4.12 Mineral Resources

This section analyzes potentially significant impacts related to mineral resources that could result from implementation of the project, which consists of the 2021 General Plan Update (GPU), Housing Element Update, and Climate Action Plan. The analysis area covers the entire city of Moreno Valley (city) and sphere of influence, which are collectively referred to as the Planning Area. Within the analysis, Concept Areas refers to those areas where the GPU proposes land use changes as shown on Figure 3-1. This analysis relies on secondary sources including state and regional mineral mapping.

4.12.1 Existing Conditions

There are no active mineral resource extraction facilities within the Planning Area. The existing 2006 General Plan land use map, as well as the proposed GPU land use map, do not delineate any mineral resource recovery sites, or designate any land for mineral resource production. The Land Use Plan of the County of Riverside Reche Canyon/Badlands Subarea designates land along Jack Rabbit Road within the southeastern portion of the Planning Area under the Mineral Resources designation (County of Riverside 2020).

4.12.2 Applicable Regulatory Requirements

4.12.2.1 Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) of 1975 established policies for the conservation, development, and reclamation of mineral lands. It also contained specific provisions for the California Geological Survey to classify the regional significance of mineral resources through the use of Mineral Resource Zones (MRZs). The objective of these zones is to identify the significance of mineral deposits and ensure that the mineral potential of land is recognized and considered by local government decision-makers before they make land use decisions that could preclude mining. The highest priority areas are those within the state that are subject to urban expansion or other irreversible land uses that would preclude mineral extraction. The following provides a description of the four different MRZs:

- MRZ-1 designates 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 designates areas underlain by mineral deposits where geologic data indicates that significant measured or indicated mineral resources are present.

- MRZ-3 designates areas that contain known mineral deposits, the significance of which cannot be evaluated from available data.
- MRZ-4 designates areas where available information is inadequate for assignment to an MRZ zone.

Figure 4.12-1 presents the distribution of each MRZ category within the Planning Area, while Table 4.12-1 presents the approximate acreage of each MRZ category within the Planning Area. The majority of land within the Planning Area is designated as MRZ-3, land for which the significance of mineral resources cannot be determined. Some land within the southwestern portion of the city is designated as MRZ-1, land where adequate geologic information indicates that no significant mineral deposits are present (1,190 acres), and a small amount of land in the southeastern portion of the Planning Area is categorized as MRZ-2, areas underlain by mineral deposits where geologic data indicates that significant measured or indicated mineral resources are present (70 acres).

Table 4.12-1 Acreage of Mineral Resource Zones within the Planning Area	
Category	Acres
MRZ-1	1,190
MRZ-2	70
MRZ-3	41,657
MRZ-4	0
TOTAL	42,917

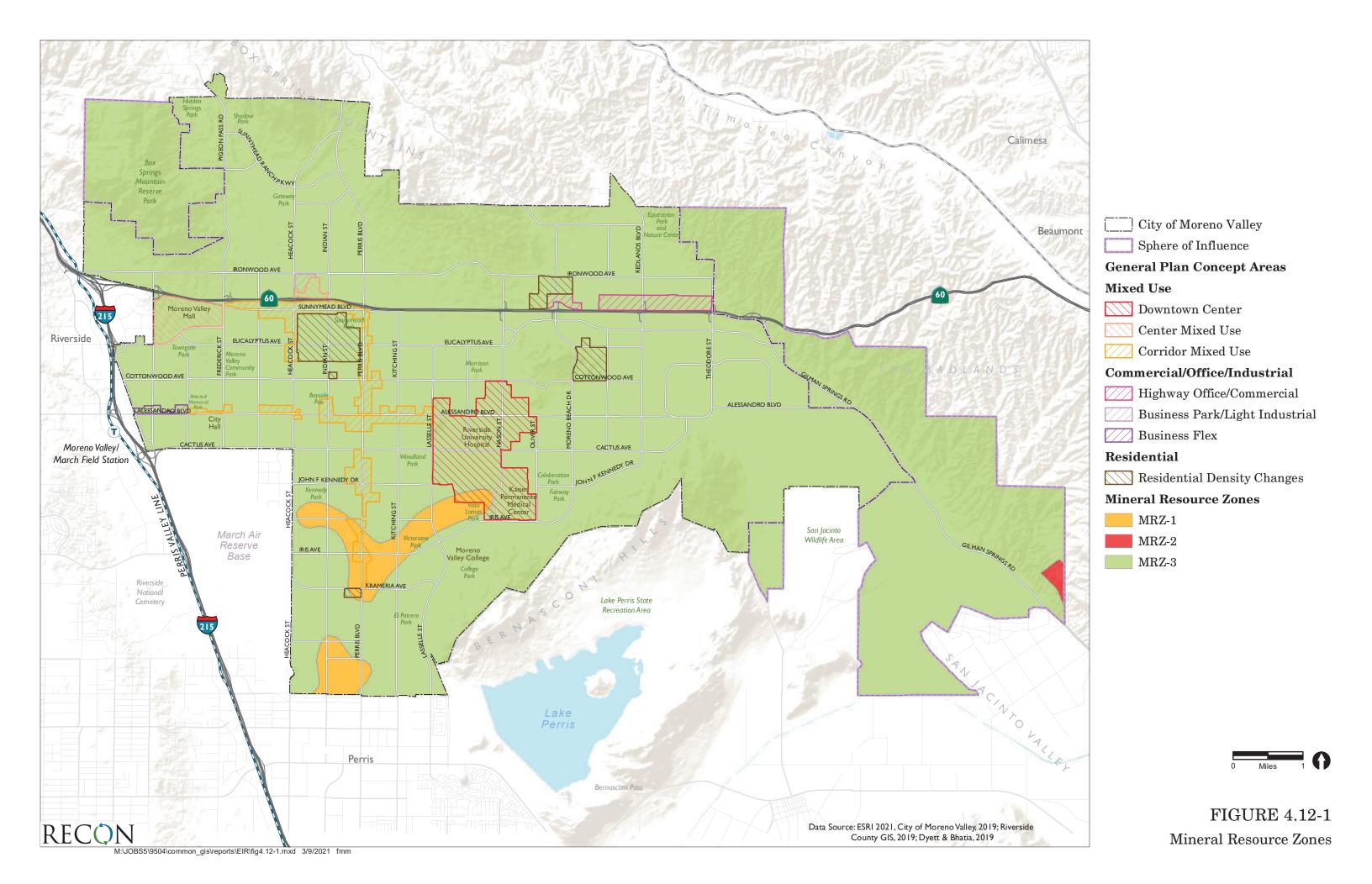
4.12.3 Methodologies for Determining Impacts

The impact evaluation began with a review to determine if existing mineral resource extraction activities occur within the Planning Area, and mapping the acreage of each MRZ category within the Planning Area.

4.12.4 Basis for Determining Significance

Thresholds used to evaluate impacts related to air quality are based on applicable criteria in the California Environmental Quality Act (CEQA) Guidelines (California Code of Regulations Sections 15000-15387), Appendix G. A significant impact related to mineral resources would occur if the project would:

- 1) 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
- 2) 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.



4.12.5 Impact Analysis

4.12.5.1 Topic 1: Mineral Resources

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?

Implementation of the GPU would primarily focus new development and redevelopment within the Concept Areas. These areas are largely within or surrounded by existing urbanization, which would make them infeasible for mining. As described in Section 4.12.2.1 above, the majority of land within the Planning Area is designated as MRZ-3, land for which the significance of mineral resources cannot be determined, or MRZ-1, land for which adequate geologic information indicates that no significant mineral deposits are present. Neither of these MRZ categories are considered significant mineral resources. The small amount of land designated as MRZ-2, areas underlain by mineral deposits where geologic data indicates that significant measured or indicated mineral resources are present, is not located within any of the proposed Concept Areas. Furthermore, this area is not currently used for mineral resource extraction. Therefore, the project would not result in the loss of availability of regionally valuable mineral resources, and impacts would be less than significant.

4.12.5.2 Topic 2: Mineral Resource Recovery Site

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?

As described in Section 4.12.1 above, there are no active mineral resource extraction facilities within the Planning Area. The existing 2006 General Plan land use map, as well as the proposed GPU land use map do not delineate any mineral resource recovery sites, or designate any land for mineral resource production. Therefore, implementation of the project would not result in the loss of a designated mineral recovery site and no impact would occur.

4.12.6 Cumulative Analysis

The majority of land within the Planning Area is designated as MRZ-3, land for which the significance of mineral resources cannot be determined, or MRZ-1, land for which adequate geologic information indicates that no significant mineral deposits are present. Neither of these MRZ categories are considered significant mineral resources. The small amount of land designated as MRZ-2, areas underlain by mineral deposits where geologic data indicates that significant measured or indicated mineral resources are present, is not located within any of the proposed Concept Areas. The Planning Area does not possess any mineral resource recovery sites. Therefore, the project would not contribute to a cumulative impact related to mineral resources.

4.12.7 Significance of Impacts before Mitigation

4.12.8.1 Topic 1: Mineral Resources

Impacts would be less than significant. No mitigation is required.

4.12.8.2 Topic 2: Mineral Resource Recovery Site

No impact would occur. No mitigation is required.

4.12.8 Mitigation

4.12.8.1 Topic 1: Mineral Resources

Impacts would be less than significant. No mitigation is required.

4.12.8.2 Topic 2: Mineral Resource Recovery Site

No impact would occur. No mitigation is required.

4.12.9 Significance of Impacts after Mitigation

4.12.9.1 Topic 1: Mineral Resources

Impacts would be less than significant. No mitigation is required.

4.12.9.2 Topic 2: Mineral Resource Recovery Site

No impact would occur. No mitigation is required.