

4.11.1 INTRODUCTION

This section of the EIR addresses potential impacts of the Project on mineral resources. Additionally, this section describes the environmental and regulatory settings in relation to mineral resources.

Minerals are materials that are naturally-occurring solid chemical elements or compounds formed as the result of biogeochemical processes. Minerals that are mineable, or “ore deposits,” are defined as deposits of ore or minerals considered to have a potential material value exceeding the associated costs required to develop, mine, and process the mineral and subsequently reclaim the affected land area. Such resources have been identified within Riverside County, and more specifically, within the Project area, and therefore are evaluated herein with regard to potential effects as the result of Project implementation.

Information given in this section is based on mineral resource information obtained from available public resources including, but not limited to, the 2003 *Riverside County General Plan* (GPA No. 618), Open Space Element, *General Plan EIR No. 441* (2003), Riverside County Ordinance No. 555, the *Southwest Area Plan*, proposed Temecula Valley Wine Country Policy Area (2011), Wine Country zones of Ordinance No. 348, the *Temecula Valley Wine Country Design Guidelines*.

4.11.2 EXISTING CONDITIONS

ENVIRONMENTAL SETTING

Physical Site Conditions

Riverside County supports extensive deposits of clay, limestone, iron, sand, and aggregates. Along with agricultural production, mineral extraction plays an important role in the County’s economy. Activities associated with the conservation, extraction, and processing of mineral resources are important in meeting the needs of both the County and many dependent industries outside of the County, and allowing for the continuation of regional growth. As such mineral resources are non-renewable in nature, and careful management of known and suspected mineral deposits is required to ensure that these resources are not depleted through waste, exploitation, and/or encroaching urbanization.

Presently, the most economically-valuable mineral resources found and extracted within the County are those that are used as building materials and in their manufacture. Such materials include clay, limestone, sand and gravel, specialty sands, and rock commodities.¹

The State of California Department of Mines and Geology (SDMG, now known as the California Geological Survey, or CGS) uses Mineral Resource Zone (MRZ) classifications to indicate the presence (or lack thereof) of measured or inferred mineral resources on lands within the State. Based on a priority list established by the State Mining and Geology Board (SMGB), the State Geologist is responsible for evaluating such resources and applying a designated MRZ classification. The MRZ classifications indicate the significance of such mineral resources, based on available information of the presence or absence of

¹ County of Riverside Transportation and Land Management Agency, *Riverside County Integrated Project (RCIP) Final Program Environmental Impact Report (SCH #2002051143)* Volume I, Section 14.4, Mineral Resources (2002).

mineral deposits, with consideration of the economic potential of such deposits. Not all mineral-bearing land classified by the State Geologist is intended or reserved for the purposes of mining, and existing land uses that may affect the potential for mining to occur are not considered in the classification. Such classifications are intended to support decision-making agencies in evaluating mineral resources and mining potential on a local scale.

The classifications used by the State to define MRZs are as follows:

- **MRZ-1:** Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.
- **MRZ-2a:** Areas where the available geologic information indicates that there are significant mineral deposits.
- **MRZ-2b:** Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
- **MRZ-3a:** Areas where the available geologic information indicates that mineral deposits exist, however, the significance of the deposit is undetermined. Additional exploratory work is needed to determine specific categorization. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral resources.
- **MRZ-3b:** Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined. This class denotes areas where presence of the mineral is inferred and/or not visible from the surface geology. Further exploration is needed to ascertain full potential of the area.
- **MRZ-4:** Areas where there is not enough information available to determine the presence or absence of mineral deposits. MRZ-4 differs from MRZ-1 as it denotes areas lacking enough information for a more specific classification to be made, rather than lacking the mineral deposits themselves.

Once a MRZ classification is applied, the SMGB determines if the mineral resource deposit is appropriate for designation as a “regional” (multi-community) or “statewide economic significance.” The MRZ classification inventories mineral deposits without consideration for existing land use; however, the purpose of designation is to identify those resources considered to be of prime importance in allowing a particular region to meet its future needs and that remain available with regard to land use. Once a designation is made, such information is provided at the local level for mandated incorporation into county and city land use planning processes.

The SMGB has designated a Mineral Resources Zone of MRZ-3 for the majority of the Project area. Additionally, a small portion in the northern portion of the Project area is identified as “Unstudied;” refer to Exhibit 4.11-1, *Mineral Resource Areas*.

4.11.3 REGULATORY FRAMEWORK

EXISTING STATE REGULATIONS

Surface Mining and Reclamation Act of 1975 (Revised 2007)

The Surface Mining and Reclamation Act of 1975 (SMARA) (revised 2007) (Public Resources Code Division 2, Chapter 9, Section 2710 et. seq.) provides for the regulation of surface mining operations. The California Department of Conservation (CDC), through the Office of Mine Reclamation and the

SMGB, is responsible for the administration of SMARA. The State delegates the responsibilities of SMARA to Riverside County for all unincorporated areas. SMARA states that “the extraction of minerals is essential to the continued economic well-being of the state and to the needs of the society, and that the reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety (SMARA Section 2711[a]). SMARA considers the “values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment,” while encouraging the production and conservation of mineral resources (SMARA Section 2711[b]).

As stated above, SMARA requires the State Geologist classify land into MRZs according to its known or inferred mineral potential. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision-makers and considered before land use decisions are made that could preclude mining. MRZs within the Project area are identified in Section 4.11.2, *Existing Conditions*, above.

EXISTING COUNTY REGULATIONS

Riverside County Ordinance No. 555

County Ordinance No. 555 addresses the importance of mineral extraction to the County’s economy. The Ordinance regulates all surface mining operations in the unincorporated portions of the County, as authorized by SMARA, to ensure that:

- The production and conservation of minerals will be encouraged while considering values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment, and at the same time, eliminating or minimizing the residual hazards to public health and safety.
- The adverse effects of surface mining operations will be prevented or minimized and that mined lands will be reclaimed to a useable condition which is readily adaptable for alternative land use.
- The reclamation of mined lands will be carried out in such a way that the continued mining of minerals will be permitted.

EXISTING COUNTY GENERAL PLAN POLICIES

Relevant mineral resources policies are identified in the Riverside County General Plan Land Use Element and the Multipurpose Open Space Element (MOSE). The General Plan policies are aimed at the conservation of those areas within the County as supporting or potentially supporting significant mineral deposits, including oil and gas resources, for potential future use. As mining and/or extraction activities have the potential to result in significant environmental impacts or the depletion of the County’s mineral resources, the General Plan policies are also intended to guide the reasonable, safe, and orderly operation of mining and extraction activities within areas designated for such use, and where potential environmental, aesthetic, and land use compatibility impacts can be properly mitigated for to reduce such impacts.

The following policies are identified in the Riverside County General Plan Land Use Element and the MOSE. These policies are considered applicable to the Project as proposed; however, as the County is currently updating the General Plan, it should be noted that such policies may be revised at a future date.

Land Use (LU) Element Policies

Open Space – Mineral Resource (OS-MIN)

The following policies apply to those lands designated as Open Space-Mineral Resources on the area plan land use maps:

- Policy 21.1: Require that surface mining activities and lands containing mineral deposits of statewide or of regional significance comply with Riverside County Ordinances and the SMARA.
- Policy 21.2: Protect lands designated as Open Space-Mineral Resource from encroachment of incompatible land uses through buffer zones or visual screening.
- Policy 21.3: Protect road access to mining activities and prevent or mitigate traffic conflicts with surrounding properties.
- Policy 21.4: Require the recycling of mineral extraction sites to open space, recreational, or other uses that are compatible with the surrounding land uses.
- Policy 21.5: Require an approved reuse plan prior to the issuing of a permit to operate an extraction operation.

Multipurpose Open Space (OS) Element Policies

Non-Renewable Resources (Mineral Resources)

The following policies from the Multipurpose Open Space Element pertain to non-renewable mineral resources:

- Policy OS 14.1: Require that the operation and reclamation of surface mines be consistent with the State Surface Mining and Reclamation Act (SMARA) and County Development Code provisions.
- Policy OS 14.2: Restrict incompatible land uses within the impact area of existing or potential surface mining areas.
- Policy OS 14.3: Restrict land uses incompatible with mineral resource recovery within areas designated Open Space-Mineral Resources.

4.11.4 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section relative to minerals is patterned after the Initial Study Checklist recommended by the CEQA Guideline Appendix G, as amended, and used by the County of Riverside in its environmental review process. The issues presented in Appendix G have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant impact on mineral resources if it causes one or more of the following to occur:

- a) 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; or,

- b) The project would result in the loss of availability of a locally-important mineral resource recovery site delineated in the local general plan, specific plan, or other land use plan (refer to Section 8, Effects Found Not To Be Significant of the Draft EIR).

Based on these significance thresholds and criteria, the Project's effects may have *Potentially Significant Effects*, as identified and explained in the December 2009 Initial Study prepared by the County of Riverside. Feasible mitigation measures that could avoid or minimize potentially significant impacts may be identified in the analysis that follows. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a "significant unavoidable impact."

4.11.5 IMPACT ANALYSIS AND MITIGATION

IMPACT METHODOLOGY

Impacts to mineral resources were evaluated with regard to existing State, County, and local plans and policies information available for the Project area. California Department of Conservation publications, Riverside County General Plan Land Use maps, and the Southwest Area Plan were reviewed to identify potential conflicts of the Project's presence and operation with existing and future mineral resource extraction. These data sources were reviewed with regard to the land area affected by the Project and with consideration for the CEQA significance threshold criteria in determining whether the Project would have a potential adverse effect on known or unknown resources within the area.

For each topic below, programmatic, construction, operational, and infrastructure improvement-related impacts associated with the Project have been identified and analyzed. When considering the significance of an individual impact, the EIR considers the existing local, State and Federal regulations, laws and policies in effect, including applicable County General Plan policies. In addition, the impact analysis considers the Project Design Features that have been incorporated into the Project to avoid, reduce or offset potential impacts. In cases where existing regulations and policies and Project Design Features may not adequately reduce Project impacts, the County has proposed additional mitigation measures in General Plan EIR No. 441 to reduce, avoid or offset Project-related impacts. These mitigation measures will be incorporated into the Project Mitigation Monitoring and Reporting Program, which will be adopted as part of the Project approval process.

PROJECT DESIGN FEATURES

The following Project Design Features are incorporated into the Project to avoid, reduce or offset potential significant environmental impacts, as reflected in the Project proposal materials, including the proposed General Plan Amendment, Zoning Ordinance Amendment, and Temecula Valley Wine Country Design Guidelines:

- 1) The Project reduces the overall density of development in the Project area, thereby reducing the permanent footprint of structures and roads, preserving the option for future mineral extraction;
- 2) Within the Winery District, the proposed Project requires a minimum of 75% of land set aside for agricultural production (viticulture). This land would remain available for potential future mineral extraction.

IMPACT ANALYSIS AND MITIGATION MEASURES

Impact 4.3-1: Loss of Availability of Known Mineral Resources

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?*

Determination: *Less than Significant with Mitigation*

Wine Country Community Plan Overview of Programmatic Impacts

Loss of Mineral Resources

The Project proposes a General Plan Amendment, Zone Change, Design Guidelines, an update to the Circulation Plan and Trails network of the Southwest Area Plan. Development of the policies/ guidance within these Project documents are not anticipated to cause significant impacts to known mineral resources; however, there is the potential for subsequent activities allowed under the Project to result in significant impacts to mineral resources by accommodating non-mineral related uses within mineral resource areas.

As discussed above, mineral resources contribute significantly to the development and economic well-being of Riverside County. As the population continues to grow over future years, the County's mineral resources will face the potential effects of waste, exploitation, uncontrolled urbanization, and incompatible land uses that may prohibit and/or restrict access to such resources.

Based on the Statewide assessment of mineral resources prepared by the SDMG, as shown in Exhibit 4.11-1, *Mineral Resource Areas*, mineral deposits are likely to exist within Project area; however, the significance of these deposits are undetermined, and in response have been classified as MRZ-3 and Unstudied. Therefore, although areas classified as MRZ-3 and Unstudied are not considered to be areas of **known** mineral resources, there is the potential for presently unidentified, significant aggregate mineral resources to occur within the Project area. Additionally, the Project may indirectly impact lands where incompatible land uses encroach upon potentially economically-viable mineral resources lands.

The *Riverside County General Plan Open Space - Mineral Resource (OS-MIN)* land use designation allows for mineral extraction and processing facilities, based on the applicable SMARA classification. Those land areas held in reserve for future mining activities are also designated as OS-MIN. There are no areas within the Project site that are designated as OS-MIN.

As identified in the Riverside County General Plan EIR No. 441, the County as a whole, and in particular, eastern Riverside County, offers extensive availability of potential aggregate resources, impacts on MRZ-3 and Unstudied lands within the Project area could be considered less than significant.² Future site-specific implementing project proposals will be required to comply with applicable local, state and federal regulations, including County General Plan policies (see discussion below). In addition, to minimize the potential for loss of or adverse effects upon presently unidentified mineral resources, the County proposes Mitigation Measure MIN-1 prior to approval of potential land-disturbing activities or encroaching land uses.

² The County recognizes the difference between "available" mineral resource lands based on designation, compared with current operational and/or permitting mineral resource sites.

Construction-related Impacts (of Implementing Projects)

Implementing projects allowed pursuant to the Project are expected to occur over a 25-year period. Temporary construction-related impacts are anticipated to involve grading to construct building pads, access roads, walls or other fencing, signage, lighting, landscaping, onsite utilities, trails and necessary infrastructure improvements to support implementing projects. Construction-related impacts are not anticipated to significantly affect mineral resources above and beyond what is previously discussed above.

Operational Impacts (of Implementing Projects)

Operational impacts are anticipated to include residential, equestrian, and winery activities within the Project area. These impacts will mainly be associated with the gradual intensification and modification of uses in the Project area as new implementing projects occur. Each individual implementing project will be evaluated for consistency with applicable regulatory requirements summarized above, as well as subject to project-specific discretionary review and CEQA compliance. Project Design Features, and Mitigation Measure MIN-1, have been developed to further reduce the Project's potential impact upon presently unidentified mineral resources to less than significant levels.

Infrastructure Impacts (of Implementing Projects)

Infrastructure improvements may be necessary within and outside of the Project area. It is anticipated that a majority of these improvements will occur within existing roadways and/or rights-of-way and would have relatively small footprints associated with trenches, such as linear facilities like sewer and water pipelines, or small areas adjacent to existing roadways or within properties, such as those associated with reservoirs, pump stations, traffic improvements, or storm drain improvements. In addition, foreseeable near-term projects may include the development of roundabouts for Project area roadway intersections. These roundabouts are anticipated to require additional right-of-way outside of existing roadways. However, this too would involve a relatively small footprint. The potential impact to mineral resources from these improvements is anticipated to be less than significant due to the typically developed or disturbed nature of the affected land and relatively limited footprint of the improvements.

Summary of Applicable Existing Regulations and Policies

- a) The Surface Mining and Reclamation Act (SMARA) enacted by the State of California was adopted to address the protection of Mineral Resources statewide.
- b) Riverside County Ordinance No. 555 regulates surface mining in unincorporated areas in compliance with SMARA.
- c) General Plan policies LU 21.1 through 21.5 apply to properties designated as Open Space-Mineral Resources on the area plan land use maps.
- d) General Plan policies OS 14.1 through 14.6 seek to conserve areas identified as containing significant mineral deposits and oil and gas resources for potential future use.

General Plan policies LU 21.1 through 21.5 and OS 14.1 through 14.6 address mineral resources issues in compliance with SMARA. In addition, these policies require that incompatible uses be limited or minimized to the extent feasible and new implementing projects provide adequate buffering and prepare re-use plans once mineral extraction is complete. The policies set in place are designed to protect mineral resources for future use.

Mitigation Measures

MIN-1 Pursuant to Public Resources Code, the Surface Mining and Reclamation Act, Chapter 9, Article 4, Section 2762(e), prior to approval of a future implementing project on lands classified by the State Geologist as MRZ-3 (as described in paragraph (3) of subdivision (b) of Section 2761), the County Geologist shall make a site-specific determination as to the site's potential to contain or yield important or significant mineral resources of value to the region and the residents of the State of California.

- If it is determined by the County Geologist that lands classified as MRZ-3 have the potential to yield significant mineral resources which may be of "regional or statewide significance" and the proposed use is considered "incompatible" (as defined by Section 3675 of Title 14, Article 6 of the California Code of Regulations) and could threaten the potential to extract said minerals, the project proponent shall prepare an evaluation of the area in order to ascertain the significance of the mineral deposit located therein. This site-specific mineral resources study shall be performed to, at a minimum, document the site's known or inferred geological conditions; describe the existing levels of development on or near the site which might preclude mining as a viable adjacent use; and analyze the State standards for designating land as having "regional or Statewide significant" under the Surface Mining and Reclamation Act. The results of such evaluation shall be transmitted to the State Geologist and the State Mining and Geological Board (SMGB).
- Should significant mineral resources be identified, future implementing projects shall either avoid said resource or shall incorporate appropriate findings subject to a site-specific discretionary review and CEQA process.

Conclusion

Implementation of the General Plan policies related to mineral resources, standard conditions of approval, and Mitigation Measure MIN-1 would ensure that future implementing projects within the Project area would not have a significant effect on area mineral resources or result in the loss of availability of unknown mineral resources of value to the region or the State. Through adherence to the County review of implementing project proposals within the MRZ-3 to avoid incompatible land uses; compliance with existing laws, regulatory programs, and General Plan policies, and implementation of Mitigation Measure MIN-1, Project impacts would be reduced to less than significant.

4.11.6 CUMULATIVE IMPACTS

Cumulative impacts to mineral resources are addressed in the Riverside County General Plan Final EIR No. 441, which is incorporated by reference into this EIR. Cumulative impacts are two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. The geographic scope for cumulative impacts to mineral resources includes all of Riverside County, and the broader Southern California area, since mineral resource extraction sites from throughout Southern California supply the Riverside County area.³ This geographic scope of analysis is appropriate because the loss of availability of mineral resources anywhere in the County would combine with potential mineral resource impacts of the Project to result in a cumulative impact on County-wide mineral resources.

³ California Geological Survey Map Sheet 52 notes that the Temescal Valley - Orange County "...has only 32 percent of the permitted reserves needed for the next 50 years" (*Liberty Quarry Draft EIR*, July 2009, page 1-2, accessed on September 6, 2011 at http://www.rctlma.org/planning/content/temp/liberty_quarry/feir).

Threshold: *Would the project result in cumulative impacts associated with implementation of the Wine Country Community Plan?*

Determination: *Less than Significant with Mitigation*

Cumulative Effects on Mineral Resources

Cumulative impacts to mineral resources are addressed in the Riverside County General Plan Final EIR, which is incorporated by reference into this EIR. The Project is not anticipated to result in greater cumulative mineral resource impacts than addressed in this EIR.

Availability of mineral resources, on a regional level, is a serious issue facing Southern California. Although much of Southern California has lands capable or designated for mineral resource production, the region has insufficient permitted mineral resource areas to meet the region's projected demand (see footnote above). The Project does not have a "cumulatively considerable" significant incremental effect on this regional impact, relative to the potential impacts on the limited MRZ-3 and Unstudied lands within the Project area. As stated above, there are no known mineral resources in the Project area, the Project does not include any designated mineral extraction sites, and the County offers extensive availability of potential aggregate resources. Compliance with existing regulatory requirements and General Plan policies, along with Project Design Features and recommended mitigation measures, will reduce the Project's share of cumulative impacts to less than significant levels. Cumulative impacts to mineral resources are most effectively addressed at the State and County level through the State programs and General Plan policies noted above.

Mitigation Measures

Refer to Mitigation Measure MIN-1, above.

4.11.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

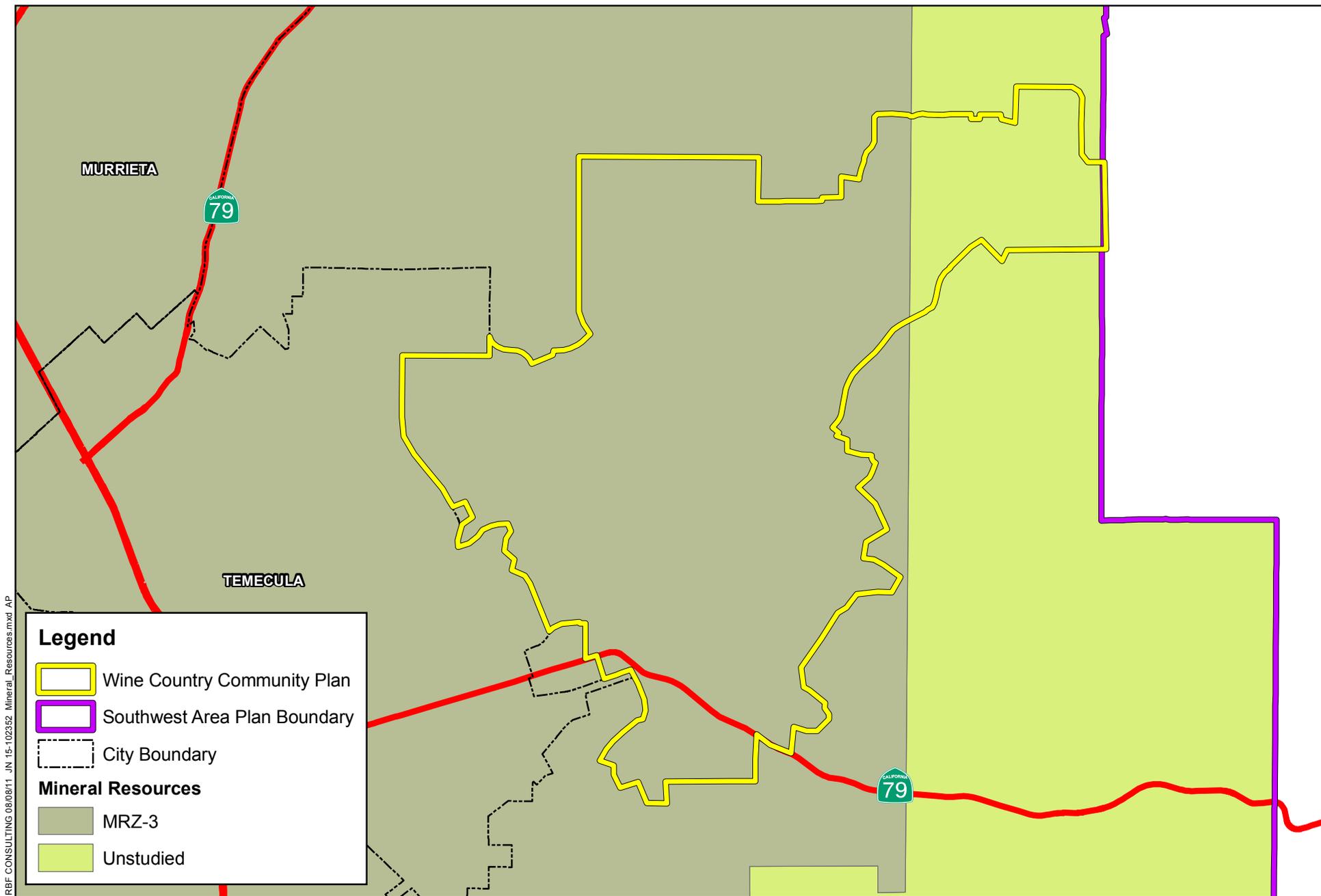
The Project would result in a less than significant impact with mitigation.

Mineral resources are projected to have significant shortcomings relative to permitted capacity compared to projected need in the region, which represents a significant impact. The County is addressing this impact through General Plan policies and project-specific mineral resource extraction reviews. The Project's effect on this cumulative impact is not "cumulatively considerable."

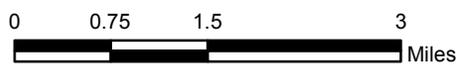


4.11 Mineral Resources

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Source: Riverside County GIS

WINE COUNTRY COMMUNITY PLAN EIR
Mineral Resource Areas



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