

5. *Environmental Analysis*

5.9 MINERAL RESOURCES

5.9.1 Methodology

The California Geological Survey Mineral Resources Project provides information about California's non-fuel mineral resources. 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.

The California legislature enacted the Surface Mining and Reclamation Act (SMARA) in 1975. SMARA provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the non-fuel mineral resources in the State to show where economically significant mineral deposits are located and where they are likely to occur based upon the best available scientific data.

The Mineral Resources and Mineral Hazards Mapping Program provides data about California's non-fuel resources, naturally occurring mineral hazards, and information about active and historic mining activities throughout the State. Land classification is the principal responsibility of the Mineral Resources and Mineral Mapping Program. The non-fuel mineral resources include the metals such as gold, silver, iron and copper; the industrial minerals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate which includes sand and gravel, and crushed stone. The presence or absence of significant sand, gravel, or stone deposits that are suitable as sources of aggregate are classified according to areas called Mineral Resource Zones (MRZ), which are described below. The intent of classification is to assist lead agencies, planners, and the public in the wise use, management, and conservation of California's mineral resources. As California's population continues to expand, the demand for minerals-especially building construction such as aggregate-will similarly grow.

- MRZ-1 – Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2 – Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or there is a high likelihood of their presence and development should be controlled.
- MRZ-3 – Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- MRZ-4 – Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.

5.9.2 Environmental Setting

Sand and gravel deposits in Anaheim are a result of the Santa Ana River, which carries alluvial material derived from a large drainage basin that encompasses parts of the San Gabriel and San Bernardino Mountains. Much of the material has been funneled through Santa Ana Canyon and deposited in the Orange County Basin. Prado Dam now prevents alluvium from being transported through the Santa Ana Canyon. The coarser alluvial material that lies in Santa Ana Canyon and within a few miles of its mouth forms a sand and gravel deposit of economic significance.

According to the Mineral Resources and Mineral Hazards Mapping Program, parts of the East Anaheim, The Canyon, and Hill and Canyon Areas are identified as being within a Mineral Resource Zone, Class 2



5. Environmental Analysis

(MRZ-2). In addition, the City of Anaheim has three sites identified as containing mineral resources of regional significance within the Santa Ana River/Santiago Creek/Arroyo Trabuco/San Juan Creek/Temescal Valley areas of the Orange County-Temescal Valley Region, Orange, Riverside, and San Bernardino Counties. These areas are shown in Figure 5.9-1, *Mineral Resource Map*. It should be noted that the majority of the areas shown on Figure 5.9-1 have already been developed.

5.9.3 Thresholds of Significance

The criteria used to determine the significance of impacts on mineral resources are taken from City-approved Thresholds of Significance based on the City's Initial Study and the model Initial Study checklist in Appendix G of the State CEQA Guidelines.

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

5.9.4 Analysis of Environmental Impacts

IMPACT: RESULT IN THE LOSS OF AVAILABILITY OF A KNOWN MINERAL RESOURCE THAT WOULD BE A VALUE TO THE REGION AND THE RESIDENTS OF THE STATE OR 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

Impact Analysis: [As shown on Figure 5.9-1, t](#)The State of California designates one MRZ-2 area and three specific areas of regionally significant mineral resources within the City. Changes in land use resulting from implementation of the proposed General Plan and Zoning Code Update would not significantly impact mineral resources in the MRZ-2 area [or the three sites designated as regionally significant](#) because land in this area is largely built out or already planned for development. ~~The four sites of regionally significant mineral resources contain construction aggregate sand and gravel and are mapped in Figure 5.9-1, *Mineral Resource Map*. The Robertson's Ready Mix site located in the eastern portion of the City near Gypsum Canyon is not designated as regionally significant.~~ Extensive amounts of the sand and gravel aggregate have been removed over the past decades from the [Robertson's Ready Mix site se areas and the surface for these areas and](#) is now scheduled for permanent closure in December of 2004.

The Land Use Plan designates these sites for industrial, commercial, residential, or other uses. Under Section 2764(b) of SMARA, findings must be made regarding whether the future land use is compatible or not with the existing mining operations. As stated above, the current operations in the Hill and Canyon Area (Mountain Park Specific Plan Area) are scheduled for closure in December 2004, therefore the land use designations specified in the General Plan and Zoning Code Update would not conflict with the operation of these mines.

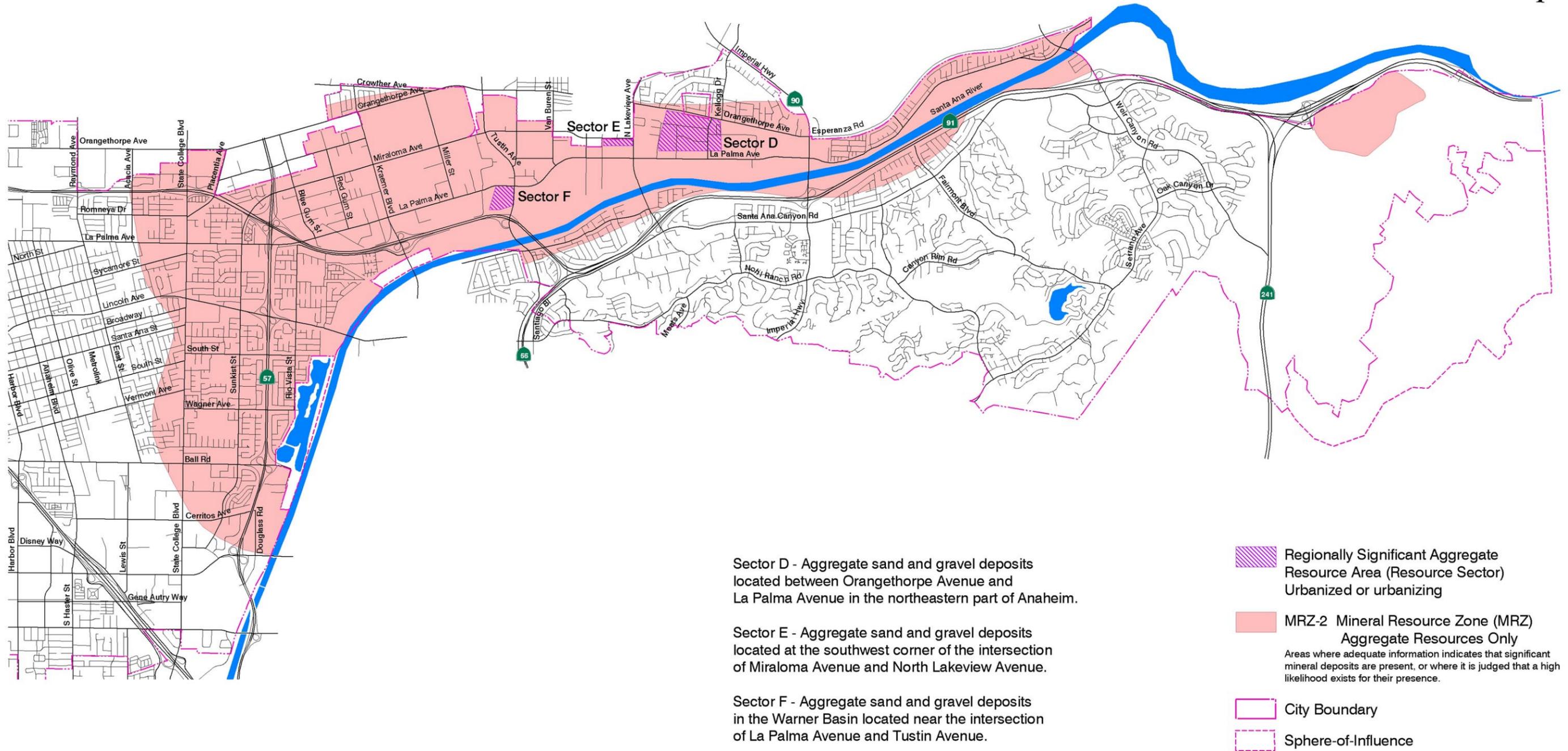
Relevant Goals and Policies

Policies related to the preservation of mineral resources include:

- Ensure the proper reclamation of significant mineral resource zones. (Green Element, Goal 15.1, Policy 1)

5. Environmental Analysis

Mineral Resource Map



Source: OFR 94-15, Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, California, Part III - Orange County. Miller, R.V., 1995.

5. *Environmental Analysis*

This page is intentionally left blank.

5. *Environmental Analysis*

Existing Codes and Regulations

- No existing codes or regulations related to groundwater apply to the proposed General Plan and Zoning Code Update.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are necessary.

Level of Significance After Mitigation: No significant adverse impacts were identified and no mitigation measures are necessary.

5.9.5 Significant Unavoidable Impacts

There are no significant unavoidable impacts related to mineral resources.



5. *Environmental Analysis*

This page intentionally left blank