7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines Section 15126.6). This chapter identifies potential alternatives to the Proposed Antelope Valley Area Plan Update and associated actions (Proposed Project) and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[a] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR.

- “The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly” (15126.6[b]).

- “The specific alternative of ‘no project’ shall also be evaluated along with its impact” (15126.6[e][1]).

- “The no project analysis shall discuss the existing conditions at the time the Notice of Preparation (NOP) is published, and at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives” (15126.6[e][2]).

- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project” (15126.6[f]).

- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (15126.6[f][1]).
7. Alternatives to the Proposed Project

- “For alternative locations, “only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR” (15126.6[f][2][A]).

- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative” (15126.6[f][3]).

For each development alternative, this analysis:

- Describes the alternative;
- Analyzes the impact of the alternative as compared to the Proposed Project;
- Identifies the impacts of the Project that would be avoided or lessened by the alternative;
- Assesses whether the alternative would meet most of the basic Project objectives; and
- Evaluates the comparative merits of the alternative and the Project.

Per the CEQA Guidelines Section 15126.6(d), additional significant effects of the alternatives are discussed in less detail than the significant effects of the Project.

7.1.2 Project Objectives

As described in Section 3.2, Statement of Objectives, the following objectives have been established for the Proposed Project and will aid decision-makers in their review of the Project, the Project alternatives, and associated environmental impacts:

As identified in the proposed Antelope Valley Area Plan (Area Plan), the following vision statement has been established for the Project Area:

The Antelope Valley region is a wonderful place to live, work, play, and raise a family. The Valley is a mosaic of unique small towns in which rural lifestyles are cherished. These diverse towns are unified by an extraordinary environmental setting that includes agricultural lands, natural open spaces, expansive mountain views, diverse ecological habitats, and dark night skies. The Valley’s network of trails, roads, and transit link these dispersed towns to each other and to a wide offering of local-serving businesses and quality social, educational, cultural, and recreational services and facilities.

Residents, business owners, and property owners collaborate with a responsive local government to ensure that life in the Antelope Valley region will continue to be exciting, enjoyable, and rewarding. The growing population’s need for additional housing and employment opportunities is balanced against the need to respect historical heritage and preserve the natural environment. Public improvements and private developments are sustainable, conserving available resources and relying on alternative energy sources, and complement the small scale of existing rural towns. A wide array of activities and opportunities for youth ensure that the Valley’s high quality of life will be sustained for future generations.
In addition to the above vision statement, the following objectives have been established for the Proposed Project. These objectives will aid decision makers in their review of the project and associated environmental impacts:

- Preserve and enhance each unique town’s rural character, allowing for continued growth and development without compromising the rural lifestyle.

- Preserve open space around existing towns in order to preserve hillside areas and significant ridgelines, conserve biological resources, provide opportunities for recreation, and make more efficient use of existing infrastructure in the core areas.

- Plan for integrated circulation systems, including bikeways, walkways, and multi-purpose trails.

- Conserve significant resources, including agricultural lands, mineral resources, water supply, and scenic areas.

- Preserve public health, safety, and welfare through identification of natural and environmental hazards, including noise, seismic, fire, and airborne emissions, and designation of land uses in an appropriate manner to mitigate these impacts; and

- Coordinate the enhancement of public and community services such as law enforcement, fire protection, and parks.

- Provide a balance of jobs and housing consistent with AB 32, SB 375, and SCAG’s RTP/SCS.

### 7.1.3 Significant Unavoidable Adverse Impacts

As described in Chapter 6, Significant Unavoidable Adverse Impacts, the following impacts related to the Proposed Project have been determined to be significant and unavoidable after implementation of all feasible mitigation measures. The impacts that were found in the Draft EIR (DEIR) to be significant and unavoidable are:

- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gas Emissions
- Mineral Resources
- Noise
- Transportation/Traffic
- Utilities and Service Systems
7. Alternatives to the Proposed Project

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this DEIR.

7.2.1 Project Planning Alternatives

During the course of the Proposed Project, numerous variations in mapping were considered. The variations were a result of an iterative process of receiving input from stakeholders and County of Los Angeles (County) staff and refining the working maps that eventually became the Proposed Land Use Policy Map. While some of these previous variations would have represented the opinions of a segment of stakeholders more strongly or would have reduced environmental impacts more than the Proposed Project or other alternatives considered, they were not appropriate for analysis in the DEIR because they are no longer being pursued by the Lead Agency. They have since been refined or supplemented by the currently proposed Land Use Policy Map. Additionally, in 2010, an expert panel of biologists was convened to evaluate the Significant Ecological Areas (SEA) boundaries, and additional locations were identified as areas that warranted the SEA designation. The Proposed Project is consistent with the Proposed SEA Boundaries, which identifies 7 SEAs in the Project Area that represent the wide-ranging biodiversity and contain its most important biological resources. Therefore, the Proposed Project and the alternatives that are analyzed below in Section 7.3 were determined to provide the best scenarios to represent the different planning approaches that have been considered during the process.

7.2.2 No Growth/No Development Alternative

The No Growth/No Development Alternative would prohibit all new development, restricting urban growth to its current extent. No alterations to the unincorporated areas would occur (with the exception of previously approved or entitled development); all existing residential, commercial, office, industrial, public facilities, agriculture and open space, along with utilities and roadways, would generally remain in their current condition. Implementation of this alternative would not provide adequate housing supply to meet the County's obligations to provide its fair share of housing. By limiting development within Project Area, implementation of this alternative would increase development pressure in surrounding areas, including the Cities of Palmdale, Lancaster, and Santa Clarita, and Kern County. It should also be noted that this alternative would not achieve any of the objectives established for the Project. As a result, this alternative has been rejected from further consideration.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the Proposed Project, but that may avoid or substantially lessen any of the significant effects of the Proposed Project. These alternatives are analyzed in detail in the following sections:
7. Alternatives to the Proposed Project

- No Project/Adopted Area Plan Alternative
- Reduced Intensity Alternative
- Alternative Land Use Policy Map

An EIR must identify an “environmentally superior” alternative, and where the no project alternative is identified as environmentally superior, the EIR is required to identify an environmentally superior alternative from among the others evaluated. Each alternative’s environmental impacts are compared to the Proposed Project and determined to be environmentally superior, neutral, or inferior. However, only those impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the Proposed Project. Section 7.7 identifies the Environmentally Superior Alternative.

7.3.1 Alternatives Comparison

The Proposed Project is analyzed in detail in Chapter 5 of this DEIR. Table 7-1 provides a summary of each project alternative analyzed in this chapter.

<table>
<thead>
<tr>
<th>Table 7-1</th>
<th>Summary of Development Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
</tr>
<tr>
<td>Antelope Valley Area Plan and associated actions</td>
<td>• Includes a comprehensive update to the Adopted Area Plan.</td>
</tr>
<tr>
<td></td>
<td>• Updates SEA boundaries based on latest biological information.</td>
</tr>
<tr>
<td></td>
<td>• Projects a total of 106,180 dwelling units at buildout (additional 81,441 units from existing).</td>
</tr>
<tr>
<td></td>
<td>• Projects a total population of 405,410 at buildout (additional 311,920 persons from existing).</td>
</tr>
<tr>
<td></td>
<td>• Projects a total of 134,351 employees at buildout (additional 102,513 employees from existing).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Project Alternatives</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1) No Project/Adopted Area Plan Alternative</td>
<td>• Adopted Area Plan originally adopted on December 4, 1986 would remain in effect.</td>
<td>Required by CEQA.</td>
</tr>
<tr>
<td></td>
<td>• Maintains existing SEA boundaries.</td>
<td>Avoids need for general plan amendments and zone changes.</td>
</tr>
<tr>
<td></td>
<td>• Projects a total of 278,158 dwelling units at buildout (additional 253,419 units from existing).</td>
<td>Increases significant impacts to agriculture and forestry resources, air quality, biological resources, greenhouse gas (GHG) emissions, noise, transportation/traffic, and water supply.</td>
</tr>
<tr>
<td></td>
<td>• Projects a total population of 1,070,571 at buildout (additional 977,081 persons from existing).</td>
<td>Does not meet the project objectives.</td>
</tr>
<tr>
<td></td>
<td>• Projects a total of 51,219 employees at buildout (additional 19,381 employees from existing).</td>
<td></td>
</tr>
</tbody>
</table>

2) Reduced Intensity Alternative | • Includes a comprehensive update to the Adopted Area Plan. | Reduces, but does not eliminate, significant impacts to agriculture and forestry resources, air quality, GHG emissions, noise, and |
7. Alternatives to the Proposed Project

### Table 7-1 Summary of Development Alternatives

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Description</th>
<th>Basis for Selection and Summary of Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reduces allowable dwelling units, population, and employment growth by 30 percent.</td>
<td></td>
<td>transportation/traffic.</td>
</tr>
<tr>
<td>• Projects a total of 81,748 dwelling units at buildout (additional 57,009 units from existing).</td>
<td></td>
<td>• Does not avoid significant environmental impacts.</td>
</tr>
<tr>
<td>• Projects a total population of 311,834 at buildout (additional 218,344 persons from existing).</td>
<td></td>
<td>• Meets some but not all of the project objectives.</td>
</tr>
<tr>
<td>• Projects a total of 103,597 employees at buildout (additional 71,759 employees from existing).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3) Alternative Land Use Policy Map

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Includes a comprehensive update to the Adopted Area Plan.</td>
<td></td>
</tr>
<tr>
<td>• Updates SEA boundaries based on latest biological information.</td>
<td></td>
</tr>
<tr>
<td>• Reduces allowable dwelling units, population, and employment growth within the Project Area to 67,463 dwelling units, 248,323 residents, and 46,225 employees.</td>
<td></td>
</tr>
<tr>
<td>• Projects a total of 67,463 dwelling units at buildout (additional 42,724 units from existing).</td>
<td></td>
</tr>
<tr>
<td>• Projects a total population of 248,323 at buildout (additional 154,833 persons from existing).</td>
<td></td>
</tr>
<tr>
<td>• Projects a total of 46,225 employees at buildout (additional 14,387 employees from existing).</td>
<td></td>
</tr>
</tbody>
</table>

- Reduces, but does not eliminate, significant impacts to agriculture and forestry resources, air quality, GHG emissions, noise, and transportation/traffic.
- Does not avoid significant environmental impacts.
- Meets some but not all of the project objectives.

Table 7-2 provides a summary of buildout projections and corresponding increases/changes for each of the three alternatives and the Proposed Project. It is important to note that the buildout numbers shown are not growth projections. That is, they do not anticipate what is likely to occur by a certain time horizon, but rather, provide a buildout scenario that would only occur if all of the areas within the Project Area were to develop to the probable capacities yielded by the alternatives. The following tables were developed to better understand the difference between the alternatives analyzed in the DEIR:

### Table 7-2 Project Alternatives - Buildout Projections

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Dwelling Units</th>
<th>Population</th>
<th>Employment</th>
<th>Jobs/Housing Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antelope Valley</td>
<td>Proposed Project</td>
<td>No Project/Adopted Area Plan Alternative</td>
<td>Reduced Intensity Alternative</td>
<td>Alternative Land Use Policy Map</td>
</tr>
<tr>
<td></td>
<td>106,180</td>
<td>278,158</td>
<td>81,748</td>
<td>67,463</td>
</tr>
<tr>
<td></td>
<td>405,410</td>
<td>1,070,571</td>
<td>311,834</td>
<td>248,323</td>
</tr>
<tr>
<td></td>
<td>134,351</td>
<td>51,219</td>
<td>103,597</td>
<td>46,225</td>
</tr>
<tr>
<td></td>
<td>1.3</td>
<td>0.18</td>
<td>1.3</td>
<td>0.69</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Dwelling Units</th>
<th>Population</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Change from Proposed Project</td>
<td>+62%</td>
<td>+62%</td>
<td>-62%</td>
</tr>
<tr>
<td></td>
<td>-23%</td>
<td>-23%</td>
<td>-23%</td>
</tr>
<tr>
<td></td>
<td>-36%</td>
<td>-39%</td>
<td>-66%</td>
</tr>
</tbody>
</table>

Source: County of Los Angeles Department of Regional Planning, 2014.
7. Alternatives to the Proposed Project

7.4 NO PROJECT/EXISTING AREA PLAN ALTERNATIVE

This alternative, which is required by CEQA, assumes that the Adopted Area Plan and implementing zoning would remain unchanged. The Adopted Area Plan, originally adopted on December 4, 1986, would remain in effect, and no update to the Adopted Area Plan goals and policies would occur. This alternative would also maintain the existing SEA boundaries. Other key components of the Proposed Project, including the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas, as well as Economic Opportunity Areas (EOAs), would also not occur under this alternative. Under the No Project/Adopted Area Plan Alternative, a total of 278,158 dwelling units (additional 253,419 units from existing), a total population of 1,070,571 (additional 977,081 persons from existing), and a total of 51,219 employees (additional 19,381 employees from existing) would occur at buildout.

7.4.1 Aesthetics

Under the No Project/Adopted Area Plan Alternative, a total of 278,158 dwelling units (additional 253,419 units from existing), a total population of 1,070,571 (additional 977,081 persons from existing), and total of 51,219 employees (additional 19,381 employees from existing) would occur at buildout. The Proposed Project reduces projected residential units and associated population by 62 percent and increases employment by 62 percent. Other key components of the Proposed Project include the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas, which assist in maintaining the rural character of the Antelope Valley. The Proposed Project also includes policies that discourage aesthetic impacts from such uses as utility-scale renewable energy (including the undergrounding of transmission lines), and promote the protection of scenic resource areas and scenic drives as well as dark night skies and rural character. As a result, impacts under the No Project/Adopted Area Plan Alternative would be greater as compared to the Proposed Project.

7.4.2 Agriculture and Forestry Resources

As discussed in Section 5.2, Agriculture and Forestry Resources, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to the buildout of the Proposed Project would be a significant impact. Project implementation could result in the conversion of up to 6,169 acres of land designated Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. However, approximately 24,433 acres of designated farmland could be developed under the Adopted Area Plan. The Proposed Project also includes policies that support farming as a viable profession for Antelope Valley residents and encourage sustainable farming practices. As a result, impacts under the No Project/Adopted Area Plan Alternative would be greater as compared to the Proposed Project.

7.4.3 Air Quality

The No Project/Adopted Area Plan Alternative would generate significantly more emissions from area, energy, and mobile sources and short-term emissions from construction activities associated with new development. This alternative would have a 62 percent increase in dwelling units, 62 percent increase in population, and a 62 percent decrease in employment in the Project Area, compared to buildout of the
7. Alternatives to the Proposed Project

Proposed Project. This Alternative generates approximately 33,787,619 vehicle miles travelled (VMT) per day. By comparison, the Proposed Project generates approximately 17,065,721 VMT per day, a 50 percent reduction. Thus, mobile-source emissions would be double those associated with buildout of the Proposed Project. Furthermore, area and energy sources of emissions would also be increased. Short-term emissions related to project construction activities would be greater in this alternative due to the increased amount of total permitted development. Also, the Proposed Project includes policies that encourage improved air quality. Implementation of the Proposed Project was found to have significant and unavoidable impacts to short- and long-term air quality. Short- and long-term air quality impacts of this alternative would also be significant and unavoidable. However, since air quality emissions would be double that of the Proposed Project, this alternative is considered environmentally inferior to the Proposed Project.

7.4.4 Biological Resources

Both the Proposed Project and the Adopted Area Plan contain policies that emphasize the conservation of SEAs and open space areas. However, neither provides a mechanism for compensation for unavoidable habitat loss or mitigation for direct impacts to special-status species or sensitive plant communities. Thus, mitigation measures are proposed to reduce direct impacts to special-status species and sensitive habitat. Although development that is allowed in both the Adopted Area Plan and the Proposed Project would result in similar significant impacts to special-status species at the area plan level, the Proposed Project includes mitigation that would reduce direct impacts to special-status species and sensitive habitat. In addition, the Proposed Project includes expanded SEA boundaries and reduced densities. Therefore, impacts would be less under the Proposed Project, although they would remain significant.

Both the Proposed Project and the Adopted Area Plan contain policies that emphasize protection of water sources and watershed to ensure the ecological functions of these systems are maintained. Mitigation measures are proposed to reduce any impacts to wetlands, and in combination with the requirements for regulatory permitting, are considered less than significant. Impacts would be similar between the Adopted Area Plan and the Proposed Project, with the potential for a slightly higher level of protection for wetland resources under the Proposed Project as a result of the recommended mitigation measures and expanded SEA boundaries.

Although both the Proposed Project and the Adopted Area Plan contain policies that emphasize the conservation of SEAs and open space areas, the Adopted Area Plan does not specifically provide for the protection of wildlife movement corridors. However, the Proposed Project emphasizes the preservation of wildlife corridors and linkages, and connectivity between habitats within the updated SEA boundaries. The Proposed Project’s policies emphasize the preservation of wildlife corridors and linkages, and mitigation measures provide additional protection to avoid or minimize impacts to wildlife corridors and nursery sites. Additionally, the expanded SEA boundaries included as part of the Proposed Project, would reduce potentially significant impacts to regional wildlife linkages as compared to the No Project/Adopted Area Plan Alternative.

Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the smaller SEA boundaries designated in the Adopted Area Plan. In
addition, mitigation measures are incorporated into the Proposed Project to reduce direct impacts to special-status species and sensitive habitat. As a result, this alternative is environmentally inferior to the Proposed Project.

7.4.5 Cultural Resources

Under this alternative, development intensity would be increased as compared to the Proposed Project. Key components of the Proposed Project include the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas, as well as three designated EOAs. As a result, development is directed to certain areas, and the overall impacts to cultural resources would be increased under the No Project/Adopted Area Plan as compared to the Proposed Project. This alternative could possibly impact historic resources similar to the Proposed Project. Ground-disturbing activities associated with the buildout of the Adopted Area Plan would occur in order to accommodate new development. Cultural resources are governed on a site-by-site basis, and the probability of uncovering new resources or disturbing known resources is considered in project-level environmental review. Mitigation measures are created for projects that have the potential to disturb cultural resources, to lessen or negate impacts. However, implementation of this alternative would result in greater impacts than the Proposed Project due to the increased amount of development.

7.4.6 Geology and Soils

Earthquake hazards would be of similar magnitude under the No Project/Adopted Area Plan Alternative as under the Proposed Project, because future development would still occur throughout the Project Area. However, the Proposed Project reduces the density in hazard areas, thereby exposing fewer homes to earthquake hazards. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, hydrocollapse, landslides, and expansive soils would also be similar for this alternative relative to the Proposed Project. New development under both alternatives would be expected to conform to the most recent County Building Code and County Grading Code Ordinance and Regulations, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative would be similar to the Proposed Project and would have a less than significant impact.

7.4.7 Greenhouse Gas (GHG) Emissions

The No Project/Adopted Area Plan Alternative would generate significantly more emissions from area, energy, and mobile sources and short-term emissions from construction activities associated with new development. This alternative would have a 62 percent increase in dwelling units, 62 percent increase in population, and a 62 percent decrease in employment in the Project Area, compared to buildout of the Proposed Project. This Alternative generates approximately 33,787,619 VMT per day. By comparison, the Proposed Project generates approximately 17,065,721 VMT per day, a 50 percent reduction. Thus, GHG emissions would be significantly greater under this alternative than those associated with the buildout of the Proposed Project. Like the Proposed Project, impacts from this alternative would be significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the
7. Alternatives to the Proposed Project

long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050. However, since air quality emissions would be double that of the Proposed Project, this alternative is considered environmentally inferior to the Proposed Project.

7.4.8 Hazards and Hazardous Materials

This impact would be greater than the Proposed Project, because the No Project/Adopted Area Plan Alternative increases overall development intensity. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions, would be increased. In addition, development under the No Project/Adopted Area Plan Alternative could expose people to hazardous substances that may be present in soil or groundwater, and demolition activities could expose workers and the environment to asbestos-containing materials and/or lead-based paint and residues. However, development under both the Proposed Project and this alternative would be held to federal, state, and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the County Code and implementation of the existing regulations related to hazardous materials would reduce this impact to a less-than-significant level. For future developments on hazardous materials sites, appropriate remediation activities would be required before construction activities could be permitted. Similar to the Proposed Project, impacts would be less than significant. Overall, impacts related to hazards and hazardous materials would be increased under this alternative compared to the Proposed Project, though impacts would remain less than significant.

7.4.9 Hydrology and Water Quality

Implementation of the No Project/Adopted Area Plan Alternative would have greater hydrology and water quality impacts as compared to the Proposed Project. Residential densities would be substantially increased under this alternative, potentially increasing runoff volumes. Similar to the Proposed Project, runoff would be subject to National Pollutant Discharge Elimination System (NPDES) permit standards and provisions stipulated in the drainage area management plan. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. The adopted policies that offer protection from water quality impairment would be implemented to treat runoff to the maximum extent practicable. In terms of water quality, this alternative would have a less than significant impact, similar to the Proposed Project. Hydrology and water quality impacts overall would be greater for this alternative than for the Proposed Project, though impacts would remain less than significant.

7.4.10 Land Use and Planning

Under the No Project/Adopted Area Plan Alternative, the benefits of concentrating development in three EOAs and implementing the Rural Preservation Strategy would not occur. Therefore, although significant impacts would not result under this alternative, the Proposed Project provides for the establishment of a Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas and shifts development to designated EOAs consistent with Senate Bill 375, Assembly Bill 32, and Southern California Association of Government’s (SCAG’s) regional policies for integrating land use and transportation. However, similarly to the Proposed Project, no conflicts with adopted plans and policies
would occur. Therefore, land use impacts would be greater than the Proposed Project under this alternative, although they would remain less than significant.

### 7.4.11 Mineral Resources

As discussed in Section 5.11, Mineral Resources, implementation of the Proposed Project is expected to have a significant unavoidable adverse impact to mineral resources due to development within the Project Area. However, under the No Project/Adopted Area Plan Alternative a total of 278,158 dwelling units (additional 253,419 units from existing), a total population of 1,070,571 (additional 977,081 persons), and total of 51,219 employees (additional 19,381 employees from existing) would occur at buildout. The Proposed Project reduces projected residential units and associated population by 62 percent and increases employment by 62 percent. Other key components of the Proposed Project include the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas, which assist in maintaining the rural character of the Antelope Valley. Since more land is expected to remain rural under the Proposed Project, impacts under the No Project/Adopted Area Plan Alternative would be greater than under the Proposed Project with respect to mineral resources.

### 7.4.12 Noise

Under the No Project/Adopted Area Plan Alternative, a total of 278,158 dwelling units (additional 253,419 units from existing), a total population of 1,070,571 (additional 977,081 persons), and total of 51,219 employees (additional 19,381 employees) would occur at buildout. The Proposed Project reduces projected residential units and associated population by 62 percent and increases employment by 62 percent. Other key components of the Proposed Project include the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas, which assist in maintaining the rural character of the Antelope Valley. Under this alternative, there would be more residential development, thereby increasing potential short-term noise impacts from construction of these projects. Additionally, the increase in residential development and construction activities would also increase potential short-term vibration impacts to sensitive receptors. This alternative would also increase potential long-term noise impacts from mobile and stationary sources. Buildout of the Adopted Area Plan would expose sensitive receptors to elevated noise levels and strong vibration from construction and result in an increase in traffic on the local roadways, which would substantially increase noise levels. Consequently, this alternative would increase the significant construction-related and operational impacts of the Proposed Project.

### 7.4.13 Population and Housing

As shown in Table 7-2, this Alternative would have a jobs/housing ratio of 0.18 at buildout, which is considered housing rich. This would be considered a significant impact without mitigation. Under the Proposed Project, a jobs/housing ratio of 1.3 is projected for the Project Area, which maintains a balance between jobs and housing to reduce commuter trips and associated VMT. Therefore, impacts under the No Project Alternative/Adopted Area Plan Alternative are considered environmentally inferior to the Proposed Project.
7. Alternatives to the Proposed Project

7.4.14 Public Services

The Proposed Project reduces projected residential units and associated population by 62 percent and increases employment by 62 percent. Under this alternative, impacts associated with fire protection, sheriff protection, schools, and library services would be greater than for the Proposed Project, since there would be more residential development at buildout. Fewer residential developments would result in a lower generation of new residents and therefore reduce demand for these services. Also, creation of the rural town centers and EOAs under the Proposed Project allow the provision of fire and sheriff service to be more efficient. Therefore, the No Project Alternative/Adopted Area Plan Alternative would have greater impacts compared to the Proposed Project, although, similar to the Proposed Project, impacts would be less than significant.

7.4.15 Recreation

Under the No Project Alternative/Adopted Area Plan Alternative, the County would continue to function under the direction of the Adopted Area Plan. Due to the higher population estimated under buildout conditions of this Alternative, the demands on existing recreational facilities would be greater under this alternative. As a result, more parkland would be required to serve the projected population at buildout. In addition, the Proposed Project includes adoption of an expanded trails network as compared to this Alternative. Impacts would remain less than significant, although this alternative would increase impacts as compared to the Proposed Project.

7.4.16 Transportation and Traffic

The Proposed Project reduces projected residential units and associated population by 62 percent and increases employment by 62 percent. This would result in corresponding increases in traffic volumes on area roadways. In addition, the Proposed Project directs future development to three EOAs and implements a Rural Preservation Strategy for the balance of the Project Area. Therefore this Alternative would generate more traffic and spread it over a larger area. This alternative would contribute to an unacceptable level of service (LOS) on several roadways in the Project Area, including California Department of Transportation (Caltrans) facilities, and therefore would still result in significant unavoidable transportation and traffic impacts. Since traffic volumes at buildout would be increased, this alternative is considered inferior to the Proposed Project with regard to transportation and traffic.

7.4.17 Utilities and Service Systems

The Proposed Project reduces projected residential units and associated population by 62 percent, and increases employment by 62 percent. Under the No Project/Adopted Area Plan Alternative, impacts to utilities and service systems would be greater due to the increase in residential units and associated population.
7.4.18 Conclusion

**Ability to Reduce Environmental Impacts**

The No Project/Adopted Area Plan Alternative would have similar impacts for geology and soils. However, impacts to all other categories would be increased, including significant impacts to agriculture and forestry resources, air quality, biological resources, cultural resources, GHG emissions, mineral resources, noise, transportation/traffic, and utilities and service systems (water supply).

**Ability to Achieve Project Objectives**

Implementation of the No Project/Adopted Area Plan Alternative would allow future growth that may not be compatible with the current goals and objectives of the County. This alternative would not update the existing SEA boundaries. Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the smaller SEAs designated in the Adopted Area Plan. Other key components of the Proposed Project, including the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, Rural Preserve Areas, and EOAs also would not occur under this alternative. Specifically, the No Project/Adopted Area Plan Alternative does not concentrate future development near regional employment and activity centers, does not maintain jobs/housing balance, and does not promote multi-modal transportation, and therefore would be inconsistent with SCAG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the Project Area.

### 7.5 REDUCED INTENSITY ALTERNATIVE

This alternative would reduce the overall additional development intensity by 30 percent within the Project Area as compared to the Proposed Project. Under the Reduced Intensity Alternative, a comprehensive update to the Adopted Area Plan goals and policies would occur, similar to the Proposed Project. Updates to the existing SEA boundaries based on the latest biological information and GIS mapping data would also occur. Other key components of the Proposed Project, including the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, Rural Preserve Areas, and EOAs would occur under this alternative. Under the Reduced Intensity Alternative, a total of 81,748 dwelling units (57,009 more than existing), a total population of 311,834 (218,344 more than existing), and a total of 103,597 employees (71,759 more than existing) would occur at buildout.

#### 7.5.1 Aesthetics

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment, compared to the buildout of the Proposed Project. This would reduce overall density within the Project Area at buildout. As a result, aesthetic impacts under the Reduced Intensity Alternative would be reduced, as compared to the Proposed Project.
7. Alternatives to the Proposed Project

7.5.2 Agriculture and Forestry Resources

As discussed in Section 5.2, Agriculture and Forestry Resources, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to Proposed Project buildout would be a significant impact in the Project Area. Project implementation could result in the conversion of up to 6,169 acres of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. This land could also be developed under the Reduced Intensity Alternative, although at lower densities. As a result, impacts under the Reduced Intensity Alternative would be similar to the Proposed Project.

7.5.3 Air Quality

The Reduced Intensity Alternative would generate fewer emissions from area, energy, and mobile sources and short-term emissions from construction activities associated with new development. Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment, compared to the buildout of the Proposed Project. Thus, mobile-source emissions would be less than those associated with the buildout of the Proposed Project. Short-term emissions related to project construction activities would be slightly less in this alternative due to the reduced amount of total permitted development. However, this alternative would not substantially reduce significant short- and long-term criteria pollutant contributions of VOC, NOX, CO, SO2, PM10, and PM2.5; would not be consistent with the adopted air quality management plans, since criteria pollutant thresholds would be exceeded; and would cumulatively contribute to the South Coast Air Basin (SoCAB) nonattainment designations for O3, PM10, and PM2.5 and the Antelope Valley portion of the Mojave Desert Air Basin (MDAB) nonattainment designations for O3 and PM2.5. Implementation of the Proposed Project was found to have significant and unavoidable impacts to short- and long-term air quality. Short- and long-term air quality impacts of this alternative would also be significant and unavoidable. However, since air quality emissions would be reduced, this alternative is considered environmentally superior to the Proposed Project.

7.5.4 Biological Resources

The Proposed Project contains policies that emphasize the conservation of SEAs and open space areas. Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are considered biologically superior to the smaller SEAs designated in the Adopted Area Plan. The updated SEA designations would also occur under the Reduced Intensity Alternative. Since the Reduced Intensity Alternative does not reduce the amount of land designated for development, impacts to biological resources would be similar to the Proposed Project and would remain significant.

7.5.5 Cultural Resources

Under this alternative, development intensity would be reduced; however, the amount of undeveloped acreage available for development would remain substantially the same. As a result, impacts to cultural resources would be expected to be substantially similar to those of the Proposed Project. Ground-disturbing activities associated with the buildout of the Reduced Intensity Alternative would continue to occur in order
to accommodate new development. Consequently, the potential of encountering fossil-bearing soils and rock formations, destroying below-ground paleontological resources, and affecting archaeological sites and sites of cultural significance would still occur, similar to the Proposed Project. However, cultural resources are governed on a site-by-site basis, and the probability of uncovering new resources or disturbing known resources is considered in project-level environmental review. Mitigation measures are created to lessen or negate impacts of projects that have the potential to disturb cultural resources. Therefore, implementation of this alternative would result in impacts similar to the buildout of the Proposed Project, which are considered less than significant.

7.5.6 Geology and Soils

Earthquake hazards would be of similar magnitude under the Reduced Intensity Alternative as under the Proposed Project, because future development would still occur throughout the Project Area. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, hydrocollapse, landslides, and expansive soils would also be similar for this alternative relative to the Proposed Project. New development under the Proposed Project or this alternative would be expected to conform to the most recent County Building Code and County Code Grading Ordinance and Regulations, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative, similarly to the Proposed Project, would have a less than significant impact.

7.5.7 Greenhouse Gas Emissions

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. Thus, overall GHG emissions would be reduced by approximately 23 percent. However, similarly to the Proposed Project, impacts from this alternative would be significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050.

7.5.8 Hazards and Hazardous Materials

This impact would be similar to the Proposed Project, although slightly reduced, because the Reduced Intensity Alternative reduces overall development intensity. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions, would be slightly reduced, although they are already less than significant. In addition, development under the Reduced Intensity Alternative could expose people to hazardous substances that may be present in soil or groundwater, and demolition activities could expose workers and the environment to asbestos-containing materials and/or lead-based paint and residues. However, development under both the Proposed Project and this alternative would be held to federal, state, and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the County Code and implementation of the existing regulations related to hazardous materials would reduce this impact to a less-than-significant level. For future developments on hazardous materials sites, appropriate remediation activities would be required before construction activities could be permitted. Similar to the
7. Alternatives to the Proposed Project

Proposed Project, impacts would be less than significant. Overall, impacts related to hazards and hazardous materials would be slightly reduced under this alternative compared to the Proposed Project, and impacts would remain less than significant.

7.5.9 Hydrology and Water Quality

Implementation of the Reduced Intensity Alternative would have similar hydrology and water quality impacts to the Proposed Project. Although both residential and non-residential intensity would be reduced under this alternative, similar alterations to drainage patterns and hydrological patterns would occur. Similar to the Proposed Project, runoff would be subject to NPDES permit standards and provisions stipulated in the drainage area management plan. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. In terms of water quality, this alternative would have a less than significant impact, similar to the Proposed Project. Hydrology and water quality impacts overall would be similar for this alternative as for the Proposed Project, and impacts would remain less than significant.

7.5.10 Land Use and Planning

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. Thus, potential land use impacts would be less than those associated with the buildout of the Proposed Project. However, under the Reduced Intensity Alternative, the benefits of providing different development opportunities in specific focus areas would occur, but not to the same extent due to the reduction in densities. Like the Proposed Project, no conflicts with adopted plans and policies would occur. Therefore, land use impacts would be slightly less than the Proposed Project under this alternative and would remain less than significant.

7.5.11 Mineral Resources

As discussed in Section 5.11, Mineral Resources, implementation of the Proposed Project is expected to have a significant unavoidable adverse impact to mineral resources due to development within the Project Area. The Proposed Project allows development on approximately 571,785 out of 1,130,544 acres. An additional 412,187 acres is designated for very low densities (548,777 acres out of 1,132,744 acres). This land could also be developed under the Reduced Intensity Alternative, although at lower densities. As a result, impacts under the Reduced Intensity Alternative would be similar to the Proposed Project with respect to mineral resources.

7.5.12 Noise

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. Under this alternative, there would be less residential and non-residential development given the reduced capacity, thereby eliminating potential short-term noise impacts from construction of these projects. Additionally, the reduction of residential and non-residential development and construction activities would also reduce potential short-term vibration impacts to sensitive receptors. This alternative would also reduce potential long-term noise impacts from
mobile and stationary sources. The reduction of planned buildout capacity would reduce the number of vehicle trips generated by new developments and would reduce the number of stationary sources of noise. Overall, this alternative would reduce short- and long-term noise impacts of the Proposed Project. However, buildout of this Alternative would continue to expose sensitive receptors to elevated noise levels and strong vibration from construction, and it would result in an increase in traffic on the local roadways, which would substantially increase noise levels. Consequently, this alternative would reduce but would not eliminate the significant construction-related and operational impacts of the Proposed Project.

7.5.13 Population and Housing

Allowable development within the Project Area under this alternative would be reduced by approximately 23 percent. Under the Reduced Intensity Alternative, a total of 81,748 dwelling units (57,009 more than existing), a total population of 311,834 (218,344 more than existing), and a total of 103,597 employees (71,759 more than existing) would occur at buildout. As shown in Table 7-2, this would result in a jobs/housing balance of 1.3 for the Project Area, which is the same as the Proposed Project and considered balanced. Therefore, impacts under the Reduced Intensity Alternative would be similar when compared to the Proposed Project.

7.5.14 Public Services

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. Under this alternative, impacts associated with fire protection, sheriff protection, schools, and library services would be less compared to the Proposed Project, since there would be less residential development at buildout. Fewer residential developments would result in a lower generation of new residents and therefore less demand for these services. Therefore, the Reduced Intensity Alternative would have reduced impacts compared to the Proposed Project, but similar to the Proposed Project, impacts would be less than significant.

7.5.15 Recreation

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. Due to the higher level of population estimated under buildout conditions of the Proposed Project, the demands on existing recreational facilities would be slightly reduced under this alternative, and less parkland would be required to serve the projected population at buildout. Impacts would remain less than significant, and this alternative would slightly reduce impacts of the Proposed Project.

7.5.16 Transportation and Traffic

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. This would result in corresponding decreases in traffic volumes on area roadways. This alternative would still contribute to an unacceptable LOS on several roadways in the Project Area, including Caltrans facilities, and therefore would still result in...
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significant unavoidable transportation and traffic impacts. However, since traffic volumes at buildout would be reduced by 23 percent, this alternative is considered superior to the Proposed Project with regard to transportation and traffic.

7.5.17 Utilities and Service Systems

Throughout the Project Area, this alternative would have a 23 percent decrease in dwelling units, population, and employment compared to the buildout of the Proposed Project. Under the Reduced Intensity Alternative, impacts to utilities and service systems would be reduced due to the reduction in residential units and non-residential square footage. However, similar to the Proposed Project, impacts would remain significant and unavoidable with regard to water supply.

7.5.18 Conclusion

Ability to Reduce Environmental Impacts

The Reduced Intensity Alternative would have similar impacts for agriculture and forestry resources, biological resources, cultural resources, geology and soils, GHG emissions, hydrology and water quality, mineral resources, and population and housing. Impacts would be reduced for aesthetics, air quality, GHG emissions, hazards and hazardous materials, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. In addition, while it would slightly reduce significant impacts with regard to agriculture and forestry resources, air quality, biological resources, cultural resources, greenhouse gas emissions, mineral resources, noise, transportation/traffic, and utilities and service systems (water supply), these would remain significant and unavoidable.

Ability to Achieve Project Objectives

This alternative would meet most of the project objectives identified in Section 7.1.2, although not to the same extent. For instance, this alternative would involve adoption of the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, and Rural Preserve Areas, although allowable densities would be reduced as compared to the Proposed Project.

7.6 ALTERNATIVE LAND USE POLICY MAP

This Alternative proposes an alternative land use policy map for the Proposed Project. Under the Alternative Land Use Policy Map, a comprehensive update to the Adopted Area Plan goals and policies would occur, similar to the Proposed Project. Updates to the existing SEA boundaries based on the latest biological information and GIS mapping data would also occur. Other key components of the Proposed Project, including the Rural Preservation Strategy and establishment of the Rural Town Center, Rural Town Areas, Rural Preserve Areas, and EOAs would also occur under this alternative. Under the Alternative Land Use Policy Map, a total of 67,463 dwelling units (42,724 more than existing), a total population of 248,323 (154,833 more than existing), and a total of 46,225 employees (14,387 more than existing) would occur at buildout.
7. Alternatives to the Proposed Project

7.6.1 Aesthetics

Under this Alternative, allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent. Under the Alternative Land Use Policy Map, a total of 67,463 dwelling units (42,724 more than existing), a total population of 248,323 (154,833 more than existing), and a total of 46,225 employees (14,387 more than existing) would occur at buildout. As a result, aesthetic impacts under the Alternative Land Use Policy Map would be reduced for the Project Area as compared to the Proposed Project.

7.6.2 Agriculture and Forestry Resources

As discussed in Section 5.2, Agriculture and Forestry Resources, conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to non-agricultural uses due to the buildout of the Proposed Project would be a significant impact in the Project Area. Project implementation could result in the conversion of up to 6,169 acres of land designated as Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent. As a result, agriculture and forestry resources impacts under the Alternative Land Use Policy Map would be reduced as compared to the Proposed Project, although they would remain significant and unavoidable.

7.6.3 Air Quality

The Alternative Land Use Policy Map would generate fewer emissions from area, energy, and mobile sources, and short-term emissions from construction activities associated with new development. Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent, population would be reduced by 39 percent, and employment would be reduced by 66 percent. This results in a jobs/housing ratio within the Project Area of 0.69, which is less balanced than under the Proposed Project (1.3). Mobile-source emissions would be less than those associated with the buildout of the Proposed Project. Short-term emissions related to project construction activities would be less in this alternative due to the reduced amount of total permitted development. However, this alternative would not substantially reduce significant short- and long-term criteria pollutant contributions of VOC, NOX, CO, SO2, PM10, and PM2.5; would not be consistent with the adopted air quality management plans, since criteria pollutant thresholds would be exceeded; and would cumulatively contribute to the SoCAB nonattainment designations for O3, PM10, and PM2.5 and the Antelope Valley portion of the Mojave Desert Air Basin (MDAB) nonattainment designations for O3 and PM2.5. Implementation of the Proposed Project was found to have significant and unavoidable impacts to short- and long-term air quality. Short- and long-term air quality impacts of this alternative would also be significant and unavoidable. However, since air quality emissions would be reduced, this alternative is considered environmentally superior to the Proposed Project.

7.6.4 Biological Resources

The Proposed Project contains policies that emphasize the conservation of SEAs and open space areas. Since the updated SEA boundaries are based on the latest biological information and GIS mapping data, they are
7. Alternatives to the Proposed Project

considered biologically superior to the smaller SEAs designated in the Adopted Area Plan. The updated SEA designations would also occur under the Alternative Land Use Policy Map. Since the Alternative Land Use Policy Map reduces the residential development within the Project Area, impacts to biological resources would be reduced as compared to the Proposed Project, although they would remain significant.

7.6.5 Cultural Resources

Under this alternative, allowable residential development within the Project Area would be reduced by approximately 36 percent. As a result, impacts to cultural resources would be reduced in the Project Area as compared to the Proposed Project. Therefore, implementation of this alternative would result in fewer impacts to cultural resources as compared to the Proposed Project, which are considered less than significant.

7.6.6 Geology and Soils

Earthquake hazards would be of similar magnitude under the Alternative Land Use Policy Map as under the Proposed Project, because future development would still occur throughout the Project Area. Other site-specific geological hazards associated with erosion, loss of topsoil, liquefaction, subsidence, hydrocollapse, landslides, and expansive soils would also be similar for this alternative relative to the Proposed Project. New development under both alternatives would be expected to conform to the most recent County Building Code and County Code Grading Ordinance and Regulations, which include strict building specifications to ensure structural and foundational stability. In terms of geologic hazards, this alternative, similarly to the Proposed Project, would have a less than significant impact.

7.6.7 Greenhouse Gas Emissions

Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent, population would be reduced by 39 percent, and employment would be reduced by 66 percent. This results in a jobs/housing ratio within the Project Area of 0.69, which is less balanced than under the Proposed Project (1.3). This could result in increased VMT within the Mojave Desert and South Coast Air Basins. Thus, GHG emissions could be more than those associated with the buildout of the Proposed Project. Similar to the Proposed Project, impacts from this alternative would be significant and unavoidable, since additional statewide measures would be necessary to reduce GHG emissions to meet the long-term GHG reduction goals under Executive Order S-03-05, which identified a goal to reduce GHG emissions to 80 percent below 1990 levels by 2050.

7.6.8 Hazards and Hazardous Materials

This impact would be similar to the Proposed Project, although slightly reduced, because the Alternative Land Use Policy Map reduces overall development intensity within the Project Area. Consequently, impacts related to the routine transport, use, or disposal of hazardous materials, as well as those related to reasonably foreseeable upset conditions, would be slightly reduced, although they are already less than significant. In addition, development under the Alternative Land Use Policy Map could expose people to hazardous substances that may be present in soil or groundwater, and demolition activities could expose workers and the
environment to asbestos-containing materials and/or lead-based paint and residues. However, development under both the Proposed Project and this alternative would be held to federal, state, and local policies protecting humans and the environment from exposure to hazards. Compliance with the provisions of hazardous material policies in the County Code and implementation of the existing regulations related to hazardous materials would reduce this impact to a less-than-significant level. For future developments on hazardous materials sites, appropriate remediation activities would be required before construction activities could be permitted. Similar to the Proposed Project, impacts would be less than significant. Overall, impacts related to hazards and hazardous materials would be slightly reduced under this alternative compared to the Proposed Project, and impacts would remain less than significant.

7.6.9 Hydrology and Water Quality

Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent and non-residential development would be reduced by approximately 66 percent. As a result, implementation of the Alternative Land Use Policy Map would reduce hydrology and water quality impacts in the Project Area due to decreased impervious surfaces. Similar to the Proposed Project, runoff would be subject to NPDES permit standards and provisions stipulated in the drainage area management plan. If necessary, treatment would be employed to remove excess pollutants from runoff during the construction and operational phases of development. The adopted policies that offer protection from water quality impairment would be implemented to treat runoff to the maximum extent practicable. In terms of water quality, this alternative would have a less than significant impact, similar to the Proposed Project. Hydrology and water quality impacts overall would be less for this alternative than compared to the Proposed Project, although they would remain less than significant.

7.6.10 Land Use and Planning

Allowable development within the Project Area would be reduced under this alternative. Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent, population would be reduced by 39 percent, and employment would be reduced by 66 percent. As a result, potential land use impacts within the Project Area would be reduced. Therefore, land use impacts would be less than the Proposed Project under this alternative and would remain less than significant.

7.6.11 Mineral Resources

As discussed in Section 5.11, Mineral Resources, implementation of the Proposed Project is expected to have a significant unavoidable adverse impact to mineral resources due to development within the Project Area. Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent, population would be reduced by 39 percent, and employment would be reduced by 66 percent. As a result, impacts under the Alternative Land Use Policy Map would be reduced as compared to the Proposed Project with respect to mineral resources, since more land would be available for mineral extraction, although they would remain significant and unavoidable.
7. Alternatives to the Proposed Project

7.6.12 Noise

Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent, population would be reduced by 39 percent, and employment would be reduced by 66 percent. Under this alternative, there would be less development given the reduced capacity, thereby eliminating potential short-term noise impacts from construction of these projects. Additionally, the reduction in potential development and construction activities would reduce potential short-term vibration impacts to sensitive receptors. This alternative would also reduce potential long-term noise impacts from mobile and stationary sources within the Project Area. The reduction of planned buildout capacity would reduce the number of vehicle trips generated by new developments and would reduce the number of stationary sources of noise. Overall, this alternative would reduce short- and long-term noise impacts of the Proposed Project within the Project Area. However, this alternative would reduce but would not eliminate the significant construction-related and operational impacts of the Proposed Project.

7.6.13 Population and Housing

As shown in Table 7-2, this Alternative has a jobs/housing balance of 0.69 as compared to 1.3 for the Proposed Project. The projected jobs/housing balance of 0.69 is considered housing rich. Therefore, impacts under the Alternative Land Use Policy Map would be increased when compared to the Proposed Project, and would be considered a significant and unavoidable adverse impact.

7.6.14 Public Services

Throughout the Project Area, this alternative would have a 36 percent decrease in dwelling units, 39 percent decrease in population, and 66 percent decrease in employment compared to the buildout of the Proposed Project. Under this alternative, impacts associated with fire protection, sheriff protection, schools, and library services would be less than under the Proposed Project, since there would be less residential development at buildout. Fewer residential developments would result in a lower generation of new residents and therefore less demand for these services. Therefore, the Alternative Land Use Policy Map would have reduced impacts compared to the Proposed Project, although similar to the Proposed Project, impacts would be less than significant.

7.6.15 Recreation

Throughout the Project Area, this alternative would have a 36 percent decrease in dwelling units, 39 percent decrease in population, and 66 percent decrease in employment compared to the buildout of the Proposed Project. Due to the higher level of population estimated under buildout conditions of the Proposed Project, the demands on existing recreational facilities would be slightly reduced under this alternative, and less parkland would be required to serve the projected population at buildout. Impacts would remain less than significant, and this alternative would slightly reduce impacts of the Proposed Project.
7. Alternatives to the Proposed Project

7.6.16 Transportation and Traffic

Allowable residential development within the Project Area under this alternative would be reduced by approximately 36 percent, population would be reduced by 39 percent, and employment would be reduced by 66 percent. This would result in corresponding decreases in traffic volumes on area roadways within the Project Area. This alternative would still contribute to an unacceptable LOS on several roadways in the Project Area, including Caltrans facilities, and therefore would still result in significant, unavoidable transportation and traffic impact. However, since traffic volumes at buildout would be reduced, this alternative is considered superior to the Proposed Project with regard to transportation and traffic.

7.6.17 Utilities and Service Systems

Throughout the Project Area, this alternative would have a 36 percent decrease in dwelling units, 39 percent decrease in population, and 66 percent decrease in employment in employment, compared to the buildout of the Proposed Project. Under the Alternative Land Use Policy Map, impacts to utilities and service systems would be reduced due to the reduction in residential units and non-residential square footage. However, similar to the Proposed Project, impacts would remain than significant and unavoidable.

7.6.18 Conclusion

Ability to Reduce Environmental Impacts

The Alternative Land Use Policy Map would have similar impacts for geology and soils. Impacts would be reduced for aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, GHG emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, public services, recreation, transportation and traffic, and utilities and service systems. However, though it would slightly reduce significant impacts with regard to agriculture and forestry resources, air quality, biological resources, cultural resources, GHG emissions, mineral resources, noise, transportation/traffic, utilities and service systems (water supply), these would remain significant and unavoidable. In addition, this Alternative would result in one new significant impact related to population and housing.

Ability to Achieve Project Objectives

This alternative would meet some but not all of the project objectives identified in Section 7.1.2.

7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the “environmentally superior alternative” and, in cases where the “No Project” Alternative is environmentally superior to the Proposed Project, the environmentally superior development alternative must be identified. An impact comparison is provided on Table 7-3, and a summary of the ability of each alternative to meet the project objectives is provided on Table 7-4. One alternative has been identified as “environmentally superior” to the Proposed Project:

- Reduced Intensity Alternative
The Reduced Intensity Alternative has been identified as the environmentally superior alternative because of its ability to reduce the significant impacts of the Proposed Project while still meeting the basic objectives of the project. This alternative would lessen impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, GHG emissions, hazards and hazardous materials, land use and planning, mineral resources, noise, public services, recreation, transportation and traffic, and utilities and service systems. In addition, the Reduced Intensity Alternative meets all of the basic objectives established for the Proposed Project.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.” [Guidelines Sec. 15126.6(c)]

### Table 7-3 Impact Comparison Proposed Project versus Project Alternatives

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Proposed Project (without/with mitigation)</th>
<th>No Project/Adopted Area Plan Alternative</th>
<th>Reduced Intensity Alternative</th>
<th>Alternative Land Use Policy Map</th>
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<tr>
<td>Hazards and Hazardous Materials</td>
<td>LS/LS</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hydrology and Water Quality</td>
<td>S/L</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Land Use and Planning</td>
<td>LS/LS</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mineral Resources</td>
<td>S/S</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Noise</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Term</td>
<td>S/S</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Long-Term</td>
<td>S/S</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Population and Housing</td>
<td>LS/LS</td>
<td>+</td>
<td>=</td>
<td>+</td>
</tr>
<tr>
<td>Public Services</td>
<td>LS/LS</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Recreation</td>
<td>LS/LS</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transportation/Traffic</td>
<td>S/S</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Utilities and Service Systems</td>
<td>S/S</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

LS = Less than significant.
S = Significant
- = Reduces impacts compared to the Proposed Project.
+ = Increases impacts compared to the Proposed Project.
= Impacts would be similar.
### 7. Alternatives to the Proposed Project

#### Table 7-4 Ability of Each Alternative to Meet the Proposed Project Objectives

<table>
<thead>
<tr>
<th>Proposed Project Objective</th>
<th>Proposed Project</th>
<th>No Project/Adopted Area Plan Alternative</th>
<th>Reduced Intensity Alternative</th>
<th>Antelope Valley Alternative Land Use Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preserve and enhance each unique town's rural character, allowing for continued growth and development without compromising the rural lifestyle.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Preserve open space around existing towns in order to preserve hillside areas and significant ridgelines, conserve biological resources, provide opportunities for recreation, and make more efficient use of existing infrastructure in the core areas.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Plan for integrated circulation systems, including bikeways, walkways, and multi-purpose trails.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Conserve significant resources, including agricultural lands, mineral resources, water supply, and scenic areas.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Preserve public health, safety, and welfare through identification of natural and environmental hazards, including noise, seismic, fire, and airborne emissions, and designation of land uses in an appropriate manner to mitigate these impacts; and</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Coordinate the enhancement of public and community services such as law enforcement, fire protection, and parks.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Provide a balance of jobs and housing consistent with AB 32, SB 375, and SCAG’s RTP/SCS.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
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