3.10 MINERAL RESOURCES

EXECUTIVE SUMMARY

The One Valley One Vision (OVOV) Planning Area contains extensive mineral resources. Gold mining and oil production have, historically, been the primary mineral extraction activities in and around the Santa Clarita Valley area. Other minerals mined in the OVOV Planning Area include construction aggregate (sand and gravel), titanium, tuff, and rock. This chapter provides an analysis of the County's proposed Area Plan policies on the protection of mineral resources within the County's OVOV Planning Area. The County's Planning Area consists of unincorporated land outside the City's boundaries and adopted Sphere of Influence (SOI) but within the OVOV Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. The County and the City Planning Areas together comprise the OVOV Planning Area. The analysis indicates that the potential impacts on the mineral resources within the County's Planning Area would be less than significant with implementation of the proposed Area Plan.

EXISTING CONDITIONS

Oil Production Wells

The majority of the existing oil and natural gas fields are located in the western portion of the County's Planning Area, as shown in **Figure 3.10-1, Existing Mineral Resources**. No known oil or gas wells are located east of Highway 14. As of 2003, approximately 3,180 acres are used for oil and natural gas extraction in the OVOV Planning Area.[1] As shown in **Figure 3.10-1**, there are approximately 712 oil producing and natural gas wells. An additional 835 wells have been abandoned and 31 wells are idle (currently not abandoned or used for production).[2]

In the 1920s, the County was the world's fifth largest oil producer.[3] Presently, oil production is not nearly as prevalent as it was almost a century ago. Small-scale oil production still occurs in many parts of the County, such as in the Baldwin Hills and the Santa Clarita Valley. The California Division of Oil, Gas, and Geothermal Resources permits and tracks each operating production well and natural gas storage well and ultimately monitors the decommissioning process. The County's involvement is limited to regulating the zoning and land use standards to protect surrounding communities from oil-production impacts.

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1 EIP Associates, GIS Table, March 2003.

2 California Department of Oil, Gas, and Geothermal Resources, Well Locations and Oil/Gas Fields, July 2008.

3 County of Los Angeles, "Conservation and Open Space Element," *Draft General Plan*, 2008.

Strict standards for the installation, operation, and decommissioning of oil derricks are necessary to protect natural resources and prevent excessive grading in the hillside areas.[4]

Surface Mining Resources

Mineral Resource Zones

The mineral resources addressed in this section are those resources that are classified under the state Surface Mining and Reclamation Act (SMARA) of 1975. 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 conservation of natural resources. Based on guidelines adopted by the California Geological Survey, areas known as Mineral Resource Zones (MRZ) are classified according to the presence or absence of significant mineral 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-2a: Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. Areas classified MRZ-2a contain discovered mineral deposits 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.
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves as determined by limited sample analysis, exposure, and past mining history or are deposits that presently are sub-economic. Further exploration and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a.
- MRZ-3a: Areas containing known mineral occurrences of undetermined mineral resource significance. Further exploration within these areas could result in the reclassification of specific localities as MRZ-2a or MRZ-2b.
- MRZ-3b: Areas containing inferred mineral occurrences of undetermined mineral resource significance. Land classified MRZ-3b represents areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration could result in the reclassification of all or part of these areas as MRZ-3a or specific localities as MRZ-2a or MRZ-2b.
- MRZ-4: Areas of no known mineral occurrences where geologic information does not rule out the presence or absence of significant mineral resources.

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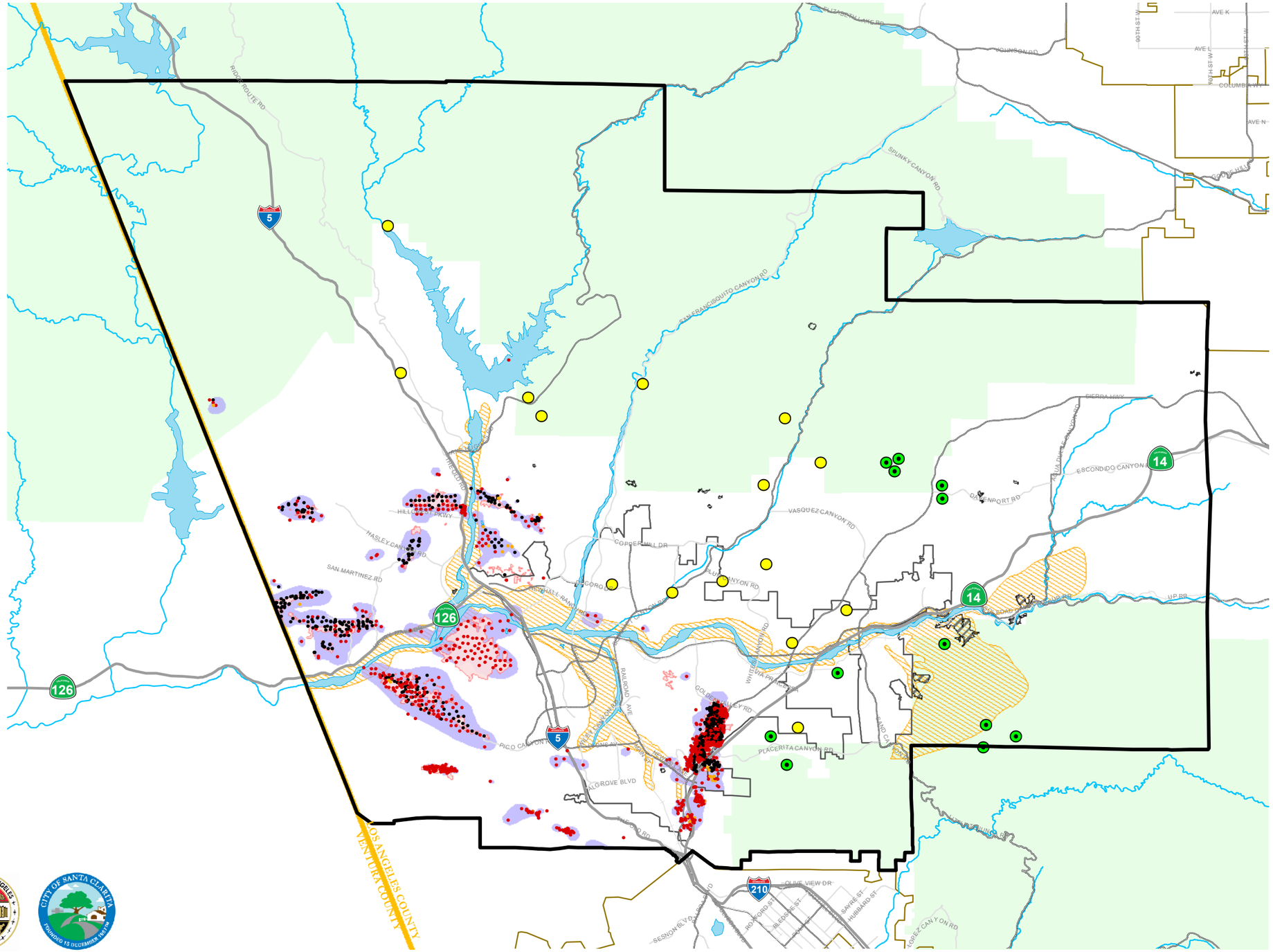
4 County of Los Angeles, "Conservation and Open Space Element," *Draft General Plan*, 2008.



Legend:

- OVOV Planning Area
- City of Santa Clarita Boundary
- Angeles National Forest
- County Boundary

Oil and Natural Gas Wells

- Producing
- Idle
- Abandoned

Existing Mineral Extraction Areas

- Oil and Natural Gas
- Sand, Gravel, and Rock
- Estimated Oil and Gas Field

Mineral Resource Zones

- Zone 2 (Aggregate)
- Placer Gold Gulch
- Lode Mine

GIS Projection - CA State Plane, Zone 5, NAD83, Feet.
Source: City of Santa Clarita - Planning, City Boundary, March 2008; LA County - Planning, DEM and OVOV Boundary, 2007; Extraction Areas, California Geological Survey, 1994; California Department of Oil , Gas, and Geothermal Resources, Well Locations and Oil/Gas Fields, June 20, 2000; State Mining and Geology Board, Mines, August 2001;

3 1.5 0 3

APPROXIMATE SCALE IN MILES

SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - March 2008

FIGURE **3.10-1**

Existing Mineral Resources

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Presence of Mineral Resource Zones within Planning Area

MRZ-2 areas are concentrated along waterways, such as the Santa Clara River, as well as SR-126, Castaic Creek, and east of Sand Canyon Road (**Figure 3.10-1**). As of 2008, there are approximately 18,868 acres used for mineral extraction of aggregate minerals (sand, gravel, and rock) within the OVOV Planning Area.[5] The MRZ-2 areas in the OVOV Planning Area contain construction-grade aggregate within the portion of the Santa Clara River that extends approximately 15 miles from Agua Dulce Creek in the east to the Ventura County boundary in the west. Approximately 12,215 acres of land within the County Planning Area are designated MRZ-2.[6] The majority of the MRZ-2 area east of Sand Canyon Road lies outside the City boundary in the unincorporated portion of the County and the Angeles National Forest.

These known mineral resources encompass portions of the San Fernando Valley–Saugus–Newhall Production-Consumption (P-C) Region and the Palmdale P-C Region. A P-C Region is one or more aggregate production districts, a group of producing aggregate mines, and the market area they serve. Aggregate resources are evaluated within the boundaries of the P-C Region. These mineral resources are considered as either:

- Permitted Resources, which are materials believed to be acceptable for commercial use that exist within property owned or leased by an aggregate producing company for which permission allowing extraction and processing has been granted, or
- Resources, which are permitted resources as well as all potentially usable aggregate material that may be mined in the future, but for which no use-permit allowing extraction has been granted.[7]

The San Fernando Valley–Saugus–Newhall P-C Region, contains a total of 88 million tons of permitted aggregate reserves[8]. The Palmdale P-C Region contains 181 million tons of permitted reserves of sand and gravel resources and no crush stone resources.

There are six active permits for surface mining activities filed with the County. No active permits for surface mining activities are filed with the City. The six permitted mining sites are generally, located in Canyon Country, Agua Dulce, Mint Canyon, and Soledad Canyon, which are in the County's portion of the OVOV Planning Area. The proposed mining activities for Soledad Canyon have been the source of litigation between the County, the City of Santa Clarita, the United States (US) Bureau of Land Management (BLM) and the US Fish and Wildlife Service.

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5 Impact Sciences. GIS-estimated acreages from **Figure 3.11-1,** prepared by the City of Santa Clarita. 2008.

6 Ibid.

7 County of Los Angeles, *OVOV Area Plan*, Draft Land Use Element, October 2008.

8 Department of Conservation, California Geological Survey, *Aggregate Availability in California*, Table 1. 2006.

That project is a split estate operation that proposes extracting 56.1 million tons of aggregate resources located in Soledad Canyon. The project site is located where a smaller mining operation previously existed. The City currently owns the property where the project would be located, but the BLM owns the mineral rights and has contracted with CEMEX, Inc., to allow CEMEX to mine 56.1 million tons of aggregate resources over a period of 20 years or less. The City opposes mining at the project site above levels of historic mining operations. The City is currently pursuing a cooperative federal legislative effort with CEMEX to resolve the mining dispute. The City sued to challenge the approvals for the project. Currently, one case is on appeal; that lawsuit challenges the County's approval on the grounds that the approval violates CEQA.

Other mineral resources include oil and natural gas, which are primarily located within the western portion of the County's Planning Area. Historically, other resources such as gold were found in the Placer gold gulches (ravines) that are situated in the western to central portion of the Planning Area. A little more than half were located within the unincorporated portion of the County, and lode mines (rock fissures containing metal ore) that are located primarily in the central portion of the Planning Area were actively mined.

REGULATORY FRAMEWORK

State Regulations

Surface Mining and Reclamation Act (SMARA) of 1975

The state Surface Mining and Reclamation Act of 1975 (SMARA), as amended in 2006, mandated the initiation of mineral land classifications to help identify and protect mineral resources in areas within the state that are subject to urban expansion or other irreversible land uses that would preclude mineral extraction. After designation of mineral resource areas, SMARA provided for the classification of designated lands containing mineral deposits of regional or statewide significance. In addition, SMARA was designed to provide guidelines for the proper reclamation of mineral lands.

The purpose of this act is to create and maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to ensure that

- adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative land uses;
- the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, wildlife, range and forage, and aesthetic enjoyment; and
- residual hazards to the public health and safety are eliminated.

These goals are achieved through land use planning by allowing a jurisdiction to balance the economic benefits of resource reclamation with the need to provide other land uses.

Local Regulations

Depending on the location, approval and permitting of proposed excavation and mining activities rests with the County or City. However, if the site is owned by the state, jurisdiction is with the State Lands Commission.

County of Los Angeles

In a joint regulatory effort, SMARA authorizes local governments to assist the state in issuing mining permits and monitoring site reclamation efforts. To manage mining resources, the County has incorporated mineral resource policies into the Open Space and Conservation Element of its Santa Clarita Valley Area Plan. In addition to those policies, SMARA requires that applicants of surface mining permits submit a reclamation plan prior to receiving a permit to mine, describing how the excavated site will ultimately be remediated and transformed into another use. Mineral extraction within the County is an allowed use within the agricultural zone. Surface mining permits are required prior to any extraction activities.

City of Santa Clarita

The City of Santa Clarita has an overlay category that is used to designate areas that have significant mineral aggregate resource areas as determined by SMARA, and/or oil fields. This latter category, the Mineral/Oil Conservation Areas (MOCA), is located primarily in the southeastern portion of the City. The purpose of this overlay is to permit the continuation of the mineral/oil usage while providing development of the area if specific requirements are met.

THRESHOLDS OF SIGNIFICANCE

In order to assist in determining whether a project will have a significant effect on the environment, the *California Environmental Quality Act (CEQA) Guidelines*, Appendix G, identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

Significant mineral resource impacts will result if

- there is the loss of availability of mineral resources that would be of value to the region and the residents of the Planning Area;
- there is a loss of availability of locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

IMPACT ANALYSIS

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on mineral resources within the County's Planning Area using the *State CEQA Guidelines* threshold of significance.

Impact 3.10-1 **There would potentially be a significant impact to the loss of availability of mineral resources that would be of value to the region and the residents of the County's Planning Area.**

Significant mineral resources identified as MRZ-2 areas have been identified within the County's Planning Area. A combined total of 269 million tons of permitted aggregate resources have been identified within the San Fernando Valley–Saugus–Newhall P-C Region and the Palmdale P-C Region. Significant mineral resources identified on **Figure 3.10-1**. The mapping of these resources is compatible with Conservation and Open Space element **Policy CO 2.3.1**. The County would be responsible for considering appropriate buffer areas near mineral resource areas planned for extraction (**Policy CO 2.3.2**) and to achieve Land Use Element **Policy LU 7.7.1**.

Identification of mineral resources locations and identification of the estimated amounts of resources available would promote the efficient use of these resources and will help conserve the Valley's hillsides, canyons, ridgelines, soils, and minerals by limiting exploration of additional mineral deposits. The extraction and processing of these mineral resources would be approved by the County on a project-by-project basis ensuring consistency with **Policies CO 2.3.3** and **2.3.4**. Approval of subsequent mining projects, per implementation of the Area Plan, would also ensure implementation (**Policy CO 1.3.3**) and that informational material would be available to the public to conserve non-renewable resources and recover materials from the waste stream.

Proposed Area Plan Policies

Policy CO 1.3.3: Provide informational material to the public about programs to conserve non-renewable resources and recover materials from the waste stream.

Policy CO 2.3.1: Identify areas with significant mineral resources that are available for extraction pursuant to Zoning Ordinance requirements.

Policy CO 2.3.2: Consider appropriate buffers near mineral resource areas that are planned for extraction, to provide for land use compatibility and prevent the encroachment of incompatible land uses.

Policy CO 2.3.3: Through the review process for any mining or mineral extraction proposal, ensure mitigation of impacts from mining and processing of materials on adjacent uses or on the community, including but not limited to air and water pollution, traffic and circulation, noise, and land use incompatibility.

Policy CO 2.3.4: Ensure that mineral extraction sites are maintained in a safe and secure manner after cessation of extraction activities, which may include the regulated decommissioning of wells, clean-up of any contaminated soils or materials, closing of mine openings, or other measures as deemed appropriate by the agencies having jurisdiction.

Policy LU 7.7.1: Maintain a suitable distance and/or provide buffering to separate aggregate mining and processing activities from nearby residential uses and other uses with sensitive receptors to noise and airborne emissions.

Effectiveness of the Proposed Area Plan Policies

Implementation of the proposed Area Plan policies related to mineral resources ensures that future development in the County would not have significant adverse impacts on mineral resources nor would future mineral resource extraction create significant adverse impacts on the environment or future development. Avoiding adverse impacts would be achieved by potentially adhering to these policies, reviewing all development proposals adjacent to MRZ-2 designated land or mining activity to safeguard against incompatible land uses, providing buffer zones between urban development mining activity, and requiring that development adhere to state mining policies and regulations.

Plan to Plan Analysis

Both the existing and proposed Area Plans contain policies intended to minimize impacts to the availability of mineral resources. Impacts would be similar under both Plans.

Impact 3.10-2 **There would potentially be a significant impact to a loss of availability of locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.**

Proximity of housing units to extraction sites would require the determination of a transition area and buffer zones from the proposed mining area to the housing area (**Figure 3.10-2).** Future development would be reviewed to ascertain project-specific impacts on mineral resources and to ensure compliance with applicable Area Plan policies. **Policy CO 2.3.1** serves to help reserve valuable mineral and aggregate resources by depicting their location within the OVOV Planning Area. Currently, no designated buffers are depicted on the Land Use Policy Map near mineral resource areas. Within the County's Planning Area, the MRZ-2 areas occur within the 100-year flood plain of the Santa Clara River and some of its tributaries, and in areas with the proposed land use designation of open space, specific plan, rural residential, and public institutional. Known oil and natural gas fields occur in the western portion of the County's Planning Area, within areas proposed primarily for specific plan use and urban residential. It will be the County's responsibility to designate the required buffer area on a land use map (**Policy CO 2.3.2**).

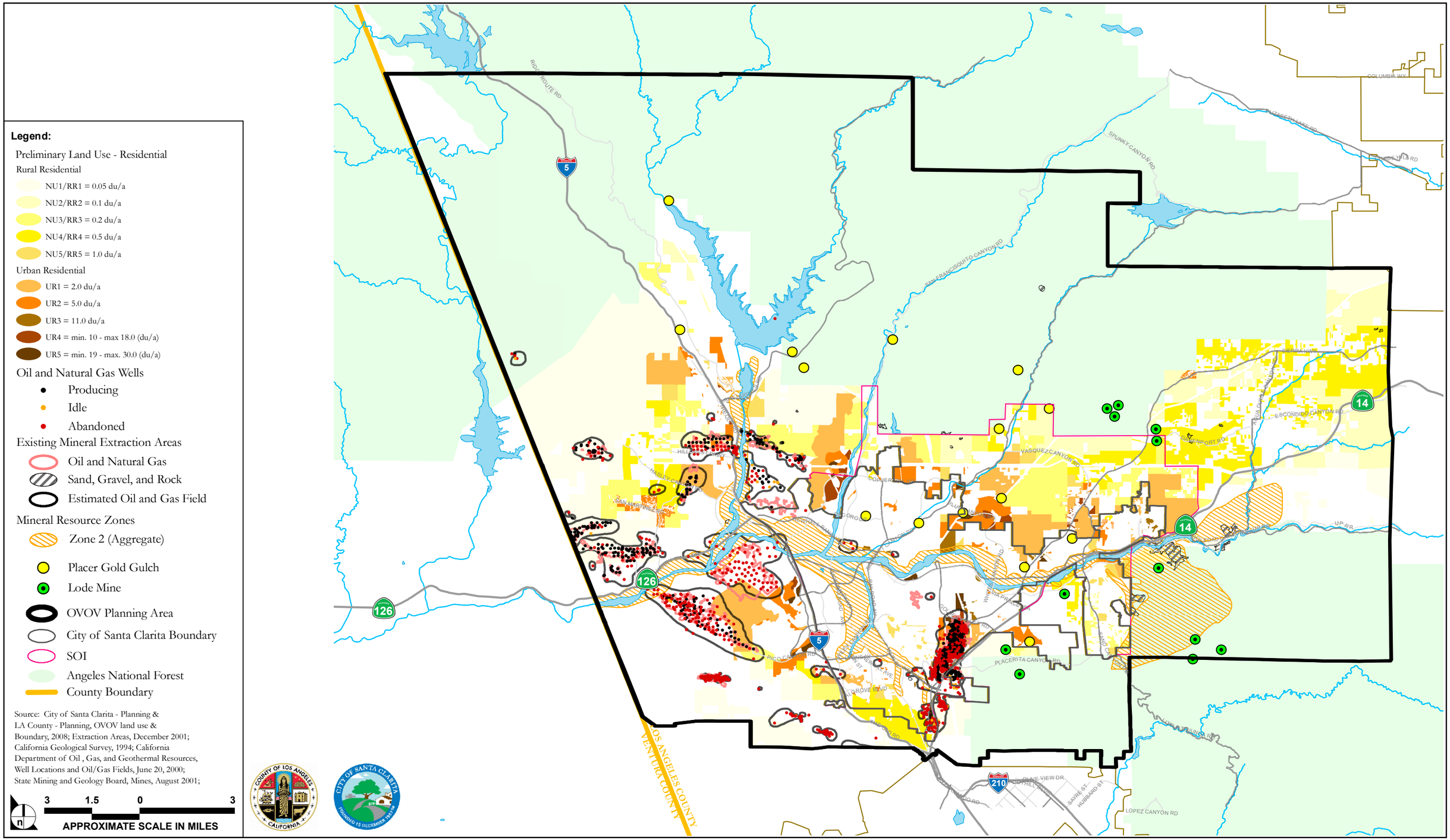
Management of mineral resources will help protect and guide the use of mineral deposits within the County's Planning Area. Management strategies, contained in the proposed Area Plan's policies, are directed towards mineral resources and their conservation and extraction. Implementation of the policies (**CO 1.3.3**, **CO 2.3.3,** and **CO 2.3.4**) would reduce or eliminate adverse impacts caused by mineral extraction. Ancillary structures or uses may be permitted which assist in the extraction, processing, or preservation of minerals. Actual building or structure size, siting, and design will be determined on a project-by-project basis.

Proposed Area Plan Policies

The proposed Area Plan policies have already been cited.

Effectiveness of Proposed Area Plan Policies

Potential adverse impacts on mineral resources would be less than significant because the policies within the proposed Area Plan state to identify, preserve from encroachment, conserve, and maintain the significant MRZ-2 lands. Implementation of the proposed Area Plan policies related to mineral resources ensure that future development in the County would not have any significant adverse impacts on mineral resources nor would future limited reasonable mineral resource extraction have any significant adverse impacts on the environment or on future development.



SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - March 2009

FIGURE **3.10-2**

Residential Land Uses / Mineral Land Uses Overlay

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Plan to Plan Analysis

Both the existing and proposed Area Plans contain policies intended to minimize impacts lands designated as mineral resources. Impacts would be similar under both Plans.

MITIGATION FRAMEWORK

No mitigation measures are required for mineral resources because implementation of the County's Area Plan policies would limit potentially significant impacts on mineral resources to a less than significant level. No mitigation measures would be required because the Area Plan's mineral resource policies would ensure that future development in the Planning Area follow set codes and regulations. The proposed Area Plan policies would ensure that the future potential significant impacts on mineral resources through the following: (1) ensure restricted development in land designated as MRZ-2; (2) review future projects on a case-by-case basis to safeguard against incompatible land uses near or adjacent to land designated as MRZ-2; and (3) provide buffer zones between urban development and mining activity.

SIGNIFICANCE OF IMPACT WITH MITIGATION FRAMEWORK

Impacts on mineral resources would be less than significant and no mitigation measures are required.