## 4.10 - Mineral Resources

## 4.10.1 - Introduction

This section generally describes the existing mineral resources in the County and potential effects from project implementation on the sites and their surrounding areas. It also considers impacts likely to be incurred in the future if additional sites are proposed or if existing sites are modified. Descriptions and analysis in this section is based on Mineral Land Classification Maps prepared by the California Department of Conservation's Division of Mines and Geology.

# 4.10.2 - Existing Conditions

## Aggregate Resources

The State of California Legislature, through the passage of the Surface Mining and Reclamation Act (SMARA) in 1975, requires the State Geologist to research and prepare reports that designate aggregate (sand and gravel) deposits of statewide and regional significance in areas designated Production-Consumption (P-C) Regions. The designation of land areas and deposits is deduced by analysis of geologic reports and maps, field investigations, active mining operations, and analysis by geologists at the California Geological Survey (CGS) in the Department of Conservation (DOC). To that end, the CGS has published reports that designate areas of mineral resources and the expected needs for such resources over the next 50 years. The CGS has produced a report and a series of Mineral Land Classification Maps for the area that designate Mineral Resource Zones (MRZ) that define areas where important deposits occur (California Department of Conservation, 1987 and 1988). MRZs are defined as follows:

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence;
- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists;
- MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data; and
- MRZ-4: Areas where available information is inadequate for assignment to any other MRZ zone.

A review of the Mineral Land Classification Maps indicated that none of the proposed tower locations are within areas designated as MRZ-2. Prime locations of aggregate resources are determined by soil composition, depth-to-bedrock, and other factors, which make particular locations attractive for sand and gravel operations. These types of operations are generally located at valley bottoms and arroyo channels. As can be seen in the individual site descriptions in Appendix A of this DEIR, most of the tower sites are located on mountaintops or ridgelines (topographic highpoints), and in urban areas. These areas are typically unlikely to contain significant aggregate resources. Therefore, the potential for aggregate resource recovery in these areas is very low.

## **Other Mineral Resources**

Gold, silver, iron, lead, and other materials are also important to society. Quantities of these materials sufficient to make extraction economically feasible have been found in the County. At various times in the region's history, mining of these materials has contributed significantly to the area's economic output. Most of the known deposits in the County, however, have been depleted or determined economically infeasible, and very little active mining for these materials has occurred for some time. With only one exception, none of the PSEC tower sites is in an area that contains mining operations, be they either current or historic operations. The exception is the Black Eagle site, which is actually located in a portion of the Black Eagle open pit mine in the east-central portion of the County. The Black Eagle Mine was a major contributor of iron ore to the steel mills that were once a dominant industry in the Inland Empire region. The mine, however, has been inactive since the mid-1980s. There are no plans to reopen the mine in the near future, and the proposed tower site is in an area of the mine that has already been mined and contains mainly spoil material. The operator of the mine has indicated that placement of a tower at that location would not interfere with future mining operations if the mine were once again to become active (personal communication, PSEC, January 14, 2008).

# 4.10.3 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G, Environmental Checklist, to determine whether impacts to mineral resources are significant environmental effects, the following questions are analyzed and evaluated:

- a.) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- b.) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

## 4.10.4 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

## Loss of Known Mineral Resource

Impact MR-1	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
	[CEQA Mineral Resources Threshold 10(a)]

## Impact Analysis

None of the project sites are located in areas that have been designated as MRZ-2 on maps prepared by the Department of Conservation. The majority of the tower sites are located on mountaintops or ridgelines, where the soil composition, depth-to-bedrock, and other factors make the sites unattractive for sand and gravel operations. These types of operations are typically located in valley bottoms and arroyo channels, not topographic highpoints, where most of the tower sites are located. Other tower sites are located in urban areas where mining resource extraction is typically not acceptable. Therefore, given the low potential for significant mineral resources within the project areas, no impacts to aggregate mineral resources would be caused by development of the communication towers throughout the County.

Likewise, none of the proposed sites are located in areas where other types of mineral resources extraction are actively occurring or have occurred in the past. The sole exception, the Black Eagle site, is located in a portion of the inactive Black Eagle Mine that has already been mined and is composed mainly of spoil material and tailings. The operator of the mine has indicated that placement of a tower at that location would not interfere with future mining operations if the mine were once again to become active (personal communication, Gerald Doak, GRD, Inc., January 14, 2008). Therefore, potential impacts to other types of mineral resources caused by development of the project are considered less than significant.

## Level of Significance Before Mitigation

No impact.

## Mitigation Measures

No mitigation is required.

## Level of Significance After Mitigation

No impact.

## Loss of Mineral Resource Recovery Site

# Impact MR-2 Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? [CEQA Mineral Resources Threshold 10(b)]

## Impact Analysis

With only one exception, none of the project sites are located in areas where there has ever been active mineral resource recovery operations. The sole exception, the Black Eagle site, is located in a portion of the inactive Black Eagle Mine in an area that has already been mined and is composed mainly of spoil material and tailings. The custodian of the mine has indicated that placement of a tower at that location would not interfere with future mining operations if the mine were once again to become active (personal communication, PSEC, January 14, 2008). Given these considerations, it can be determined that no impact to locally important mineral resources would occur.

## Level of Significance Before Mitigation

No impact.

## **Mitigation Measures**

No mitigation is required.

# Level of Significance After Mitigation

No impact.