

SECTION 4.0

ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This section describes the environmental consequences that would result from the development of the alternatives. The analysis presented in this section has been prepared in accordance with the Council on Environmental Quality's (CEQ) National Environmental Policy Act (NEPA) Regulations Section 1502.16. The direct environmental effects of each alternative are provided under the resource headings described in **Section 3** and listed below. This section also provides analysis of growth-inducing and indirect effects in **Section 4.14**, as well as cumulative effects (**Section 4.15**) and unavoidable adverse effects (**Section 4.16**).

Section	Resource Area/Issue
4.2	Geology and Soils
4.3	Water Resources
4.4	Air Quality
4.5	Biological Resources
4.6	Cultural and Paleontological Resources
4.7	Socioeconomics Conditions
4.8	Transportation/Circulation
4.9	Land Use
4.10	Public Services
4.11	Noise
4.12	Hazardous Materials
4.13	Aesthetics
4.14	Indirect and Growth-Inducing Effects
4.15	Cumulative Effects
4.16	Unavoidable Adverse Effects

4.1.1 DETERMINATION OF SIGNIFICANCE

Specific significance criteria for each issue area are identified in **Section 3** of this Environmental Impact Statement (EIS). CEQ's regulations (40 CFR Section 1508.27) define significance of effects in terms of context and intensity, as recited below:

- (a) *Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.*
- (b) *Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:*
 - (1) *Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.*
 - (2) *The degree to which the proposed action affects public health or safety.*
 - (3) *Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.*
 - (4) *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*
 - (5) *The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.*
 - (6) *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*
 - (7) *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.*
 - (8) *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*
 - (9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.*
 - (10) *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

Significance criteria are more precisely defined in standard practices, environmental compliance criteria, or in the statutes or ordinances of the jurisdictional entities. Thus, the Bureau of Indian Affairs' (BIA) determination of significance of impacts is accomplished with the assistance of governmental entities that have jurisdiction or special expertise for each resource. Further, BIA uses the standard practices and criteria already established by those entities prior to the preparation of this EIS.

4.1.2 JURISDICTION AND SPECIAL EXPERTISE

Consistent with 40 CFR 1508.15 and 1508.26, the BIA identified several parties having jurisdiction and/or special expertise regarding the project alternatives. These entities assist the BIA in the determination of significant impacts for the alternatives for areas within their jurisdiction and/or area of special expertise. These agencies have either agreed to serve as NEPA cooperating agencies, to comment on the Draft EIS or to otherwise provide consultation in the analysis process. These agencies, which have assisted in developing appropriate measures of significance for potential impacts within their areas of jurisdiction or expertise, are identified in **Section 1.3** of this EIS.