



Comments and Responses

Comprehensive Trail Management Plan

Mammoth Cave National Park, Kentucky

The purpose of this document is to describe the public review process related to the Draft Comprehensive Trail Management Plan and Environmental Assessment (Draft CTMP/EA), provide a summary of comments received, and provide a response to the comments received. All the comments received are available on the NPS-Planning, Environment and Public Comment (PEPC) website, www.parkplanning.gov.

HISTORY OF PUBLIC REVIEW

The Draft CTMP and its EA were published for a 60-day public review on January 24, 2008, and open for written comments until March 24, 2008. During the comment period, a total of 2,905 written comments were received via email, via the PEPC website, standard mail, or hand delivery. The comments ranged from single sentences to letters of several pages, and presented a variety of viewpoints and concerns regarding the alternatives of the Draft CTMP/EA. Comments covered a wide spectrum of thoughts, opinions, ideas, and concerns. The most commonly addressed themes pertained to visitor use and experience, specific types of uses, safety, and environmental impacts.

RESPONSE TO COMMENTS RECEIVED

Mammoth Cave National Park (park) appreciates all those individuals and groups who are interested in the future of the park and provided comments on this proposal. The park has elected to respond to those comments that were considered substantive. Comments are substantive if they raise, debate, or question a point of fact or policy by:

- Challenging accuracy of analysis;
- Disputing information accuracy;
- Suggesting different viable alternatives; or
- Providing new information that makes a change in the proposal.

From the 2,905 submissions received during the comment period, 53 substantive comments were extracted. These comments were summarized, combined into 20 issue statements, and are presented here, along with a response per issue.

Comments in favor of or against an alternative, that offer opinions, or provide information not directly related to issues or impact analyses, are not considered substantive (NPS Director's Order 12). Non-substantive comments have been considered by the planning team, but do not require a formal response.

SUBSTANTIVE COMMENTS AND RESPONSES

The following is a summary of the substantive comments received and the park response to those comments.

Comment: Comments were received suggesting a modified Alternative 4 (823 comments), which would:

- incorporate the primary elements of Alternative 4;
- construct more than 6 miles of sustainable, single-track trail; and,
- allow Sal Hollow to remain open to bicycles until the final CTMP is implemented.

Response: Alternative 5 was the park's preferred alternative, and the environmentally preferred alternative in the EA, prior to public review and comment. It was not selected because of the overwhelming number of public comments received which opposed it. Park management concluded that the slightly higher Value Analysis score for this alternative did not outweigh the importance of selecting an alternative with a high level of public support that scored almost as high.

Therefore, the park has elected to implement Alternative 4 as the Final Selected Action.

The 6-mile proposed trail listed in the Draft CTMP/EA as Alternative 4 is a conceptual estimate within approximately 1,000 acres. The EA examined the impacts expected from construction of a 6-mile trail and connector trails; therefore, additional compliance work would be required for additional mileage or any other additional trails not considered in the CTMP/EA.

The CTMP states the park will "study the potential of other trail proposals. . .that balance visitor use interests with resource protection, and are in accordance with the park's enabling legislation."

Implementation of individual elements of the CTMP, such as new trail construction and initiation of the trail monitoring program, will occur as funding becomes available.

Comment: Comments were received suggesting that the trail system and permitted visitor use remain as is, as stated in Alternative 1; these comments also supported improvements to trail related facilities and sustainable design of trails (51 comments).

Response: Alternative 1, or the No-Action Alternative, is required by the National Environmental Policy Act to serve as a baseline for comparing other alternatives. However, the park pursued the CTMP/EA because park managers determined that status quo is not acceptable; managers saw a need to resolve visitor use conflicts and prevent trails from degrading to the point of causing resource damage. This was also supported by the public in the June 2006 scoping meeting. Facility improvements and sustainable design are included in the park's Selected Action.

Comment: One comment was received stating that the results of the Value Analysis appeared to be subjective and skewed.

Response: To accurately represent all aspects of park operations and visitor interests, the park used a Value Analysis to assess the Plan's alternatives. The Value Analysis is a decision-making process and an objective tool that allows evaluation of the relationship between impacts, results, and costs; it identifies the alternative with the greatest value in accomplishing NPS goals and objectives. A group of park staff representing each of the park's divisions (Interpretation, Law Enforcement/Emergency Services, Facility Management, Science/Resource Management, Administration, and the Superintendent's Office) was assembled to formulate the Value Analysis. They applied their own professional judgment and information gained from the scoping meeting to the Value Analysis. The park's management team reviewed their work before it was finalized. In using the Value Analysis, all NPS laws, policies, regulations, and guidelines were consulted.

The Superintendent seeks equitable opportunities for all park visitors. Appropriate uses of the park trails and related facilities are identified in the Draft CTMP/EA as hiking, horseback riding, bicycling (recreational and mountain biking), cross-country skiing and snow-shoeing (as weather permits), and accommodations for persons who are mobility impaired in their outdoor pursuits.

Comment: Eleven comments were received questioning the impact of trail users and the lack of scientific study on the impact of trail users.

Response: Sound information on trail use and trail use impacts is needed for responsible management decisions. The Draft CTMP/EA states that a formal trail monitoring program will be established as part of the CTMP/EA. The Superintendent recognizes the need for further research and analysis; however the park has compiled a large amount of data that has been and will continue to be used for park trail management, including:

- the Northside District Trailhead Survey (Appendix IV of the Draft CTMP/EA);

- a visitor analysis published in 1995 (Peine, J., Fly, M., Burde, J., Stynes, D., Stevens, B., 1995, Visitor Behavior, Perceptions, Opinions, and Economic Impact Mammoth Cave National Park, University of Tennessee, Knoxville, Tennessee;
- a 1995 study examining the effectiveness of the aging septic tanks at the Maple Springs Research Center, noting that elevated bacteria counts in some springs were attributable to run off from a parking area used by horse trailers. (Uhlenbruch, Christoph R., 1995, Hydrology and Groundwater Quality of the Maple Springs Area, Mammoth Cave National Park, Kentucky. Proceedings of the Mammoth Cave National Park's Fourth Science Conference.);
- a trail condition assessment conducted by park staff in 1996;
- multiple environmental (NEPA compliance) reviews completed for trail projects;
- the park's Facility Management Division regular evaluation of park trails for internal reports and funding requests;
- visitor comments consistently reporting the poor condition of park trails.

The park's Water Resources Management Plan (April 2006, Joe Meiman, NPS Hydrogeologist), outlines the desired future conditions for water quality of the park and serves as a guide to all park actions that may affect water quality. It provides data summaries from many years of long-term, park-wide (watershed scale) study (north and south of Green River) for a wide array of parameters, as measured at the most-downstream point of each watershed. However, there has been limited study of specific use at the small scale or trail specific level.

Comment: Comments were received which promoted multiple-use trails (34 comments).

Response: Multiple-use trails can be found on many public lands. Although no reports reflecting a safety problem have been recorded, throughout this planning process park trail users have clearly expressed their interest in separating user groups, expressing safety as the primary reason.

Comment: Comments were received suggesting a system of trail openings and closings to horses to improve trail conditions (18 comments).

Response: With implementation of the CTMP/EA plan, overall trail conditions/health should greatly improve through the use of a monitoring system, sustainable design in planning and maintaining the trails, and increased trail stewardship. Should trail conditions deteriorate, the park will employ various management options (hardening of trails, rehab of trails, reroutes, permits, trail closures, etc.) to ensure that unacceptable impacts to park resources do not occur.

The park would engage the public as appropriate in this decision making process.

Comment: One comment suggested that the Sal Hollow/Buffalo/Turnhole trail loop could be split into two loops; the east loop could be designated for horse use, and the west loop could be designated for bikes.

Response: One factor within the Value Analysis addresses operational efficiency from the park management perspective. This suggestion would be difficult to enforce and interpret to visitors. Under the Selected Action, a new trail will be developed and designed to accommodate bike use. Sal Hollow will not be open to bicyclists.

Comment: One comment, in support of Alternative 5, suggested development of a new trail parallel to Houchins Ferry Road to provide a connector-loop trail, to keep trail use off the road itself.

Response: This and other comments in support of Alternative 5 were considered, but the park elected not to implement Alternative 5. Due to topography and for the protection of sensitive cultural and natural resources, development of a trail in this area is currently considered inappropriate.

Comment: Comments were received stating the importance of volunteers in maintaining park trails (730 comments). Similarly, 770 comments promoted the development of a formal agreement with a local bicycle organization that would encourage members to volunteer in the park.

Response: Volunteers are essential to many facets of park management; in 2007, 408 volunteers contributed 37,770 hours, the equivalent of 18 employees.

To work toward a sustainable trail system, the park will call upon all trail users to use the trails in a responsible manner and to volunteer their time and effort to maintain, rehabilitate, and/or construct park trails. The Superintendent will seek to formalize volunteer agreements with all trail user organizations.

Comment: Eight comments were received which questioned the validity of the costs estimates for the alternatives as listed in the Draft CTMP/EA.

Response: The cost estimates for the alternatives were prepared in accordance with NPS estimating requirements; the level of detail for this type of cost analysis, which, although appropriate for this level of study, may be less accurate than a more detailed estimate to be prepared when the project is implemented. Costs could be substantially reduced through the use of volunteer labor and donations.

Comment: One comment was received stating the importance of having a horse livery (commercial use authorization) as a service to park visitors.

Response: For over 15 years, a commercial use authorization for a horse livery to provide guided rides on park trails has been in place. The business also provides horse trailer parking and camping on private property adjacent to the park boundary. In 2007, 2,281 visitors used the horse livery.

Comment: Comments were received stating horses provide accessibility to park trails for visitors with mobility concerns (1,669 comments).

Response: The Superintendent acknowledges the benefit of horse use for people who are mobility impaired. Double J Stable operates in the park under a Commercial Use Authorization and provides an opportunity for mobility impaired visitors to experience the backcountry on horse. Alternative 4 would provide 50 miles of trail for horse users.

Comment: One comment was received suggesting the park use the present system of trails instead of developing new trails.

Response: The present trail system and its condition as outlined in Alternative 1 (No Action), was determined by park staff and the Superintendent to be unacceptable, and many visitors have expressed their dissatisfaction with the trails. The purpose of the CTMP/EA is to improve the condition and management of park trails. Alternative 5, the Preferred Alternative in the CTMP/EA, proposed a different use configuration of the existing 85 miles of park trails, but public concerns were raised regarding that alternative. The Final Selected Action (Alternative 4) adds 6 miles of trail (when compared to the other alternatives), a 7 percent increase to the 85-mile park trail system. Although implementation of Alternative 4 does result in a modest increase of mileage to the trail system, it resolves visitor concerns and conflicts while meeting the park's purpose and need.

Comment: Ten comments were received suggesting excluding horse use from the Sal Hollow Trail. 1000+ were received requesting Sal Hollow be reopened to horse use.

Response: Hikers and bicyclists expressed their dissatisfaction with the results of horseback riders on Sal Hollow Trail, citing trail wear and horse waste.

The park is seeking to balance the needs of different user groups, each of which has had an interest in using the Sal Hollow Trail. Under the Selected Action, horse use and bike use will be separated. Use of the new trail will be limited to bicyclists and hikers, and horse use and hiking will be allowed on Sal Hollow Trail.

Comment: One comment was received stating the use of mountain bikes on trails is inconsistent with the mission of the NPS, and that the park does not have a special regulation for bike use on trails.

Response: The 1916 Organic Act established the purpose of national parks: "...to conserve the scenery and the natural and the historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Congress established Mammoth Cave NP, in part, as a recreational opportunity located near population centers in the eastern United States. Mammoth Cave NP's enabling legislation (1941) states the park provides an "...exceptional opportunity for developing a great national recreational park..." The park's General Management Plan states: "The aim of management at Mammoth Cave National Park is to perpetuate the integrity and diversity of geologic features and life systems that are associated with the caves, and the aquatic and terrestrial environments, for these have aesthetic, recreational, educational and scientific values to man." The NPS holds a formal agreement with the International Mountain Biking Association supporting bicycle use: NPS Director Bomar's memorandum regarding the agreement states: "...The NPS is committed to identifying and providing opportunities for the public to participate in outdoor recreation to promote health and wellness..."

One of the reasons Mammoth Cave National Park was established was to provide recreation for the public. Cave tours, picnicking, camping, hiking, fishing, canoeing, and horseback riding are the traditional uses of the park. In the early 1970's, the park planned and opened a series of trails on the northside of Green River, and in 1974, these trails were officially opened to hiking and horseback-riding.

Over the last 10 to 15 years, a growing interest in bike usage in the park has been observed. In 1999, park management was approached by the Bowling Green League of Bicyclists, a local biking club, about the possibility of permitting bicycling on one or more trails in the park. After some discussion, approximately 13.7 miles of trail (Sal Hollow) were opened to bicycling on an experimental basis, while continuing to allow the traditional hiking and horseback riding on the same trails. From 1999-2004, virtually all of the maintenance on this section of trail was performed by volunteers from the Bowling Green League of Bicyclists. The experimental period proved to be successful and bicycles to be an appropriate use.

The park will promulgate a special regulation for use of mountain bikes on trails during the implementation of the Selected Action.

Comment: The trails need to be sustainable (673 comments).

Response: The Selected Action requires sustainable design of all new trails and reroutes. The park will seek formal agreements with all trail users groups to encourage responsible use of trails and volunteer assistance in maintaining the trails.

Comment: Comments received addressed safety issues that arise when horses and bicyclists use the same trails (128 comments).

Response: Park trail users stated their preference to separate trail user groups because of safety issues in the June 2006 scoping meeting, and again during the public comment period. The park has no record of reported accidents or incidents where a conflict between a horse and bicycle led to an accident or injury on backcountry trails. The Superintendent acknowledges the interests of the users groups.

Comment: Three comments were received promoting seasonal use of trails by horses to prevent erosion.

Response: The park receives an average of 52 inches of rainfall per year. Erosion is a major concern in maintaining the trails, and illustrates the need for sustainable trail design. The park has begun to implement sustainable design in ongoing trail maintenance work and trail re-routes to address problems with soil erosion on park trails. While the park believes that actively using sustainable trail design will reduce the level of concern with soil erosion, the park also believes that the implementation of a resource monitoring program will be essential to better understand and address resource impacts like soil erosion. The Selected Action encourages all trail users to adhere to the Leave No Trace environmental ethic principles and practice responsible use of trails.

Comment: Comments were received that requested a special regulation for the authorized use of bikes on backcountry trails for specific locations/trails (126 comments).

Response: The special regulation to formalize the use of bikes on backcountry trails will be specific to defined trail locations.

Comment: Three comments were received stating that the park has no legal authority to allow bikes on backcountry trails without the existence of a special regulation for that purpose.

Response: The Superintendent acknowledges that the park lacks a special regulation for bike use on backcountry trails. However, the park and the NPS recognize mountain bikes as legitimate trail users. This EA will also serve as the necessary NEPA compliance document for promulgation of the special regulation.

In part, the CTMP/EA was initiated to resolve trail use conflicts and management issues. It establishes specific locations for bike use. During the implementation stage, the promulgation process to establish a special regulation will begin.

Other Comments

Though not considered as substantive comments by definition, three groups of comments were notable due to their sheer volume:

- Comments were received stating the writers were opposed to Alternative 5, the Preferred Alternative (2,043 comments).
- Comments were received stating the writers were in favor of Alternative 4 (1,936 comments).
- Comments were received promoting trail stewardship (1,728 comments).