

4.11 MINERAL RESOURCES

This section provides an overview of mineral resources and evaluates impacts associated with the proposed project. Topics addressed include statewide/regional and local mineral resources. The proposed project is evaluated in terms of whether the implementation of the project would result in the permanent loss of, or loss of access to, mineral resources occurring within the West Adams CPA.

REGULATORY FRAMEWORK

The following section provides a regulatory framework, describing applicable agencies and regulations related to mineral resources.

Federal

Bureau of Land Management (BLM). The BLM, an agency within the United States Department of the Interior, administers 261 million surface acres of America's public lands, located primarily in 12 Western States. The BLM is responsible for managing commercial energy and mineral production from the public lands in an environmentally sound and responsible manner, for the leasing of federal oil and gas and geothermal minerals, and for supervising the exploration, development, and production operations of these resources on both federal and Native American lands. The BLM is responsible for maintaining viable national policies and processes for solid minerals resources under federal jurisdiction. Solid minerals include coal and non-energy leasable minerals, hard rock minerals on acquired lands, locatable minerals, and salable minerals.

State

Surface Mining and Reclamation Act of 1975 (SMARA). The SMARA requires that the State Department of Mines and Geology Board map areas throughout the State of California that contain regionally significant mineral resources. Construction aggregate resources (sand and gravel) deposits were the first commodity selected for classification by the Board. Once mapped, the Board is required to designate for future use those areas that contain aggregate deposits that are of prime importance in meeting the region's future need for construction-quality aggregates. The primary objective of SMARA is for each jurisdiction to develop policies that will conserve important mineral resources, where feasible, that might otherwise be unavailable when needed. SMARA requires that once policies are adopted, local agency land use decisions must be in accordance with its mineral resource management policies. These decisions must also balance the mineral value of the resource to the market region as a whole, not just their importance to the local jurisdiction.

Division of Oil, Gas, and Geothermal Resources (DOGGR). The DOGGR within the State Department of Conservation supervises the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells to protect the environment, public health and safety, and encourage good conservation practices. The DOGGR collects data on the location of groundwater, oil, gas, and geothermal resources, and records the location of all drilled and abandoned wells.

California Geologic Survey (CGS). Based on guidelines adopted by the CGS, areas known as Mineral Resource Zones (MRZ) are classified according to the presence or absence of significant deposits, as defined below. These classifications indicate the potential for a specific area to contain significant mineral resources:

- **MRZ-1:** Areas where available geologic information indicates there is little or no likelihood for presence of significant mineral resources.
- **MRZ-2:** Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present or where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.

- **MRZ-3:** Areas containing known mineral occurrences of undetermined mineral resource significance.
- **MRZ-4:** Areas of no known mineral occurrences where geologic information does not rule out the presence or absence of significant mineral resources.

Much of the area within the MRZ sites in Los Angeles was developed with structures prior to the MRZ classification and, therefore, is unavailable for extraction.

Local

City of Los Angeles General Plan Safety and Conservation Element. The City of Los Angeles General Plan provides growth and development policies by providing a comprehensive long-range view of the City as a whole. The Safety and Conservation Element of the General Plan consists of an identification and analysis of the existing natural resources in the City of Los Angeles. Policies of the Safety and Conservation Element include the preservation of mineral resources and of the access to these resources. The applicable Safety Element and Conservation Element policies and objectives are shown in **Table 4.11-1**.

TABLE 4.11-1: RELEVANT GENERAL PLAN MINERAL RESOURCES, SAFETY, AND CONSERVATION ELEMENT GOALS, OBJECTIVES, AND POLICIES	
Goal/Policy/Objective	Goal/Policy/Objective Description
SAFETY ELEMENT – HAZARDS MITIGATION	
Policy 1.1.4	Health/environmental protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from accidental release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.
CONSERVATION ELEMENT - RESOURCE MANAGEMENT (FOSSIL FUELS) - PETROLEUM (OIL AND GAS)	
Policy 1	Continue to encourage energy conservation and petroleum product reuse.
Policy 3	Continue to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction, and transport operations, consistent with California Department of Conservation, Division of Oil and Gas requirements.
SOURCE: City of Los Angeles General Plan, Safety Element, 1996, and Conservation Element, 2001.	

Oil Drilling District and Rock and Gravel District Procedures. To regulate subsurface extraction activities, the City established Oil Drilling District procedures in 1948 and Rock and Gravel District procedures in 1951. The latter was superseded in 1976 by the Surface Mining District ordinance which brought the City into compliance with SMARA. The former has been amended several times to improve protective and procedural measures and, in 1971, to include offshore oil drilling. Both contain provisions for monitoring and imposing mitigation measures to prevent significant subsidence relative to oil and gas extraction and mining activities. The districts are established as overlay zones and are administered by the Department of City Planning with the assistance of other City agencies. The City Oil Administrator of the Office of the City Administrative Officer is responsible for monitoring oil extraction activities and has the authority to recommend additional mitigation measures to the Planning Commission after an Oil Drilling District is established. The Planning Department Office of Zoning Administration issues and administers oil drilling permits and may impose additional mitigation measures, as deemed necessary, after a permit has been granted, such as measures to address subsidence.

City of Los Angeles Municipal Code (LAMC). To comply with SMARA, the City of Los Angeles adopted (1975) the 'G' Surface Mining supplemental use provisions (LAMC Section 13.03). Subsequent amendments have brought the City's provisions into consistency with new state requirements. The 'G' provisions are land use, not mineral conservation regulations. They regulate the establishment of sand and gravel districts, extraction operations, mitigation of potential noise, dust, traffic, and other potential impacts, as well as post-extraction site restoration. Other conditions may be imposed by the City if deemed appropriate.

The 'O' Oil Drilling supplemental use district provisions of the (LAMC Section 13.01) were initially enacted in 1953. They delineate the boundaries within which surface operations for drilling, deepening, or operation of an oil well or related facilities are permitted, subject to conditions and requirements set forth in the code and by a Department of City Planning Zoning Administrator, the City of Los Angeles Fire Department, and the City's petroleum administrator of the Office of Administrative and Research Services. The conditions protect surrounding neighborhoods and the environment from potential impacts, e.g., noise, hazard, spills, and visual blight. In addition, the Department of Water and Power monitors drilling operations to assure protection of water wells and aquifers. Property owners, including the City, receive oil production royalties from lands (e.g., City streets) that lie within oil drilling districts.

EXISTING SETTING

Statewide and Regional Mineral Resources

The Los Angeles Basin is known to be a source of petroleum. Most of the petroleum is from the Lower Pliocene (3- to 5-million years old) and from the Upper Miocene (5- to 11-million years old) rock formations. The Las Cienegas and Inglewood Oil Fields are partially located in the West Adams CPA. The Las Cienegas Oil Field is located in the northeast portion of the West Adams CPA, as shown in **Figure 4.11-1**. This oil field is operational and produced 512,000 barrels (bbl) of oil and 332,000 cubic feet (cf) of gas in 2006.¹

The Inglewood Oil Field is located in three areas along the western edge of the West Adams CPA, as shown in **Figure 4.11-1**.² Current activities at the Inglewood Oil Field involve extracting oil and gas from subsurface reservoirs located between 3,000 and 10,000 feet deep, processing extracted crude oil to remove water, and processing extracted gas to remove water and gas liquids. There are currently 436 active producing wells within the surface boundary of the Inglewood Oil Field, 207 active water injection wells, 177 shut-in wells, 643 abandoned wells, for a total of 1,463 wells. The current production volumes are 8,700 barrels per day (bpd) of oil, 300,000 bpd of water, and 5,700 thousand standard cubic feet per day (mscfd) of gas.

An EIR was prepared in June 2008 to establish a Community Standards District (CSD) for portions of the Inglewood Oil Field within Los Angeles County. A CSD is a supplemental district used to address special issues that are unique to certain geographic areas within unincorporated areas of Los Angeles County. The CSD would establish permanent development standards, operating requirements, and procedures for this portion of the oil field. The EIR analyzed a potential future development scenario for the Inglewood Oil Field. Over the next 20 years, it is anticipated that as many as 53 new wells could be drilled each year. This future drilling could increase the production of oil and gas from the oil field. Potential crude oil production is estimated to peak at about 21,000 bpd and gas production is estimated to peak at about 15,000 mscfd. Water produced and then re-injected into the groundwater system is estimated to peak at about 720,000 bpd. The increase in oil production could require the construction and operation of a number of new facilities or modification of existing facilities.

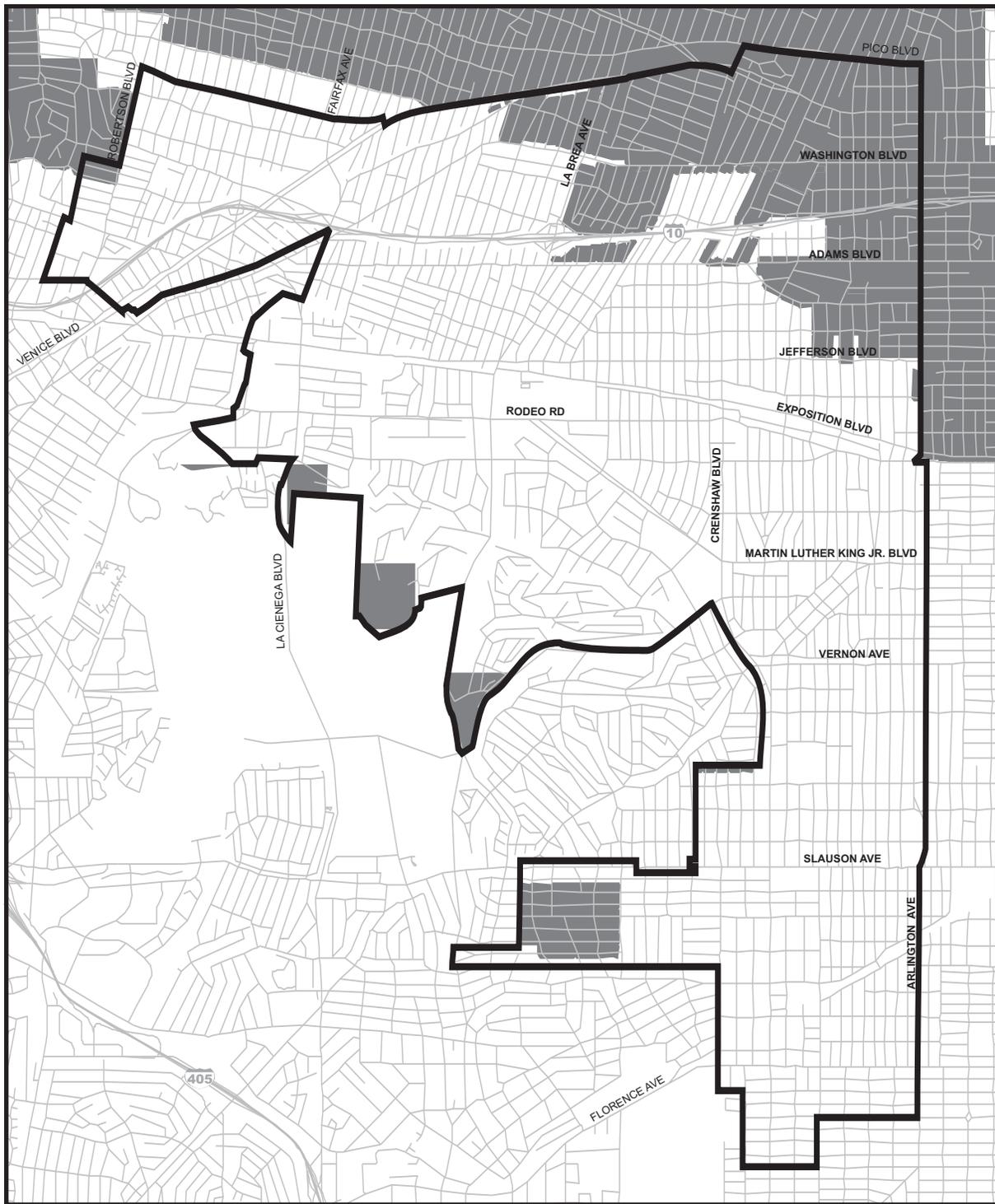
Local Mineral Resources

According to the City's Areas Containing Significant Mineral Resources Map, the West Adams CPA does not contain any land classified as MRZ-2. Therefore, the West Adams CPA is not underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present or where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.³

¹California Department of Conservation, Division of Oil, Gas and Geothermal Resources, *2006 Preliminary Report of California Oil and Gas Production Statistics*, January 2007.

²*Ibid.*

³*Ibid.*



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LEGEND:

-  West Adams CPA
-  Oil Field

APPROX.
SCALE



SOURCE: City of Los Angeles, ESRI and TAHA, 2012.

FIGURE 4.11-1

OIL FIELDS

THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to mineral resources if it 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; and/or
- 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.

IMPACTS

The proposed project is the adoption of the West Adams New Community Plan and its implementing ordinances. These ordinances, which include standards and guidelines for projects within the West Adams CPA, include a Community Plan Implementation Overlay District (CPIO) containing several subdistricts throughout the plan area, as well as amendments to the existing Crenshaw Corridor Specific Plan. The proposed project further involves General Plan Amendments and zone changes to create consistency with the City's General Plan Framework Element, as well as create consistency between both planned and existing uses of parcels and their relationship to surrounding areas. The proposed project further restricts detrimental uses, incentivizes development in targeted areas, and provides development standards to ensure that new construction is consistent with neighborhood character, as well as corrects minor errors within the existing West Adams Community Plan. While there are mineral resources within the West Adams CPA, they are subject to the federal, State, and local policies and guidelines mentioned above; therefore, the proposed West Adams New Community Plan and its implementing ordinances do not contain any specific guidelines that would affect mineral resources.

Construction

The West Adams New Community Plan describes the capacity for future development for a portion of the City. While the proposed project includes a series of implementing ordinances, it is not an implementation plan in and of itself, and its adoption does not constitute a commitment to any project-specific construction. However, construction related to future capacity within the West Adams CPA would have the following impacts.

Statewide and Regional Mineral Resources

State designated oil fields are located within the central western and northeastern portions of the West Adams CPA, as shown in **Figure 4.11-1** above. The central western area of the West Adams CPA where State-designated oil fields are located currently contains a variety of land uses including open space, single, and multi-family residential. The northeastern area of the West Adams CPA where State-designated oil fields are currently located contains a variety of land uses, including single- and multi-family residential, industrial/manufacturing, public facilities, commercial, and open space.

The West Adams New Community Plan could potentially result in some development or infrastructure projects on undeveloped/vacant lands within the West Adams CPA. As most of this development would be infill of existing urban spaces, these projects are not expected to directly impact mineral resources. Similarly, areas of more intense development, such as the transit-oriented development (TOD) areas located at Venice/National Boulevards, La Cienega/Jefferson Boulevards, La Brea/Farmdale Avenues, Crenshaw/Jefferson Boulevards, and Crenshaw Boulevard along the Crenshaw/LAX LRT Project corridor

that would be allowed under the West Adams New Community Plan would not directly impact mineral resources.

Many of the land use changes under the proposed project consist of General Plan Amendments to create consistency with Framework and Land Use Designations. The Safety and Conservation Element consists of policies that would minimize potential impacts associated with the loss of a known and/or locally important mineral resource. Additional policies in the General Plan seek to implement the provisions of the SMARA, to establish extraction operations at appropriate sites; to minimize operation impacts on adjacent uses, ecologically important areas, and ground water; to protect the public health and safety; and to require appropriate restoration, reclamation and reuse of closed sites. These policies would reduce impacts in areas near and/or overlaying state-designated oil fields within the West Adams CPA and would not interfere with the extraction of oil and gas resources. Additionally, existing City policies would regulate and identify provisions for districts where production of oil and gas is permitted and how it shall be undertaken. Furthermore, implementation of existing City Codes, regulatory requirements, and policies would ensure that the proposed project would result in less-than-significant impacts related to Statewide and regional mineral resources.

Local Mineral Resources

As described above, the West Adams CPA does not contain any land classified as MRZ-2. Therefore, no impacts related to local mineral resources would occur.

Operations

Operation of the proposed project would not affect mineral resources. Therefore, no further discussion of operation impacts is necessary.

MITIGATION MEASURES

Construction

The West Adams New Community Plan describes the capacity for future development for a portion of the City. While the proposed project includes a series of implementing ordinances, it is not an implementation plan in and of itself, and its adoption does not constitute a commitment to any project-specific construction.

Statewide and Regional Mineral Resources

Impacts related to statewide and regional mineral resources would be less than significant. No mitigation measures are required.

Local Mineral Resources

No impacts related to local mineral resources would occur. No mitigation measures are required.

Operations

No operational impacts related to mineral resources would occur. No mitigation measures are required.

SIGNIFICANCE OF IMPACTS AFTER MITIGATION

Construction

The West Adams New Community Plan describes the capacity for future development for a portion of the City. While the proposed project includes a series of implementing ordinances, it is not an implementation plan in and of itself, and its adoption does not constitute a commitment to any project-specific construction. Construction related to future capacity within the West Adams CPA would have the following significance after mitigation.

Statewide and Regional Mineral Resources

Impacts related to statewide and regional mineral resources were determined to be less than significant without mitigation.

Local Mineral Resources

No impacts related to local mineral resources would occur.

Operations

No operational impacts related to mineral resources would occur.