

## 3.7 Mineral Resources

This section describes the regulatory and environmental settings for mineral resources. Impacts that would result from implementing the proposed action and alternatives are described in Chapter 4, *Environmental Consequences*, along with mitigation measures to reduce impacts, where appropriate.

### 3.7.1 Regulatory Setting

#### Federal

There are no federal laws or regulations pertaining to mineral resources that are relevant to the proposed action or alternatives.

#### State

##### California Surface Mining and Reclamation Act of 1975

The principal legislation addressing mineral resources in California is the Surface Mining and Reclamation Act of 1975 (SMARA) (Public Resources Code Sections 2710–2719), 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 that will encourage the production and conservation of mineral resources while ensuring that adverse environmental effects of mining are prevented or minimized; that mined lands are reclaimed and residual hazards to public health and safety are eliminated; and that consideration is given to recreation, watershed, wildlife, aesthetic, and other related values. SMARA governs the use and conservation of a wide variety of mineral resources, although some resources and activities are exempt from its provisions, including excavation and grading conducted for farming, construction, or recovery from flooding or other natural disaster.

SMARA provides for the evaluation of an area's mineral resources using a system of Mineral Resource Zone (MRZ) classifications that reflect the known or inferred presence and significance of a given mineral resource. The MRZ classifications are based on available geologic information, including geologic mapping and other information on surface exposures, drilling records, and mine data, and on socioeconomic factors such as market conditions and urban development patterns. The MRZ classifications used for the Mineral Land Classification of Placer County (Division of Mines and Geology 1995) are defined as follows.

- **MRZ-1**—Areas where available geologic information indicates there is little likelihood for the presence of significant mineral resources.
- **MRZ-2a**—Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. As shown on the California Mineral Land Classification 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.

- **MRZ-2b**—Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves as determined by limited sample analysis, exposure, and past mining history or are deposits that presently are sub-economic.
- **MRZ-3a**—Areas containing known mineral occurrences of undetermined mineral resource significance.
- **MRZ-3b**—Areas containing inferred mineral occurrences of undetermined mineral resource significance. Land classified MRZ-3b represent areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits.
- **MRZ-4**—Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

Although the State of California is responsible for identifying areas containing mineral resources, individual counties or cities are responsible for SMARA implementation and enforcement by providing annual mining inspection reports and coordinating with the California Geological Survey.

Mining activities that disturb more than 1 acre or 1,000 cubic yards of material require a SMARA permit from the lead agency, which is the county, city, or board that is responsible for ensuring that adverse environmental effects of mining are prevented or minimized. The lead agency establishes its own local regulations and requires a mining applicant to obtain a surface mining permit, submit a reclamation plan, and provide financial assurances, pursuant to SMARA.

Certain mining activities do not require a permit, such as excavation related to farming, grading related to restoring the site of a natural disaster, and grading related to construction.

### **California Assembly Bill 3098 List**

A state agency may not purchase or use sand, gravel, aggregates, or other minerals produced from a surface mining operation subject to SMARA unless the operation is identified on the AB 3098 List. This list, which is named after the 1992 legislation that established it, set out conditions that the operations must meet. To be included on the list, an operation must meet the following criteria.

- Have an approved reclamation plan.
- Have approved financial assurance.
- Have filed its annual report.
- Paid its reporting fee.
- Have had its annual inspection by the lead agency that reflects the operation is in full compliance with the law.

## **Local**

### **Placer County General Plan**

Excerpted below are the relevant goal, policies, and implementation program from the *Placer County General Plan* that pertain to mineral resources (Placer County 2013).

**Goal**

**1.J.** To encourage commercial mining operations within areas designated for such extraction, where environmental, aesthetic, and adjacent land use compatibility impacts can be adequately mitigated.

**Policies**

**1.J.1.** The County shall require new mining operations to be designed to provide a buffer between existing or likely adjacent uses, minimize incompatibility with nearby uses, and adequately mitigate their environmental and aesthetic impacts.

**1.J.2.** The County shall require that new non-mining land uses adjacent to existing mining operations be designed to provide a buffer between the new development and the mining operations. The buffer distance will be based upon an evaluation of noise, aesthetics, drainage, operating conditions, topography, lighting, traffic, operating hours and air quality.

**1.J.3.** The County shall discourage the development of any uses that would be incompatible with adjacent mining operations or would restrict future extraction of significant mineral resources.

**1.J.4.** The County shall discourage the development of incompatible land uses in areas that have been identified as having potentially significant mineral resources.

**1.J.5.** The County shall require that all mining operations prepare and implement reclamation plans that mitigate environmental impacts and incorporate adequate security to guarantee proposed reclamation.

**1.J.6.** The County shall require that plans for mining operations incorporate adequate measures to minimize impacts to local residents and County roadways.

**Implementation Program**

**1.3.** The County should, in consultation with the California Division of Mines and Geology, evaluate the relative value of potentially-significant mineral deposits identified in the General Plan Background Report and designated as Mineral Resource Zone (MRZ) in relationship to other mineral resources of the same type in the county or region. If these mineral deposits are determined to be easily replaced by other substitute deposits, the County should continue to apply existing policies and plans to allow extraction of these resources. If these deposits are found not to be easily substituted, the County should amend the Countywide General Plan or applicable community plan as necessary to direct incompatible growth away from these sites.

**Sutter County General Plan**

Excerpted below are the relevant goal and policy from the *Sutter County General Plan* that pertain to mineral resources (Sutter County 2011).

**Goal**

**ER 5.** Encourage commercial resource extraction activities in locations where environmental, aesthetic, and adjacent land use compatibility impacts can be adequately mitigated.

**Policy**

**ER 5.1 Significant Resources.** Conserve and protect mineral resources that may be identified by the state as a significant resource to allow for their continued use in the economy.

## City of Lincoln General Plan

Excerpted below are the relevant goals and policies from the *City of Lincoln General Plan* that pertain to mineral resources (City of Lincoln 2008).

### Goal

**OSC-1.** To designate, protect, and encourage natural resources, open space, and recreation lands in the city, protect and enhance a significant system of interconnected natural habitat areas, and provide opportunities for recreation activities to meet citizen needs.

### Policy

**OSC-1.5 Protection of Minerals.** The City will protect mineral resources such as groundwater, clay deposits, as well as groundwater recharge areas from urban development.

### Goal

**OSC-3.** To encourage energy conservation in new and existing developments throughout the City.

### Policies

**OSC-3.5 Minimize Land Conflicts.** The City shall require that new extractive operations are designed to provide a buffer between existing or likely adjacent uses to minimize incompatibility with nearby sites and adequately mitigate their environmental and aesthetic impacts. The City shall also ensure adequate buffers are included for existing operations (i.e., Gladding-McBean mine and operational areas) that protect the continued operations of the mine and future residents.

**OSC-3.6 Existing Clay Operations.** The City shall not permit incompatible land uses within the impact area of existing and potential mineral extraction activities (i.e., Gladding-McBean).

## 3.7.2 Environmental Setting

Mining began in Placer County in 1849 with the discovery of gold. The initial gold finds in rivers and stream led to hydraulic mining and hard rock mining. Placer County has also produced significant amounts of silver, copper, lead, zinc, and chromite and small amounts of tungsten (scheelite) and manganese. Industrial minerals include quartz for silicon and small amounts of limestone, asbestos, clay, and mineral paint (Division of Mines and Geology 1995).

Construction aggregate is also mined in the county. MRZ-2 and MRZ-3 zones are applied in a number of areas that total 8 square miles in Placer County (Figure 3.7-1). These areas are located in the western portion of the county in the foothills and valley. Several active and proposed mines are located along the Bear River, Coon Creek, and the Middle and North Forks of the American River (Division of Mines and Geology 1995). No areas have been designated as MRZ-2 in Sutter County (Sutter County 2008). No areas have been designated as MRZ in Plan Area B. No additional locally important mineral resource recovery sites within the Plan Area have been delineated on the *Placer County General Plan*.

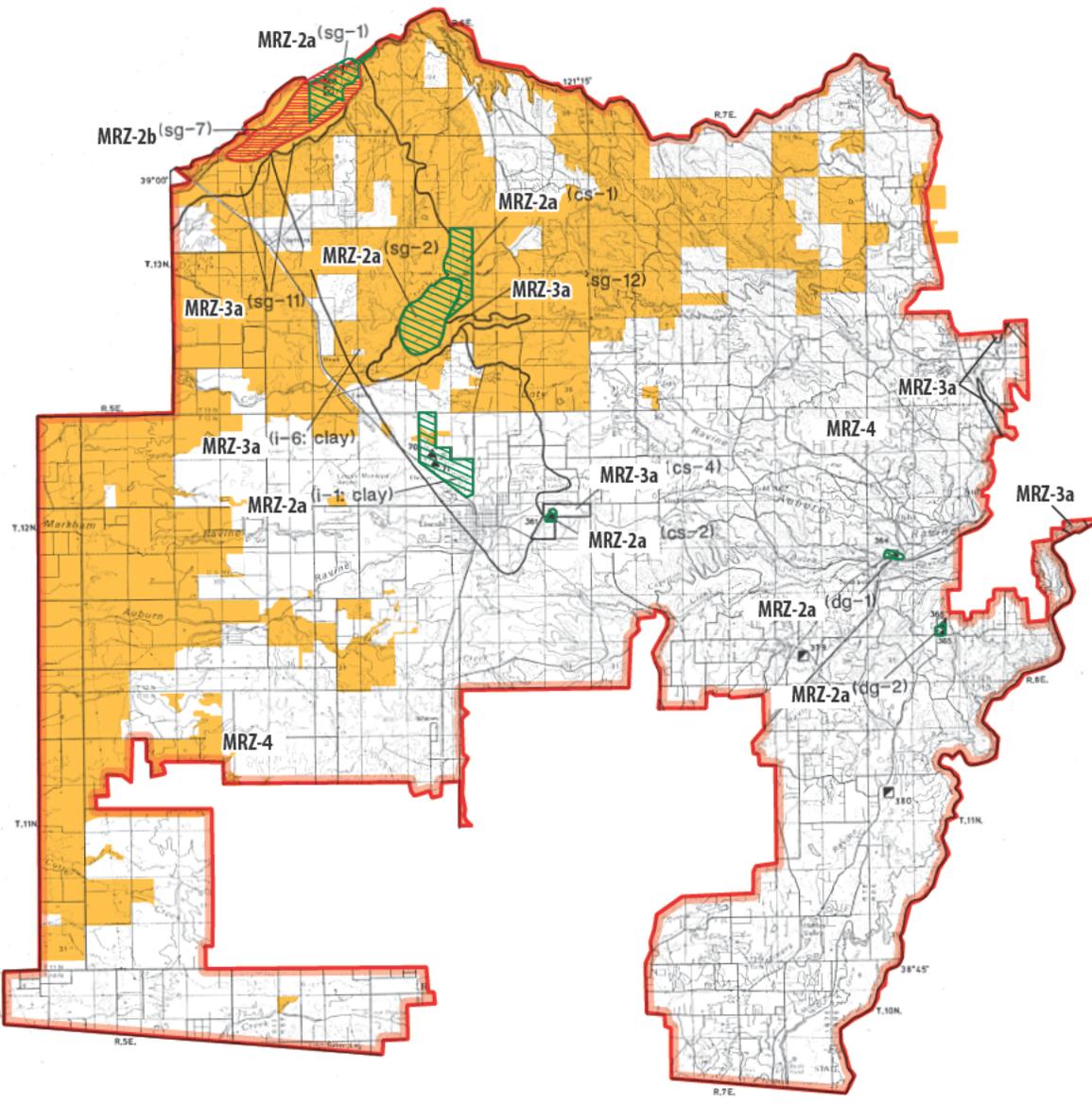
Although mines in Placer County provide material for local construction, the county is still a net importer of construction aggregate (Division of Mines and Geology 1995).

There are two mining operations in Placer County in the Plan Area that are on the April 2016 AB 3098 list. These operations—the Robinson Gravel Pit Newcastle Quarry and the Patterson Sand and Gravel—are sand and aggregate mines (Office of Mine Reclamation 2016). There is one additional mining operation that has vested County approvals but is not active at this time. The mine is owned

by Teichert Aggregates and is located adjacent to Coon Creek east of SR 65. The mining entitlements allow for aggregate removal, hard rock mining, and processing of aggregate materials.

### 3.7.3 References Cited

- City of Lincoln. 2008. *City of Lincoln General Plan*. March. Lincoln, CA. Prepared by Mintier & Associates and Matrix Design Group, Sacramento, CA.
- Division of Mines and Geology. 1995. Mineral Land Classification of Placer County, California. DMG Open-File Report 95-10. California Department of Conservation. Available: <http://maps.conservation.ca.gov/cgs/informationwarehouse>. Accessed: May 25, 2016.
- Office of Mine Reclamation. 2016. AB 3098 List. Available: [http://www.conservation.ca.gov/omr/SMARA%20Mines/ab\\_3098\\_list](http://www.conservation.ca.gov/omr/SMARA%20Mines/ab_3098_list). Accessed: May 25, 2016.
- Placer County. 2013. *Placer County General Plan*. Adopted August 16, 1994. Updated May 21, 2013. Auburn, CA.
- Sutter County. 2008. *General Plan Update Technical Background Report*. February. Prepared by PBSJ.
- Sutter County. 2011. *Sutter County General Plan*. Adopted March 2011.



**Legend**

- MRZ-1 Areas where available geologic information indicates there is little likelihood for the presence of significant mineral resources.
- MRZ-2a Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. As shown on the California Mineral Land Classification 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.
- MRZ-2b Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves as determined by limited sample analysis, exposure, and past mining history or are deposits that presently are sub-economic.
- MRZ-3a Areas containing known mineral occurrences of undetermined mineral resource significance.
- MRZ-3b Areas containing inferred mineral occurrences of undetermined mineral resource significance. Land classified MRZ-3b represents areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits.
- MRZ-4 Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

Plan Area A Boundary

Reserve Acquisition Area

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Miles

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Source: California Department of Conservation, Division of Mines and Geology, 1995.

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**Figure 3.7-1**  
**Mineral Resource Zones in the Plan Area**  
Placer County Conservation Program – EIS/EIR