

# **Management Issues and Threats to the Longest Cave**

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## **Abstract**

Impacts imposed from outside Mammoth Cave National Park's border by highways, sewage and farming runoff, industrial development, tourism development, and concomitant air quality problems create management challenges. Matching these external pressures is the fact that the cave system extends far beyond the park established by Congress in 1926. Exploration and scientific research has kindled a belief based on scientific understanding that Mammoth Cave will one day be mapped to at least 1,600 kilometers, perhaps extending from near Munfordville in the northeast to near Bowling Green in the southwest. Threats to the ecosystem health of Mammoth Cave have been repeatedly met over the decades and will be discussed. Since 1999 a new challenge has emerged in the Kentucky Trimodal Transpark. It is proposed that this facility will include a passenger and freight airport, a railroad and trucking node, an industrial park, and numerous new highway links. Plans are to situate this 1,600- to 2,400-hectare facility on privately owned farmland ten kilometers southwest of the park boundary within the Graham Springs drainage basin on the Sinkhole Plain between Bowling Green and Smiths Grove. This presentation will provide an update on the national cave and karst community's efforts to protect the karst of south-central Kentucky, including Mammoth Cave. Discussion will focus on the need for a comprehensive hydrological investigation to understand the characteristics of the underground drainage divide at all stages and to assess the risks to Mammoth Cave National Park.