3.12 MINERAL RESOURCES

3.12.1 INTRODUCTION

The focus of the following discussion is related to the potential project-related impacts related to the loss of availability of known mineral resources and the loss of availability of a locally important mineral resource site.

3.12.2 ENVIRONMENTAL SETTING

The information contained in this Environmental Setting section includes information contained in the City of Lake Elsinore General Plan Background Reports (see Chapter 12 – Geology and Mineral Resources). This document is attached as Appendix B to this PEIR.

HISTORIC BACKGROUND

In the late 19th century, the Lake Elsinore experienced a boom because of gold mining between the towns of Elsinore and Perris. The most prosperous mine was Good Hope Mine, the discovery of which has been credited to Juan B. Castillo and Madison Chaney or possibly a Frenchman by the name of Mache. This mine produced more than $2 million worth of gold (over $20 million in current dollars) during its working years. At its height, it used coal extracted from the Terra Cotta mines to process the gold. The coal mines, which were discovered in 1883 by Madison Chaney and his wife, Esther, were also used to fire kilns and heat homes. The region surrounding Alberhill was also known for its coal mining. Coal was also mined in the Warm Springs Valley. The coal mine provided employment but also gave Lake Elsinore a degree of energy self-sufficiency.

Mining of asbestos also began during the 1880s. John D. Huff owned and operated the John D. Huff Asbestos Company and founded the coal and clay mines near the town of Terra Cotta. The clay mine at Terra Cotta was in operation until the 1940s when the Alberhill mine became the sole operating clay mine in the region. The clay extracted from these mines was of such high quality that it won a gold medal at the prestigious Panama-California Exposition at San Diego in 1916. The Pacific Clay Brick Products Company is the present owner of the Alberhill commercial area.

Rail transportation opened up the Lake Elsinore region to prospectors, miners, and investors who took advantage of the untapped reserves to expand their personal wealth to influence the City. Lake Elsinore became the main center for mining and transportation in the region. Many additional spurs were built to improve the connection of Lake Elsinore to its surrounding mines. The rails injected new life into the valley and kept a steady stream of prospectors, settlers, and vacation seekers flowing to the shores of Lake Elsinore. When the mines played out, the tourists and vacationers continued to provide a source of economic opportunity.

MINERAL RESOURCE AREAS

The County's principal mineral resources include clay, limestone, iron ore, sand, and construction aggregate. The SOI and surrounds encompass areas with economically viable deposits of clay, sand, gravel, and stone products, including decomposed granite. As of 2010, six mines were active in the Lake Elsinore area, producing clay, stone/rock, and sand and gravel. Decomposed granite has also been mined in the Lake Elsinore area in recent years.

The City of Lake Elsinore lies within the Temescal Valley Area, Riverside County, California. Special Report No. 165, prepared in 1991 by the State Department of Conservation, Division of Mines and Geology, identified construction aggregate, clay deposits, and crushed stone with an MRZ-2 designation (as described below) in the City.

The construction aggregate resource areas include sand and gravel deposits in McVicker Canyon, Rice Canyon and Temescal Wash. The mouth and upstream deposit areas at McVicker Canyon are within lands subdivided and developed, thereby eliminating this area from consideration as a sand and gravel reserve. The deposits associated with Rice Canyon and Temescal Wash are being mined. The long term extraction and recommended use of these lands are addressed in the specific plans for these areas.

A crushed stone site located along Railroad Canyon Road has been intermittently mined in the past by the Riverside County Transportation Department and other operators, as a source of base aggregate for roadway construction. The Railroad Canyon Road site is located within the approved Cottonwood Hills Specific Plan area.

Significant clay resources are associated with the Alberhill area in the north portion of the City, and classified by the State since 1982. Clays from this area have been used to produce two main types of clay products, heavy products such as sewer pipe, brick and tile, and refractory products such as fire brick, flue lining and pottery. In addition, red "bone clay" is sold directly for cement use. The Pacific Clay Products deposits are located within the approved Alberhill Specific Plan and pending Alberhill Villages Specific Plan. The mining activity is being phased out in accordance with approved permits, and the continued use and ultimate reclamation of these lands has been or will be addressed in the specific plans prepared for these areas.

3.12.3 REGULATORY SETTING

FEDERAL

There are no Federal regulations applicable to mineral resources.

STATE

Surface Mining and Reclamation Act

The principal piece of legislation addressing mineral resources in California is the Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code Sections 2710 through 2719), which was enacted in response to land use conflicts between urban growth and essential mineral production. The stated purpose of SMARA is to provide a comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to assure that adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses; the production and conservation of mineral resources are encouraged, while giving consideration to values related to recreation, watershed, wildlife, range and forage and aesthetic enjoyment; and that residual hazards to the public health and safety are eliminated. (Public Resources Code Section 2712.)

The Surface Mining and Reclamation Act of 1975 (SMARA) mandated the initiation by the State Geologist of mineral land classification in order to help identify and protect mineral resources in areas within the State subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

In order to communicate information concerning the existence of mineral resources within lands subject to classification, the classification categories set forth in guidelines by the SMGB have been adapted from the California Mineral Land Classification System Diagram (see **Table 3.12-1, California Mineral Land Classification System Diagram**). These adaptations are presented below:

- **MRZ-1:** Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

- **MRZ-2:** *A*reas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. As shown in **Table 3.12-1, California Mineral Land Classification System Diagram**, MRZ-2 is divided on the basis of both degree of knowledge and economic factors. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history.

- **MRZ-3:** Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories. As shown in **Table 3.12-1**, MRZ-3 is divided on the basis of knowledge of economic characteristics of the resources.

MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits. MRZ-3b is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present.

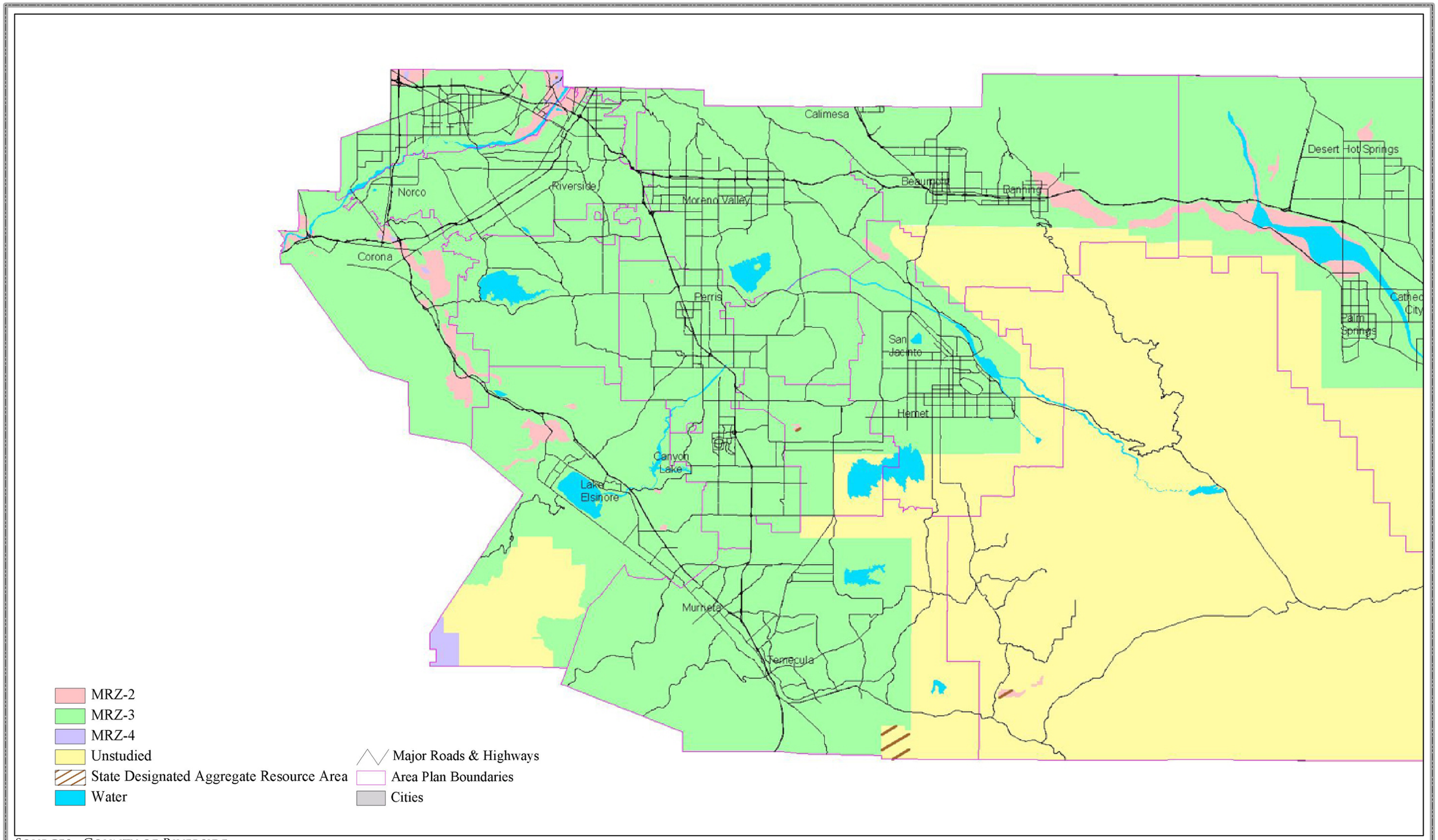
- **MRZ-4:** Areas where geologic information does not rule out either the presence or absence of mineral resources. MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence.

Table 3.12-1, California Mineral Land Classification System Diagram

	AREAS OF IDENTIFIED MINERAL RESOURCE SIGNIFICANCE		AREAS OF UNDETERMINED MINERAL RESOURCE SIGNIFICANCE		AREAS OF UNKNOWN MINERAL RESOURCE SIGNIFICANCE
	DEMONSTRATED	INFERRED			
	MEASURED/ INDICATED				
Economic	**MRZ-2a** Reserves	**MRZ-2b** Inferred Resources	**MRZ-3a** Known Mineral Occurrence	**MRZ-3b** Inferred Mineral Occurrence	**MRZ-4** No known Mineral Occurrence
Marginally Economic	**MRZ-2a** Marginal Reserves	**MRZ-2b** Inferred Marginal Resources			
Sub-Economic	**MRZ-2a** Demonstrated Subeconomic Resources	**MRZ-2b** Inferred Subeconomic Resources			
Non-Economic	**MRZ-1** Areas of No Mineral Resource Significance				

Source: California Department of Conservation, *California Surface Mining and Reclamation Policies and Procedures, Guidelines for Classification and Designation of Mineral Lands*, 2000, page 5

Delineation of an area's of Mineral Resource Zone (MRZ) classification is usually based on available geologic information, including geologic mapping and other information on surface exposures, drilling records, and mine data, and socioeconomic factors such as market conditions and urban development patterns. As shown in **Figure 3.12-1, Mineral Resource Zones**, the City, SOI, and surrounding area have been classified as MRZ-3, and areas along the I-15 corridor north of Lake Elsinore are classified MRZ-2.



SOURCES: COUNTY OF RIVERSIDE

CITY OF LAKE ELSINORE
DREAM EXTREME

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CITY OF LAKE ELSINORE
MINERAL RESOURCE ZONES
FIGURE 3.12-1

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LOCAL

Lake Elsinore Municipal Code (LEMC) – Title 14, Chapter 14.04

Chapter 14.04 of the Lake Elsinore Municipal Code sets forth the City's regulations regarding surface mining and reclamation. The purpose of this chapter is to "ensure the continued availability of important mineral resources, while regulating surface mining operations as required by California's Surface Mining and Reclamation Act no 1975." (Section 14.04.020)

Chapter 14.04 describes the City's procedures for processing applications for surface mining permits and reclamation plans. Section 14.04.240 this chapter provides for the protection of mineral resources and states that mine development "is encouraged in compatible areas before encroachment of conflicting uses. Mineral resource areas that have been classified by the State Department of Conservation's Division of Mines and Geology or designated by the State Mining and Geology Board, as well as existing surface mining operations that remain in compliance with this chapter, shall be protected from intrusion by incompatible land uses that may impede or preclude mineral extraction or processing, to the extent possible for consistency with the City's General Plan."

City of Lake Elsinore Municipal Code Title 17 (Zoning) Chapter 17.144

Provisions for a mineral resources and related manufacturing district are set forth in Chapter 17.144 [(M-3) Mineral Resources and Related Manufacturing District] of the Lake Elsinore Municipal Code. The purpose of the Mineral Resources and Related Manufacturing District is to "reserve appropriate locations consistent with the General Plan to accommodate a full range of mineral resource extraction and related manufacturing in order to strengthen the City's economic base and to increase employment opportunities." (Section 17.114.010)

Chapter 17.144 identifies the uses that are permitted subject to a surface mining permit and those subject to a conditional use permit. Premises in the M-3 district used for any mining and quarry operations and related manufacturing are subject to special development and landscape improvement standards related to noise suppression, roads and driveways, access roads, air and water pollution, slopes of excavation, distancing and landscaping, hours of operation, insurance and rehabilitation.

3.12.4 GENERAL PLAN UPDATE GOALS & POLICIES

The City of Lake Elsinore General Plan Update addresses Mineral Resources in Chapter 4.0 (Resource Protection and Preservation) and in various District Plans. The goals, policies and implementation programs related to mineral resources are listed in **Table 3.12-2, General Plan Mineral Resources Goals, Policies and Implementation Programs** and **Table 3.12-3, District Plan Mineral Resources Goals, Policies and Implementation Programs.**

Table 3.12-2, General Plan Mineral Resources Goals, Policies and Implementation Programs

GENERAL PLAN GOALS, POLICIES AND IMPLEMENTATION PROGRAMS
Chapter 2.0 - Community Form (Section 2.3 - Land Use)
Goal 1 Create a diverse and integrated balance of residential, commercial, industrial, recreational, public and open space land uses.
Policy 1.4 Encourage development of a mix of industrial uses including light industrial, clean manufacturing, technology, research and development, medium industrial, and extractive uses.
Chapter 4.0 – Resource Protection and Preservation (Section 4.5 – Mineral Resources)
Goal 5 Balance the importance of conserving mineral resource areas that have been determined to be significant, the need for extracted materials for local construction, and the potential impacts and conflicts that may result.
Policy 5.1 The City shall consider the public benefits in allowing extraction activities of mineral resources when making land use decisions.
Policy 5.2 The City shall require mined property to be left in a condition suitable for reuse in conformance with the General Plan land use designations and the California Surface Mining and Reclamation Act (SMARA).
Policy 5.3 The City shall encourage the reuse and recycling of existing aggregate construction material for new residential, commercial and industrial development.
Implementation Program Through the project, CEQA and permitting processes, the City shall ensure a balance between the conservation of significant mineral resources, the need for extracted materials for local construction, and proper mitigation for potential impacts and conflicts between uses.

Table 3.12-3, District Plan Mineral Resources Goals, Policies and Implementation Programs

DISTRICT PLAN	DISTRICT PLAN GOALS, POLICIES AND IMPLEMENTATION PROGRAMS
Alberhill	Goal 1 The primary goal of the Alberhill District is to support and maintain a healthy transition from extractive/mining activities to a network of residential communities with a balanced mix of residential, commercial, light industrial, business professional, and institutional/public uses that provide a sense of place and high quality of life. Policy AH 1.1 Continue to encourage proper reclamation and enhancement of areas impacted by extractive/mining activities for the public's health, safety and welfare. Policy AH 1.2 Consider the preservation of vacant lands in areas with high elevations in the north, east and southwest in order to provide an adequate amount of conserved lands, open space and wetland areas.

DISTRICT PLAN	DISTRICT PLAN GOALS, POLICIES AND IMPLEMENTATION PROGRAMS
	Policy AH 1.3 Encourage proper land use compatibility between mining activities and surrounding uses. Policy AH 1.4 Impose conditions, as necessary, on mining operations to minimize or eliminate the potential adverse impact of mining operations on surrounding properties and the environment. Policy AH 1.5 Encourage new non-mining land uses adjacent to existing mining operations to provide an adequate buffer, with a buffer distance from mining operations based on an evaluation of: noise, aesthetics, drainage, operating conditions and operating hours, biological resources, topography, lighting, traffic, and air quality. Policy AH 1.6 Periodically revise and update the City's surface mining reclamation ordinance to ensure the most recent SMARA developments are reflected in the City's code. Implementation Program As part of project review and the CEQA process, the City shall evaluate and impose conditions as necessary that address land use compatibility and balance, preservation of wetlands and suitable open space, and appropriate buffers and distance between mining operations and new non-mining land uses.
Business District	Policy BD 1.4 Through the project and CEQA processes ensure land use compatibility between any mining activities and surrounding uses as discussed in the Alberhill District. Implementation Program The City shall utilize the development review process to promote commercial and industrial land uses. During the CEQA review process, the City shall ensure that natural wetlands are observed, floodway regulations are followed, and measures are taken that address compatibility with adjacent mining activities in the Alberhill District.
North Central Sphere	Policy NCS 1.4 Through the project and CEQA processes ensure land use compatibility between any mining activities and surrounding uses as discussed in the Alberhill District.

The Alberhill District currently has geologic resource operations, which are to be phased out and the areas converted to residential and commercial land uses. These plans are already approved, and therefore, development under the GPU would not significantly affect the availability of known mineral resources that would be of value to the region and the residents of the state. The district plan includes Goal 1 and related policies and implementation program for the public's health, safety, and welfare to ensure proper reclamation and enhancement of areas affected by extractive activities. Policies in the adjacent Business District and North Central Sphere District address the issue of land use compatibility with adjacent mining activities.

3.12.5 SIGNIFICANCE THRESHOLDS

The City of Lake Elsinore has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. However, Appendix G of the State CEQA Guidelines indicates that impacts to mineral resources may be considered potentially significant if the project would:

- 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.
- 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.

3.12.6 IMPACT ANALYSIS

Threshold: Would the project 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: Would the project 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.

Analysis

The history of the planning area includes mineral extraction within some areas of the City and its SOI. As shown in **Figure 3.12-1**, the City, SOI, and surrounding area have been classified as MRZ-3, and areas along the I-15 corridor north of Lake Elsinore are classified MRZ-2. However, such activity is planned be phased out over time and the areas converted to other land uses, such as residential and commercial. This land use designation change has already been approved, and therefore, development under the GPU would not significantly affect the availability of known mineral resources that would be of value to the region and the residents of the state.

However, the proposed GPU includes an Extractive Overlay designation located in the Alberhill District, the Business District, and the North Central Sphere District which provides for continued operations of extractive uses, such as aggregates, coal, clay mining, and certain ancillary uses. Reclamation Plans are required in conjunction with mining permits as particular projects come forward.

The policies within the proposed General Plan pertaining to mineral resources seek to conserve areas identified as containing significant mineral deposits for potential use. The policies will maintain the availability of mineral resources while continuing to encourage proper reclamation and enhancement of areas impacted by extractive/mining activities for the public's health, safety and welfare.

The increased growth and development associated with the implementation of the proposed project would not significantly impact mineral resources located within City and its SOI. The

policies provided within the proposed General Plan, including the implementation of an Extractive Overlay designation, will both guide future development of residential, commercial, industrial, recreational, public and open space land uses and provide for continued operations of extractive uses, such as aggregates, coal, clay mining, and certain ancillary uses.

In accordance with the goals, policies and implementation programs of the proposed project, future development will be reviewed to ascertain project-specific impacts to mineral resources and to ensure compliance with the GPU and applicable provisions of the State and local regulations.

Mitigation Measures

No mitigation is required.

Level of Significance

Implementation of the proposed General Plan policies related to mineral resources ensure that future development in the City and its SOI would not have any significant adverse impacts on mineral resources nor would future mineral resource extraction have any significant adverse impacts on future development.

3.12.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed policies would guarantee that potential impacts on mineral resources remain at a less than significant level.

3.12.8 REFERENCES

In addition to other reference documents, the following references were used in the preparation of this section of the EIR:

City of Lake Elsinore, *General Plan Background Reports*, prepared by Mooney Jones & Stokes, January 2006. (Appendix ~~*~~B)

City of Lake Elsinore, *Municipal Code* (Available at www.lake-elsinore.org/index.aspx?page=346; accessed June 20, 2011.)

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California Department of Conservation, *California Surface Mining and Reclamation Policies and Procedures, Guidelines for Classification and Designation of Mineral Lands*, 2000. (Available at http://www.consrv.ca.gov/SMGB/Guidelines/ClassDesig.pdf; accessed July 25, 2011.)

State of California, Surface Mining and Reclamation Act of 1975. (Available at http://www.conservation.ca.gov/omr/lawsandregulations/Pages/SMARA.aspx; accessed July 25, 2011.)

Hudson, Tom, *Lake Elsinore Valley – Its Story 1776-1977*, Lake Elsinore Downtown Business Association and City of Lake Elsinore Centennial, Second Printing 1988. (Available at Lake Elsinore Library, 600 W. Graham Avenue, Lake Elsinore, CA 92530)