
3.11 - Mineral Resources

3.11.1 - Introduction

This section describes and evaluates potential environmental impacts to mineral resources resulting from the proposed City of Elk Grove Sphere of Influence Amendment (SOIA). The Notice of Preparation identified the Mineral Resources topical issue for evaluation (Sacramento Local Agency Formation Commission 2010).

Mineral resources in Sacramento County include natural gas, petroleum, sand, gravel, clay, gold, silver, peat, topsoil, and lignite. Only aggregates (that is, sand and gravel) and natural gas are in production.

3.11.2 - Environmental Setting

The project site primarily contains agricultural uses with rural housing, light industrial, commercial, and public facilities. There are no mineral resource extraction activities within the project site or close to the site.

Sacramento County's primary remaining aggregate deposits are located in the Old American River channel south of Rancho Cordova. Additional Portland cement concrete (PCC) grade aggregate exists in the floodplain and channel of Cosumnes River. State Geologists indicated that the quality of aggregates is mined along with topsoil at Wilton Road, and aggregate producers have purchased at least one tract in the Cosumnes flood plain. All of the sand and gravel mined in Sacramento County is used for construction. Three major and several smaller aggregate producers are located in Sacramento County, with the larger producers located in the central portion of the County. Clay is surface-mined in at least two locations and topsoil from one location on the Cosumnes River. The natural gas production areas are primarily located the Delta's Rio Vista Field southwest of the project site.

3.11.3 - Regulatory Setting

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) guides the continued mining of minerals and provides for the protection and subsequent beneficial use of the mined and reclaimed lands (California 2010a).

Consistent with the mandatory requirements of SMARA, Sacramento County created mineral resource policies and incorporated them into the General Plan Conservation Element. In addition, the Open Space Element delineated the extent of mineral resources in Sacramento County. Implementing the General Plan, the Sacramento County Zoning Code contains the Surface Mining Combining Land Use Zone (SM). This zone is designed to protect the mineral resources of Sacramento County from

incompatible land use, to manage these mineral resources, to assure the County an adequate supply of these resources with due consideration for the environment, and to provide for the restoration of mined lands for future use. A conditional use permit would be required for surface mining operations or regulation through the procedures of an existing special planning area zoning designation.

The SM Combining Zone may be combined with 14 zones. Of these, four zones occur within the project site.

Local

County of Sacramento

The County of Sacramento General Plan establishes goals and policies to guide both present and future development within the County's jurisdiction. The proposed SOIA project does not include any development at this time; therefore, determination of any specific policies for future projects would be premature. However, a general discussion of policies is included below to provide guidance to any future development within the SOIA boundaries.

- **Policy CO-37:** Apply the aggregate resources combining land use category to additional areas as subsequent studies determine them to contain mineral resources which are feasible and appropriate for mining. The aggregate resources combining land use category shall not be a prerequisite to (SM) surface mining combining zoning or regulation through the procedures of an existing special planning area zoning designation in conjunction with proposed surface mining.
- **Policy CO-38:** Sewer interceptor and trunk alignments shall be routed to avoid areas planned for aggregate resource mining to the extent practical. Where such alignments are impractical, they shall be designed to minimize aggregate resources which would be precluded from mining, and make reasonable attempt to preserve the future use of mined areas for flood control or recharge purposes.
- **Policy CO-44:** Due to predicted shortages of aggregates in Sacramento County, mining of mineral resources within the Urban Services Boundary (USB) is encouraged, where consistent with Habitat Conservation Plans or other County initiated conservation programs and where such mining does not preclude successful completion of these plans, to avoid the potential loss of these mineral resources as a result of potential urban development. This policy is not intended to preclude mining outside of the USB.

City of Elk Grove

The City of Elk Grove General Plan was also reviewed but does not contain any specific policies concerning mineral resources.

3.11.4 - Methodology

The 2011 Sacramento County General Plan and DEIR for the 2030 General Plan Update were reviewed for applicable policies and existing mineral resource sites that apply to the project site. Analysis of impacts to mineral resources was limited to aggregates and natural gas because only these two mineral resource groups are currently extracted within Sacramento County.

The analysis excluded changes in General Plan land use designations or zoning classifications, including pre-zoning, because neither of these changes is proposed or necessary for project implementation.

The impacts related to mineral resources from implementation of the 2003 Elk Grove General Plan were evaluated in the General Plan Environmental Impact Report (EIR). All mitigation measures identified for impacts in the Elk Grove General Plan EIR and adopted by the City continue to remain the responsibility of the City as part of implementation of the General Plan. Consequently, upon approval of any future annexation request for the SOIA Area, those General Plan policies and EIR mitigation measures are assumed to apply to development within the SOIA Area.

3.11.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to mineral resources are significant environmental effects, the following questions are analyzed and evaluated. 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?
- 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?

3.11.6 - Project Impacts and Mitigation Measures

This section assesses the effects that implementation of the proposed project could have on mineral resources. The analysis considers the potential impacts in existing extraction activities and known resource areas.

Loss of Known Mineral Resource

Impact MIN-1:	The project would not 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.
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Impact Analysis

Aggregates. The Sacramento County General Plan Conservation Element delineated areas designated by the State Geologist as Prime Aggregate Resource Areas (ARA). The California Mineral Land Classification System classifies ARAs as Mineral Resource Zone 2; this zone is identified by areas of identified mineral resource significance (California 2010b). These ARAs are

located in the central portion of the County and not within or adjacent to the project site. Therefore, project implementation would not result in the loss of a known ARA.

The Open Space Element delineated the boundaries of the Sacramento-Fairfield Production-Consumption Region, which partially overlies the project site. The portion of the P-C Region overlying the project site is identified as containing aggregate resources that cannot be evaluated from available data. Under the California Mineral Land Classification System, this equates to Mineral Resource Zone 3, a zone identified by areas of undetermined mineral resource significance and, specifically, Mineral Resource Zone 3b. Mineral Resource Zone 3a represents known mineral occurrence, whereas Mineral Resource Zone 3b is broadly defined as areas containing inferred mineral deposits that may qualify as mineral resources. Because of the project site is classified as Mineral Resource Zone 3b, impacts to the loss of known aggregate mineral resources would be less than significant.

The entire project site is identified as open space, which is defined as any land or water area essentially unimproved and devoted to the managed production of resources, that include areas containing major mineral deposits (Sacramento County 1993b).

The Open Space Element further delineates the remaining open space containing significant aggregate deposits and ARAs. This area does not overlay the project site. Therefore, no impacts to known aggregate resources within open space would result from implementation of the SOIA project.

Clay. The Conservation Element separately delineates Potential Clay Deposits (Ione Formation Series) and Potential Kaolin Clay Deposits in the easterly portion of the County. The project site does not contain either of the two types of clay deposits; therefore, project implementation would not result in the loss of a known clay mineral resource.

Natural Gas. The Conservation Element delineates “Known Gas Regions” within the County. The majority of these regions occur in the southwest portion of the County in the Delta’s Rio Vista Field, with isolated regions occurring in the west-central and northwest portions of the County. The Open Space Element provides locations for Known Gas Deposits that approximately correspond to the mapped Known Gas Regions. The project site does not contain either a Known Gas Region or a Known Gas Deposit. One small, isolated Known Gas Region occurs approximately 2 miles north of the project site near the Elk Grove Boulevard and Franklin Boulevard intersection. Because the Known Gas Regions and Deposits are located outside the project site boundary, loss of the availability of a known natural gas deposit mineral resource would not result from implementation of the proposed SOIA project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant impact.

Loss of Mineral Resource Recovery Site

Impact MIN-2: **The project would not 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.**

Impact Analysis

No active mining or natural gas extraction operations are located within the project site boundary. As discussed under Impact MIN-1 above, the County General Plan does not designate any locally important mineral resource recovery sites within the project site. Therefore, loss of a locally important mineral resource recovery site resulting from impacts to an existing operation would not result from implementation of the proposed SOIA project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Less than significant impact.

