

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Chapter 3 describes the existing environment in the project study area (i.e., the potentially “affected environment”) and assesses the environmental consequences that would occur with construction, operation and maintenance of the Falcon to Gonder project. This chapter also identifies mitigation measures to reduce or avoid adverse impacts. Environmental consequences of the no action alternative are also considered.

This chapter analyzes five project route alternatives and the no action alternative from the perspective of 19 resource topics:

- 3.1 Geology and Minerals
- 3.2 Soils
- 3.3 Water Resources
- 3.4 Vegetation (including Wetlands)
- 3.5 Invasive Nonnative Species
- 3.6 Wildlife and Wildlife Habitat
- 3.7 Special-Status Species (Animals and Plants)
- 3.8 Range Resources (Livestock Grazing and Wild Horses)
- 3.9 Visual Resources
- 3.10 Public Health and Safety (Fire Management, Hazardous Materials and EMFs)
- 3.11 Noise
- 3.12 Air Quality
- 3.13 Land Use and Access
- 3.14 Recreation/Wilderness
- 3.15 Social and Economic Values
- 3.16 Cultural Resources
- 3.17 Paleontology
- 3.18 Environmental Justice
- 3.19 Native American Concerns

Section 3.20, Comparison of Alternatives, provides a summary of the impacts and the methodology that was used to select the preferred alternative.

3.0.1 BLM CRITICAL ELEMENTS

This EIS discusses the following “Critical Elements,” which are mandated for consideration by BLM policy and various government regulations:

- Air Quality *(see Section 3.12)*
- Areas of Critical Environmental Concern *(There are no designated Areas of Critical Environmental Concern in the project area)*
- Cultural Resources *(see Section 3.16)*
- Environmental Justice *(see Section 3.18)*
- Farmlands, prime or unique *(There are no prime or unique farmlands in the project area)*
- Floodplains *(see Section 3.3)*
- Invasive, Nonnative Species *(see Section 3.5)*

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- Migratory Birds *(see Section 3.6)*
 - Native American Religious Concerns *(see Sections 3.16, 3.19)*
 - Special-Status Species *(see Section 3.7)*
 - Wastes, Hazardous/Solid *(see Section 3.10)*
 - Water Quality (Surface and Ground) *(see Sections 3.2, 3.3)*
 - Wetlands / Riparian Zones *(see Sections 3.3, 3.4)*
 - Wild and Scenic Rivers *(There are no designated Wild and Scenic Rivers in the project area)*
 - Wilderness *(see Section 3.14)*

3.0.2 APPROACH AND FORMAT OF ANALYSIS

As shown below, the five route alternatives share many of the same segments and, thus, many of the same environmental impacts:

- Crescent Valley (a) route alternative (Segments A-B-F-G-I-J)
- Crescent Valley (b) route alternative (Segments A-B-F-H-I-J)
- Pine Valley (a) route alternative (Segments A-C-D-F-G-I-J)
- Pine Valley (b) route alternative (Segments A-C-D-F-H-I-J)
- Buck Mountain route alternative (Segments A-C-E-J)

To avoid redundancy and facilitate comparison of the alternatives, the following sections analyze:

1. Impacts common to all route alternatives, and
2. Alternative-specific impacts (i.e., those that are unique to a particular alternative).

Evaluation of the no action alternative is also provided. This information is then summarized in Section 3.20, Comparison of Alternatives, which also describes the methodology for selection of the preferred alternative. **The BLM's preferred alternative is the Pine Valley (a) route alternative.**

K and L Re-Routes

During the 1999 field surveys that were conducted along Segment B, two areas were found to contain sensitive resources that should be avoided if possible. The “K and L re-routes” were delineated as potential ways to avoid these areas. As shown in the previous [Figure ES-1](#), the K re-route is at the northern end of Grass Valley and crosses over a portion of the Cortez Mountains. The L re-route is in Whirlwind Valley and parallels an existing transmission line.

In the early stages of this environmental analysis, it became clear that the L re-route offers real advantages and would most likely be incorporated into Segment B if one of the Crescent Valley route alternatives were selected. Thus, to facilitate the analysis and the accurate quantification of data, many of the tables in the following chapter assume that Segment B would follow the L re-route around Whirlwind Valley.

The K re-route conversely was found to have clear disadvantages related to visual impacts, steep terrain, accessibility and biological impacts to nesting raptors. Thus, it would not likely be incorporated into Segment B. However, the advantages and disadvantages of the K and L re-routes, as well as the original Segment B alignment, are evaluated fully in this chapter.