INTRODUCTION

The National Park Service (NPS) has undertaken a Special Resource Study of the Loess Hills landform region in western Iowa (study area) in response to the requirements of Public Law 106-113 (1999). Special Resource Studies are designed to evaluate natural and cultural resources within a selected study area. The evaluation determines if an area is nationally significant, and whether it meets suitability and feasibility criteria for addition to the National Park System. In accordance with this legislative direction, the National Park Service has provided a range of management alternatives (options) for the long-term preservation of the Loess Hills of western Iowa.

The National Park Service, through the Secretary of the Interior, forwards the study and any recommendations to Congress.

Purpose

The purpose of the Loess Hills Special Resource Study (SRS) is to evaluate the Loess Hills landform region for possible designation as a unit of the National Park System and to determine what measures should be taken to preserve the Loess Hills in western Iowa. This environmental assessment (EA) analyzes management alternatives and their direct, indirect, and cumulative impacts to the human environment, per the requirements of the National Environmental Policy Act (NEPA) (42 U.S.C § 4379 et seq.), NEPA regulations (40 CFR 1500-1508), and NPS policies (National Park Service 2001).

Need

As previously described, the Loess Hills of western Iowa are a distinctive topographic region encompassing more than 640,000 acres and extending for nearly 200 miles in a narrow band that parallels the Missouri River valley. Exceptionally thick deposits of windblown silt form a region of unique hill forms that have been described as "the best example of loess topography not only in the Central Lowlands, but in the United States" (National Park Service 1985). The striking terrain is an outstanding example of landscapes formed by two fundamental geological processes-- the action of wind and the erosive sculpture of water.

The geologic significance of the Loess Hills has been recognized for well over a hundred years, and the biological significance for nearly as long. The area's rich archeological and historical resources, combined with the extensive prairie ecosystems, contribute to the landform region's exceptional value. Although important natural and cultural resources remain in the Loess Hills, increasing urban and suburban development, mineral extraction,

woody plant encroachment, and insensitive agricultural practices are threatening the stability and integrity of the Loess Hills.

Location and Scope

Public Law 106-113 authorized the National Park Service to study the "Loess Hills of Iowa." The study team further defined the scope of the study to include the entire natural geologic formation located in portions of Plymouth, Woodbury, Monona, Harrison, Pottawattamie, Mills, and Fremont counties (640,000 acres) (Figure 1). The metropolitan areas of Sioux City and portions of Council Bluffs are included in the study area.

Access is available from U.S. Interstate 29, which runs parallel (north-south) to the Loess Hills, U.S. Interstate 680, and from U.S. Interstate 80, which provides a major east-west artery, passing through the Loess Hills near Council Bluffs. Several U.S., state, and county hard-surface and gravel roads provide access within the landform region. Additionally, the 220-mile Loess Hills National Scenic Byway extends through the heart of the landform region.