

### **3.0 AFFECTED ENVIRONMENT AND IMPACTS TO THE HUMAN ENVIRONMENT**



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### 3.1 INTRODUCTION

Consistent with the Tier I Final EIS, the information provided in this chapter is organized by resource topic. While there are slight variations, the analysis of each resource topic generally follows a similar structure:

- **Key considerations of each resource as it pertains to the proposed alternatives.** The discussion of the key considerations provides the rationale why each resource topic was chosen for analysis and outlines the focus of the description of each resource and impact analysis.
- **A discussion of the methodology used to evaluate how the resource would be affected by the alternatives.** Methodologies used to assess the impacts to each resource topic are described in each resource section.
- **A description of the current condition of the resources affected by the alternatives (the affected environment).** The affected environment describes the existing environmental and social conditions that have the potential to be impacted by the alternatives. The descriptions focus only on those resources and characteristics of the environment most likely to be beneficially or adversely affected. Resource topics likely to be affected by the alternatives described in this chapter are:
  - Land Use, Planning Policies and Visitor Experience
  - Historic Resources
  - Visual Resources
  - Geology, Soils and Groundwater
  - Natural Resources
  - Transportation

In addition, federal or District laws and regulations or executive orders pertinent to a particular resource impact analysis are described within each resource section.

- **An analysis of the environmental consequences the proposed actions would have on each resource.** A detailed discussion of the environmental consequences that could occur from the alternatives, including, the No Action Alternative, is presented after the affected environment has been described.
- **Mitigation measures that could be employed to minimize adverse impacts.** To help ensure the protection of natural, cultural, and social resources, the Smithsonian Institution and NCPC would avoid, minimize, and mitigate potentially adverse environmental impacts associated with the NMAAHC to the best of their abilities where practicable and reasonable. Following the description of environmental consequences, a general description of the measures that could be utilized, or are required by law to minimize the intensity or duration of identified impacts are presented in each section.

Resource topics not affected by proposed action have been dismissed from analysis in this Tier II Draft EIS. These resources, along with a rationale for their dismissal, are described in Chapter 2.

### 3.1.1 General Approach and Methodology for Determining Impacts Related to the Project

As discussed in the Tier I Final EIS, environmental consequences were determined by looking at how the actions associated with each of the alternatives would impact each of the resource topics identified in this chapter. Impacts for the action alternatives were considered for both the construction and operational phases of the proposed NMAAHC. In addition, impacts are described in terms of type (beneficial or adverse); context; duration (short- or long-term); and intensity (significance). “Impact” and “Effect” are interchangeable terms according to CEQ. Definitions of these descriptors include:

- **Beneficial:** A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.
- **Adverse:** A negative change that declines, degrades, and/or moves the resource away from a desired condition or detracts from its appearance or condition.
- **Context:** The affected environment within which an impact would occur, such as local, regional, global, affected interests, society as whole, or any combination of these.
- **Duration:** Impacts resulting from construction are considered short-term and would occur during the period between initial ground-breaking and the time the museum opens its doors to the public. Operational impacts are considered long-term and are associated with ongoing operation, maintenance, and management of the proposed facility.
- **Intensity:** Because definitions of significance (Minor, Moderate, and Major Impacts; No Effect, Effect, and Adverse Effect; No Effect, No Significant Effect, and Significant Effects) vary by impact topic, significance definitions are provided separately for each impact topic analyzed.