

# Mineral Resources

## Chapter 3.11

### SUMMARY OF FINDINGS

The proposed Project will not have any significant impacts related to Mineral Resources, as the project site is not located near a known mineral resource area. No mitigation measures will be required. A detailed review of potential impacts is provided in the analysis below.

### INTRODUCTION

#### California Environmental Quality Act (CEQA) Requirements

This section of the Draft Environmental Impact Report (DEIR) addresses potential impacts to Mineral Resources. As required in Section 15126, all phases of the proposed Project will be considered as part of the potential environmental impact.

As noted in 15126.2 (a), “[a]n EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there. Similarly, the EIR should evaluate any potentially significant impacts of locating development in other areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas) as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.”<sup>1</sup>

The environmental setting provides a description of the Mineral Resources in the County. The regulatory setting provides a description of applicable Federal, State and Local regulatory policies that were developed in part from information contained in the Tulare County 2030 General Plan, the Tulare County General Plan Background Report and/or the

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<sup>1</sup> 2012 CEQA Guidelines, Section 15126.2 (a)

Draft Environmental Impact Report for the  
Harvest Power Project

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Tulare County General Plan Revised DEIR incorporated by reference and summarized below. Additional documents utilized are noted as appropriate. A description of the potential impacts of the proposed Project is provided and includes the identification of feasible mitigation measures (if necessary and feasible) to avoid or lessen the impacts.

Thresholds of Significance

The Tulare County 2030 General Plan identifies known Mineral Resource areas. The threshold of significance for this section will include the following:

- Impact a known Mineral Resource

**ENVIRONMENTAL SETTING**

“There is estimated to be a total of 932 million tons of aggregate resources in Tulare County. This figure includes 219 million tons of reserves available for mining and 200 million tons that are located in the hard rock quarries southeast of Porterville. Of that total, 19 million tons are located in Northern Tulare County, which is expected to be depleted by the year 2010 unless new resources are permitted for mining. Lemon Cove has been the most highly extracted area for PCC quality aggregate supplies.”<sup>2</sup>

“Economically, the most important minerals that are extracted in Tulare County are sand, gravel, crushed rock and natural gas. Other minerals that could be mined commercially include tungsten, which has been mined to some extent, and relatively small amounts of chromite, copper, gold, lead, manganese, silver, zinc, barite, feldspar, limestone, and silica. Minerals that are present but do not exist in the quantities desired for commercial mining include antimony, asbestos, graphite, iron, molybdenum, nickel, radioactive minerals, phosphate, construction rock, and sulfur... The majority of these activities appear to occur in the Sierra Foothill Area.”<sup>3</sup>

“The following MRZ categories are used by the State Geologist in classifying the State’s lands. The geologic and economic data and the arguments upon which each unit MRZ assignment is based are presented in the mineral land classification report transmitted by the State Geologist to the SMGB...

- A. *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. This zone is applied where well developed lines of reasoning, based on economic-geologic principles and adequate data, indicate that the likelihood for occurrence of significant mineral deposits is nil or slight.
- B. *MRZ-2a*—Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. As shown on the diagram of the California Mineral Land Classification System, 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

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<sup>2</sup> General Plan Background Report, pages 10-18

<sup>3</sup> General Plan Background Report, page 10-17

- reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits. A typical MRZ-2a area would include an operating mine, or an area where extensive sampling indicates the presence of a significant mineral deposit.
- C. *MRZ-2b*—Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. 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. Further exploration work and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a. A typical MRZ-2b area would include sites where there are good geologic reasons to believe that an extension of an operating mine exists or where there is an exposure of mineralization of economic importance.
- D. *MRZ-3a*—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. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits. As shown on the diagram of the California Mineral Land Classification System, MRZ-3 is divided on the basis of knowledge of economic characteristics of the resources. An example of a MRZ-3a area would be where there is direct evidence of a surface exposure of a geologic unit, such as a limestone body, known to be or to contain a mineral resource elsewhere but has not been sampled or tested at the current location.
- E. *MRZ-3b*—Areas containing inferred mineral deposits that may qualify as mineral resources. Land classified MRZ-3b represents areas in geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-3a category or specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3b is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present. An example of a MRZ-3b area would be where there is indirect evidence such as a geophysical or geochemical anomaly along a permissible structure which indicates the possible presence of a mineral deposit or that an ore-forming process was operative.
- F. *MRZ-4*—Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that 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. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories.”<sup>4</sup>

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<sup>4</sup> Guidelines for classification and designation of mineral land, pages 4 to 6



## **REGULATORY SETTING**

### *Federal Agencies & Regulations*

None that apply to the proposed Project.

### *State Agencies & Regulations*

#### Surface Mining and Reclamation Act of 1975 (SMARA)

“The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt State policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act, (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the state’s mineral resources. Public Resources Code Section 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations.”<sup>5</sup>

#### State Mining & Geology Board (SMGB)

“The SMGB serves as a regulatory, policy, and appeals body representing the State's interests in geology, geologic and seismologic hazards, conservation of mineral resources and reclamation of lands following surface mining activities. The SMGB operates within the Department of Conservation, and is granted certain autonomous responsibilities and obligations under several statutes including the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act, and the Surface Mining and Reclamation Act.”<sup>6</sup>

#### The Office of Mine Reclamation (OMR)

The Office of Mine Reclamation was created in 1991 to administer the SMARA requirements. OMR provides assistance to cities, counties, state agencies and mine operators for reclamation planning and promotes cost-effective reclamation. OMR strives to reclaim mined lands to a beneficial end-use through the implementation of SMARA, prevent or minimize the adverse environmental effects of mining by providing assistance to lead agencies and miners in the review of reclamation plans, and minimize residual hazards to public health and safety through the Abandoned Mine Lands program.”<sup>7</sup>

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<sup>5</sup> SMARA Description, <http://www.conservation.ca.gov/smgb/Regulations/Pages/regulations.aspx>

<sup>6</sup> State Mining & Geology Board (SMGB), <http://www.conservation.ca.gov/smgb/Pages/Index.aspx>

<sup>7</sup> Office of Mine Regulation, <http://www.conservation.ca.gov/OMR/Pages/Index.aspx>

## ***Local Policy & Regulations***

### Tulare County General Plan Policies

The General Plan has a number of policies that apply to projects within Tulare County. General Plan policies that relate to the proposed Project are listed below.

#### **ERM-2.10 Incompatible Development**

Proposed incompatible land uses in the County shall not be on lands containing or adjacent to identified mineral deposits, or along key access roads, unless adequate mitigation measures are adopted or a statement of overriding considerations stating public benefits and overriding reasons for permitting the proposed use are adopted.

## **IMPACT EVALUATION**

### **Would the project:**

- 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?**

Project Impact Analysis:            *No Impact*

The project site is not located in or near a known mineral resource zone (MRZ). The closest MRZ (classified as “3a”) is located approximately 6.5 miles north of the project site. MRZ Class 3a is defined as areas of known mineral occurrence but undetermined resource significance. There will be no project specific impacts related to this resource.

Cumulative Impact Analysis:    *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted above, the proposed Project does not include mining operations and is not located within a known mineral resource zone. No cumulative impacts related to this checklist item will occur.

Mitigation Measures:

**None Required.**

Conclusion:                            *No Impact*

As noted above, no project specific or cumulative impacts related to this resource will occur.

**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?**

Project Impact Analysis:            *No Impact*

As noted in the Response to 3.11 a), the proposed Project does not include a mining operation and the project site is not located in or near a known mineral resource zone. The project site is located approximately 0.40 miles south of an existing permitted Tulare County Surface Mine (K&G Ranches, Surface Mine Permit PMR 01-005). This mine permit was granted so that the operator, a walnut farmer, could excavate sand streaks on the property, with reclamation to expand an existing walnut orchard. The owner plans to sell or give the sand to the County and or local materials suppliers at his discretion. The applicant completed excavation of the sand several years ago, and the site is in final reclamation. The proposed Project will not create any project specific impacts related to this resource.

Cumulative Impact Analysis:    *No Impact*

The geographic area of this cumulative analysis is Tulare County. This cumulative analysis is based on the information provided in the Tulare County 2030 General Plan, General Plan background Report, and/or Tulare County 2030 General Plan EIR.

As noted in the Response to 3.11 a), the proposed Project does not include a mining operation and is not located within a mineral resource zone. As such, no cumulative impacts related to this resource will occur.

Mitigation Measures:

**None Required.**

Conclusion:                            *No Impact*

As noted above, no project specific or cumulative impacts related to this resource will occur.

## **DEFINITIONS/ACRONYMS**

### Acronyms

(MRZ)	Mineral Resource Zone
(OMR)	Office of Mine Reclamation
(SMGB)	State Mining & Geology Board
(SMARA)	Surface Mining and Reclamation Act

## **REFERENCES**

Tulare County 2030 General Plan, August 2012

Tulare County 2030 General Plan Background Report, February 2010

California Department of Conservation, Division of Mines and Geology, "Guidelines for Classification and Designation of Mineral Lands",  
<http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf>

2012 CEQA Guidelines

SMARA Description, <http://www.conservation.ca.gov/smgb/Regulations/Pages/regulations.aspx>

State Mining & Geology Board (SMGB),  
<http://www.conservation.ca.gov/smgb/Pages/Index.aspx>

Office of Mine Regulation, <http://www.conservation.ca.gov/OMR/Pages/Index.aspx>