5.12 MINERAL RESOURCES

This section of the Draft EIR evaluates the potential for the proposed project to impact the mineral resources as defined by the Department of Conservation's Mineral Resources Program.

5.12.1 Environmental Setting

5.12.1.1 REGULATORY BACKGROUND

Mineral Resources Project

The Mineral Resources Program of the Department of Conservation is divided into two projects, the Mineral Resources Project and the Mineral Hazards Project. These two projects provide data about California's varied nonfuel mineral resources (such as metals and industrial minerals), naturally occurring mineral hazards (such as asbestos, radon, and mercury), and active and historical mining activities throughout the state.

The Mineral Resources Project classifies nonfuel mineral resources into three categories: metals, industrial minerals, and construction aggregate. Metals include gold, silver, and copper; industrial minerals include boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone; and construction aggregate includes sand and gravel and crushed stone. The primary focus of the Mineral Resources Project is to classify lands throughout the state that contain regionally significant mineral resources, as mandated by the Surface Mining and Reclamation Act of 1975 (SMARA).

SMARA Mineral Land Classification Project

In 1975, the California legislature enacted SMARA, which provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the nonfuel mineral resources of the state to show where economically significant mineral deposits occur or are likely to occur based upon the best available scientific data. Reclamation of mined lands is within the purview of the Division of Mine Reclamation, but the process of inventorying nonfuel mineral resources is the responsibility of the Mineral Resources Project. Under SMARA (Public Contract Code, Division 2, Article 2, Section 10295), "minerals" means any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and bituminous rock, but excluding geothermal resources, natural gas, and petroleum.

The classification process involves the determination of Production-Consumption (P-C) Region boundaries based on identification of active aggregate operations (Production) and the market area served (Consumption). The P-C regional boundaries are modified to include only the urbanized or urbanizing parts of the region and are classified for their aggregate content. An aggregate appraisal further evaluates the presence or absence of significant sand, gravel, or stone deposits that are suitable sources of aggregate. The classification of these mineral resources is a joint effort of the state and local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zones (MRZ), a Scientific Resource Zone (SZ).

- **MRZ-1:** A mineral resource zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** A mineral resource zone where adequate information indicates that significant mineral deposits are present or likely to be present, and development should be controlled.
- **MRZ-3:** A mineral resource zone where the significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** A mineral resource zone where there is insufficient data to assign any other MRZ designation.
- **SZ Areas:** Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.

As part of the classification process, an analysis of site-specific conditions is used to calculate the total volume of aggregates within individually identified "resource sectors." Resource sectors are MRZ-2 areas identified as having regional or statewide significance. Anticipated aggregate demand in the P-C Regions for the next 50 years is then estimated and compared to the total volume of aggregate reserves identified in the P-C Region.

5.12.1.2 EXISTING CONDITIONS

The project site is in MRZ-1 and MRZ-3, as shown in Figure 5.12-1, *Mineral Resource Zone Map*. MRZ-1 refers to areas where adequate information indicates that no significant mineral deposits are present or likely to be present. MRZ-3 refers to area where the significance of mineral deposits cannot be determined from the available data.

5.12.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

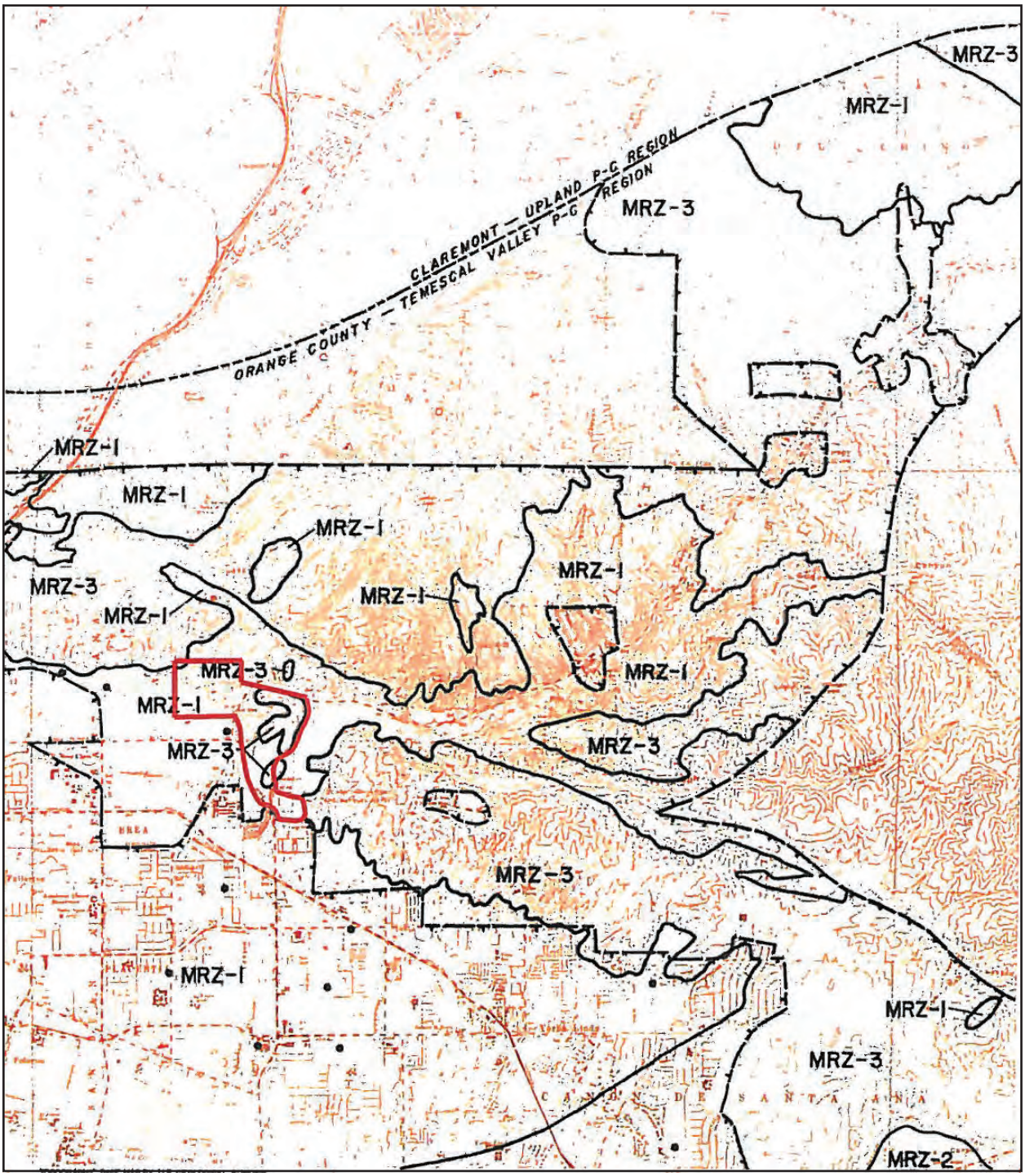
M-1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

M-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.

5.12.3 Plans, Programs, and Policies

No plans, programs, and policies are applicable.

Figure 5.12-1 - Mineral Resource Zone Map
5. Environmental Analysis



MRZ-1 A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.

MRZ-2 A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.

MRZ-3 A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.

MRZ-4 A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

Specific Plan Boundary

0 1
Scale (Miles)

Source: Alta, 2018

5. Environmental Analysis
MINERAL RESOURCES

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5.12.4 Environmental Impacts

5.12.4.1 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance; the applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-1: The proposed project would not 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. [Threshold M-1]

The project site is an active oil operations site owned by Aera Energy, with the exception of the southern agricultural area. However, as shown in Figure 5.12-1, the majority of project site is in MRZ-1, and a few areas on the eastern side of the project site are in MRZ-3. The project site has been operating as oil fields for about 100 years, and no known nonfuel mineral resources have been identified within this area that would be of value to the region and the residences of the state, as defined by SMARA. Therefore, although further investigation could uncover mineral resources and result in the reclassification into other categories, it has not been found that the project site contains economically significant and viable nonfuel mineral deposits. Additionally, implementation of the proposed project would not preclude future identification and mining of aggregate deposits if future investigation based on economic-geologic principals finds that the likelihood for occurrence of significant mineral deposits exists. The proposed project would not deplete or modify the availability of a known mineral resources that would be of value to the region and the residents of the state. Project impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.12-2: The proposed project would not 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. [Threshold M-2]

The City of Brea does not designate any locally important mineral resource recovery site in its general plan or other land use plan. The Orange County General Plan does not identify the project site as a mineral resource area in Figure VI-3, Orange County Mineral Resources. Therefore, no locally important mineral resource recovery site delineated on Brea's General Plan or other applicable land use plan would be impacted by the proposed project.

Level of Significance Before Mitigation: No impact.

5.12.5 Cumulative Impacts

Implementation of the proposed project, along with other cumulative projects identified in Table 4-1, *Related Cumulative Projects*, would not result in cumulatively significant impacts to known mineral resources or mineral resources recovery sites. Brea contains areas of MRZ-1 and MRZ-3, and no known mineral resources sites that are value to the region and the residents of the state are identified in the cumulative projects' sites (CGS 2019). There is no locally important mineral resource recovery site delineated in Brea's General Plan.

Implementation of the proposed project and the cumulative projects in Brea would not result in significant mineral resources impacts, individually or cumulatively.

5.12.6 Level of Significance Before Mitigation

The following impacts would be less than significant: 5.12-1 and 5.12-2.

5.12.7 Mitigation Measures

No mitigation measures are required.

5.12.8 Level of Significance After Mitigation

No significant impacts associated with mineral resources have been identified. No significant unavoidable adverse impacts relating to mineral resources are anticipated.

5.12.9 References

Alta California, Geotechnical Inc. (Alta). 2018, December 19. EIR-Level Geotechnical Assessment, Brea Central Property, City of Brea, County of Los Angeles.

California Department of Conservation, California Geological Survey (CGS). 2019, July (accessed). Mineral Lands Classification. CGS Information Warehouse: Mineral Land Classification. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc.

Miller, R.V. 1994. Generalized Mineral Land Classification of Orange County, California (Aggregate Resources Only).