included all of Sal Hollow and Buffalo Trails, and part of Turnhole Bend Trail. From 1999-2004, virtually all of the maintenance on Sal Hollow trail was performed by volunteers from the Bowling Green League of Bicyclists, who donated hundreds of hours of labor to maintain and improve the trail. Their work included some significant reroutes of this trail. During most of this period, the hikers, horseback riders, and bicyclists shared the trails without any conflicts reported. However, in 2004 the bicyclists began to report that portions of the work they had completed were being impacted during wet periods by horseback riders who also used the trail. Park management responded to this issue by temporarily closing Sal Hollow Trail to horseback riding in 2004. Sal Hollow remains closed to horseback riding in 2006; all of Buffalo Trail and Turnhole Bend Trail which is open to bicycles also remains open to horses and hikers.

The Sal Hollow Trail closure resulted in considerable visitor feedback, including positive comments from hikers and bikers, and negative comments from the equestrian community. Mainly as a result of this issue, the local horseback-riding community organized into a new interest group in 2004, the Mammoth Cave Equestrian Trail Riders Association. The primary objectives of this association were to keep all horse-trails open, and promote safe, eco-friendly riding in the park. A similar negative response from the equestrian community was generated in 2005, when the park announced the possibility of opening some administrative roads to bikes under a new nationwide agreement between the National Park Service and the International Mountain Bike Association. During a public comment period for this proposal, the horseback-riding community submitted approximately 700 comments in opposition to opening any roads which would be shared by horses and bikes, primarily citing safety concerns posed by sharing trails. The biking community submitted less than a dozen responses in favor of the proposal during this period. The park's action on this matter was to open four administrative roads to bicycles on the south side of the river, which are not used by horses (about 5 miles total), but none on the north side. Currently, the park has a total of approximately 80 miles of trails open to various user groups. All trails are open to hiking, approximately 50 miles are open to horses, and approximately 20 miles are open to bikes.

In 2005, park management called on each of the three primary backcountry user groups (the Mammoth Cave Equestrian Trail Riders Association, the Bowling Green League of Bicyclists and the Mammoth Cave Chapter of the Sierra Club), to form a single coalition, the Mammoth Cave Backcountry Summit Council, in order to facilitate communication and exchange information directly with each other and the NPS regarding backcountry issues at the park. This group has since met semi-annually, and has found common ground on a number of issues, including enhancing resource protection and supporting the maintenance and sustainability of all trails in the park. This Summit Council has also participated in several backcountry trail workdays, where members from all groups worked together with the NPS on a variety of trail projects. During NPS FY05, members from this Council donated a total of 308 hours of volunteer labor during these projects, with workdays continuing through 2006, and hopefully beyond. The Bowling Green League of Bicyclists continues to perform regular maintenance on the Sal Hollow trail.

In 2005 and 2006, the park constructed a new 9-mile, graveled biking and hiking trail, also on the south side, essentially following a historic railroad bed leading from the Visitor Center to Park City. This trail, the Mammoth Cave Railroad Bike and Hike Trail, was constructed utilizing modern technology and sustainable design. This new trail is receiving significant use by both hikers and bikers, with numerous folks being seen on the trail daily. A proposed extension of this trail, leading west from Sloans Crossing to Houchins Ferry, is currently in the very early, conceptual, planning stage.

Since 2003, the park has also completed or initiated a number of projects aimed at improving overall conditions of the backcountry, decreasing recreational impacts, and increasing user satisfaction on trails. A major, sustainably-designed restoration of Collie Ridge Trail was completed in 2005 which completely rehabilitated and graveled the trail, which is the most heavily used trail in the backcountry. Several major

## **II. Facilities:** What are our facility needs? Trails, parking lots, restrooms, etc.

### **Questions:**

- 1.) Are existing trails adequate, in terms of length, and type?
- 2.) What, if any, new trails would be desirable, including the proposed extension of the Bike/Hike trail?
- 3.) Are existing parking lots adequate? What are future needs? Should new lots be considered; should existing lots be expanded/improved?
- 4.) Are other facilities adequate? (Restrooms, hitch-rails, trash cans, signs, etc.)
- 5.) How should the Raymer Hollow Trail, the Sal Hollow Trail, the group campground, and the Maple Springs International Center for Science and Learning be best connected by trails? Should the existing trailhead location be expanded, or should an additional trailhead be constructed?

## **III. Maintenance: What is the status and what are our needs?**

- Maintenance and upkeep of existing trails, parking, signage
- Continuing with completion of approved reroutes of Good Springs Trail, Wet Prong of Buffalo Trail, and McCoy Hollow Trails
- Sustainable design
- Continuing with stream crossing stabilization

### **Questions:**

- 1.) What is the best approach for maintaining existing park trails?
- 2.) If any new trails are recommended, what is the best approach for their maintenance?

## **IV. Administration:**

- 1.) Assessing and recording numbers of visitors
- 2.) Interpretation (maps, signage, trail marking, bulletin boards)
- 3.) Enforcement

### **Questions:**

- 1.) How do we keep track of numbers of visitors, what extent of accounting is adequate, what do we need and want?
- 2.) How can communications between the NPS and visitors regarding safety and resource protection be most efficiently achieved? How do we maximize compliance with regulations?
- 3.) Should we consider restricting trail use during extended periods of wet weather?
- 4.) To what extent, if any, should the park service address the possible future need and feasibility of implementing a fee and/or permit system regarding trail use?