



5.21 Karst Impacts

5.21.1 Introduction

Karst ecosystems are important and unique features of southern Indiana. The term karst refers to “landscapes characterized by caves, sinkholes, underground streams, and other features formed by the slow dissolving, rather than the mechanical eroding of bedrock” (AGI, 2001). Karst forms as water dissolves bedrock.

Water resources are especially important in karst areas. Very little water purification occurs because the water flows directly through cracks and fissures in rocks rather than percolating slowly through soil as in other types of terrain. Therefore, water quality is an important concern in karst areas. Karst areas are also important because they provide habitat for a number of rare, threatened, and endangered species. Many species of bats including the federally endangered Indiana Bat (*Myotis sodalis*) use caves which form in karst areas.

5.21.2 Methodology

Section 2 is not located within a karst region. Field reconnaissance conducted during the summer and fall of 2004, and spring and summer of 2005, revealed no karst features to be present either within the Section 2 corridor or outside the corridor and potentially interconnected with the corridor. A Karst Memorandum of Understanding (MOU) was signed by INDOT, IDNR, IDEM, and USFWS on October 13, 1993, that provides guidelines for construction of transportation projects in karst regions in Indiana. If any karst features are identified within Section 2 during future studies or construction, the Karst MOU will be implemented.

5.21.3 Analysis

There are no known karst features within or connected to the Section 2 corridor; therefore, there will be no karst impacts associated with the project in Section 2

5.21.4 Mitigation

Because there are no karst impacts associated with Section 2, no karst impact mitigation is offered.

5.21.5 Summary

Field reconnaissance conducted during the summer and fall of 2004, and spring and summer 2005 revealed no karst features to be present either within the Section 2 corridor or outside the corridor and potentially interconnected with the corridor. Since there are no known karst features within or connected to the corridor, there would be no karst impacts associated with the project in Section 2.



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