Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

Richard J. Bruckner
Director

June 11, 2015

TO: Supervisor Michael D. Antonovich, Mayor
Supervisor Hilda L. Solis
Supervisor Mark Ridley-Thomas
Supervisor Sheila Kuehl
Supervisor Don Knabe

FROM: Richard J. Bruckner
Director

MEETING ON THE ANTELOPE VALLEY AREA PLAN UPDATE; PROJECT NO. R2007-02733-(5); ADVANCE PLANNING NO. 2007-00019-(5); ZONE CHANGE NO. 2014-00009-(5); ADVANCE PLANNING NO. 2014-00009-(5); ENVIRONMENTAL ASSESSMENT NO. 2014-00021-(5); (FIFTH SUPERVISORIAL DISTRICT) (3-VOTES)

This action is to adopt the Los Angeles County (County) Antelope Valley Areawide General Plan Update (Project). This Project includes an updated Antelope Valley Areawide General Plan (AV Plan) (Advance Planning No. 2007-00019-(5), which replaces the 1986 Antelope Valley Area Plan. The Project also includes Zone Change No. 2014-00009-(5) which rezones properties in the Antelope Valley to be consistent with the AV Plan, and Advance Planning No. 2014-00009-(5) which amends Title 22 of the County Code to maintain consistency between the AV Plan and its implementing documents. The Project also includes minor amendments to the adopted Los Angeles Countywide General Plan to reflect updated text and maps related to highways, agricultural areas, trails, and Significant Ecological Areas (SEAs) within the Antelope Valley.

At the close of the November 12, 2014, public hearing, the Board moved to indicate its intent to approve the project with additional changes and clarifications. These revisions were incorporated into updated documents for your consideration for final approval on June 2, 2015.

The Department of Regional Planning recommends a slightly revised AV Plan which further clarifies language in compliance with your motion regarding the Project. These changes are as follows:

Pages IMP-4-5:

> … In order to allow for more flexibility in the future detailed site design of specific neighborhoods in this area, a Specific Plan for a project in the West EOA may be allowed to convert the areas designated as Residential 5 (H5) to General Commercial (CG) or Public and Semi-public (P) designations without amending this Area Plan, so long as the resulting residential densities do not exceed those provided for by this Area Plan and no change in unmitigated significant impacts occurs. The Specific Plan may also include provisions for the conversion of residential to commercial areas, provided the amount of planned commercial building square footage does not result in any new unmitigated significant impacts. The Specific Plan shall also stipulate that these provisions (i.e. converting residential to commercial or other designations) are subject to a traffic study that confirms that no new unmitigated significant traffic impacts will occur.
>
> Overall, land use adjustments within designations are permitted as part of a Specific Plan provided that the adjustments: 1) do not increase the total number of developable acres, dwelling units or square footage; 2) increase the total amount of open space and do not decrease the total amount of natural open space; and 3) do not result in new unmitigated significant impacts.
>
> …

Should you have any questions, please contact Susan Tae at (213) 974-6476 or via email at stae@planning.lacounty.gov.

RJB:MC:SMT:st:ems

Attachment:
1. Modified AV Plan

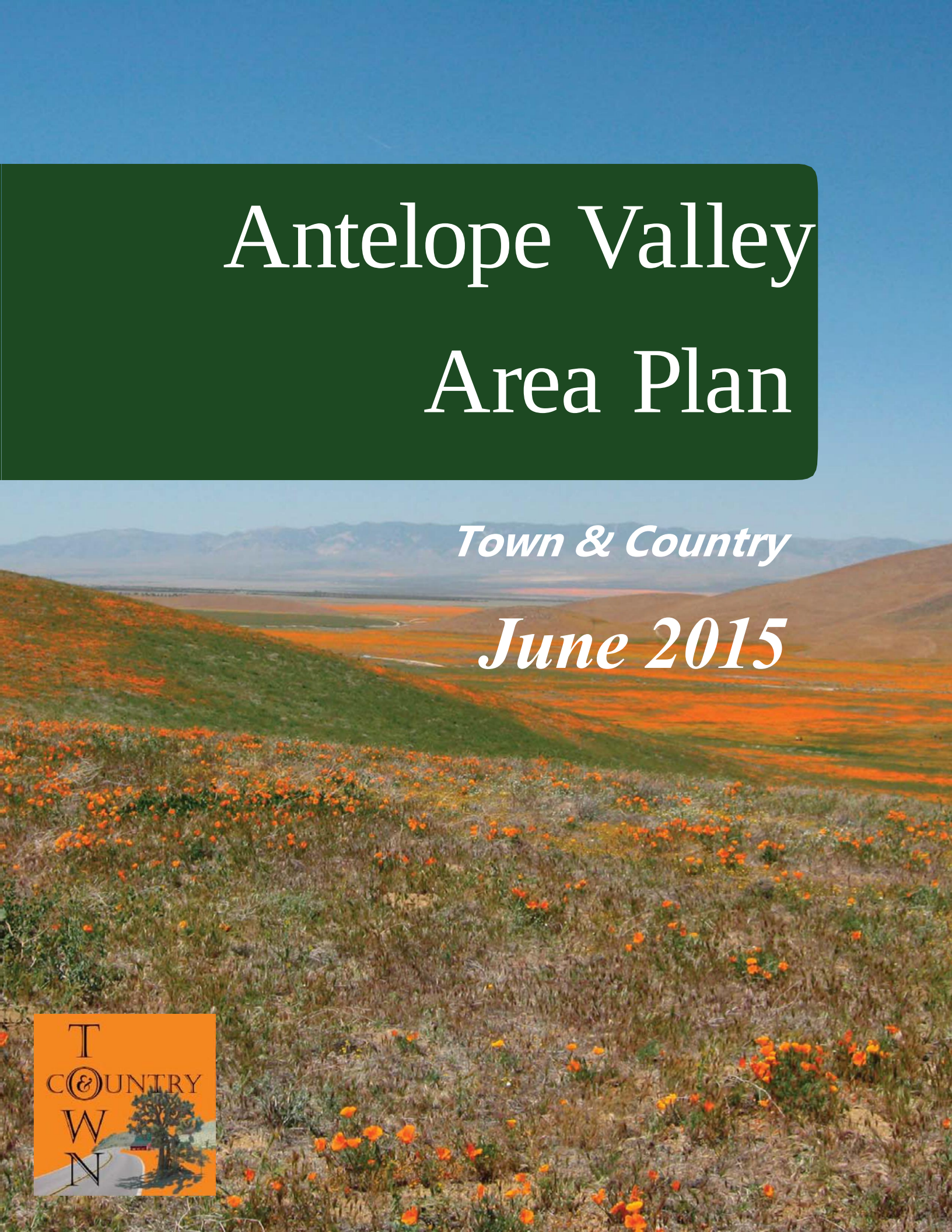
c: Executive Office, Board of Supervisors
County Counsel
Chief Executive Office

S_AP_061115_BM_AVPLAN

Antelope Valley Area Plan

Town & Country

June 2015



Los Angeles County Department of Regional Planning

Antelope Valley Area Plan

Town & Country

June 2015

ñTo enrich lives through effective

ñTo improve the quality of life through innovative and resourceful physical and environmental planning, balancing individual

ACKNOWLEDGEMENTS

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Laura Shell
Former Commissioners

Department of Regional Planning

Richard J. Bruckner, *Director of Planning*
Dennis Slavin, *Chief Deputy Director*
Mark Child, AICP, *Deputy Director, Advance Planning*
Elaine Sainz

Community Studies North

Susan Tae, AICP
Carl Vincent Nadela, AICP
David McDonald
Emma Howard
Jay Lee, AICP

Contributing Staff

Ayala Ben-Yehuda
Iris Chi, AICP
Soyeon Choi
Connie Chung, AICP
Joseph Decruyenaere
Bruce Durbin
Nick Franchino, AICP
Leon Freeman
Tina Fung
Mitch Glaser, AICP
Rob Glaser
Oscar Gomez
Pat Hachiya, AICP
Mark Herwick, AICP
Dan Hoffman
Thuy Hua, AICP
Shirley Imsand
Gina Natoli, AICP
Maya Saraf
Alyson Stewart
Christina Tran

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Department of Public Works
Fire Department
Department of Parks and Recreation
Department of Public Health

Los Angeles County Department of Regional Planning

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Chapter 1

Chapter 1: Introduction

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I. PURPOSE AND VALUES

Purpose

The purpose of the Antelope Valley Area Plan (Area Plan) is to achieve the communities' shared vision of the future through the development of specific goals, policies, land use and zoning maps, and other planning instruments. This shared vision is articulated in the Town and Country Vision Statement, which was developed by the Antelope Valley communities in various workshops in 2008. It goes:

> 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.

The Area Plan is a blueprint for future development and conservation in the Antelope Valley that informs decision-making at all levels to help ensure that individual activities are consistent with, and supportive of, the communities' vision. It is a tool for residents, elected officials, planners, service providers, and developers. Each group will use the Area Plan in different ways, but all are guided by its vision, goals, and policies. Residents will use the Area Plan as a benchmark in attaining their aspirations for the development and preservation of their communities. Elected officials and planners will refer to the Area Plan when allocating resources to address residents' most important issues and priorities. Service providers will use the Area Plan as a guide for deciding which infrastructure and improvement projects should be undertaken and which programs should be established or improved. Developers will look to the Area Plan's goals and policies in deciding what to build, including location, character, and appearance.

As a component of the Los Angeles County General Plan, the Antelope Valley Area Plan refines the countywide goals and policies in the General Plan by addressing specific issues relevant to the Antelope Valley, such as community maintenance and appearance, and provides more specific guidance on

elements already found in the General Plan. The General Plan provides guidance on all issues not covered in the Area Plan.

The Area Plan also helps further the countywide objective of reducing greenhouse gases in order to meet the goals of the California Global Warming Solutions Act of 2006 (Assembly Bill 32) and California's Sustainable Communities and Climate Protection Act (Senate Bill 375), which aim to achieve reductions of greenhouse gases. Los Angeles County has undertaken countywide measures to address these mandates, including adoption of the Green Building, Drought Tolerant Landscaping, and Low Impact Development Ordinances in 2008. The Area Plan strengthens these efforts by including goals and policies to support local development practices and initiatives to reduce greenhouse gas emissions. Implementation of the Land Use, Mobility, and Conservation and Open Space Elements contained in this Area Plan cumulatively affect the future reduction of greenhouse gases both locally and regionally.

Values

All aspects of the Area Plan are informed by a set of core values that ground and guide the Area Plan. In order to best serve the common interests represented in this Area Plan, planning values outline the shared responsibilities of the many partners who will work together to transform goals and policies into a realized vision. The core values of the Antelope Valley Area Plan are:

1. **Collaboration**: The issues and actions identified in the Area Plan are multi-dimensional and complex. As such, it takes a collaborative effort to accomplish the Area Plan's goals. Working in partnership with individuals from public agencies, private organizations and throughout the community, participants in planning and implementation of the Area Plan can come together to achieve the community's vision.

2. **Participation:** The dedicated commitment and ongoing participation of community members, service providers and elected officials will ensure that the Area Plan's implementation over time remains in line with the communities' vision. Community participation also demonstrates to elected leaders and service providers that constituents support the implementation of the Area Plan and expect results.

3. **Accountability**: By adopting this Area Plan, elected leaders have expressed their commitment to achieving the communities' vision by adhering to the Area Plan's goals and policies and by using the implementation actions to guide their work. Land use decisions will be made to benefit the needs of the community as a whole and not individual interests. Accountability means that all stakeholders take responsibility for their respective components of the Area Plan.

4. **Stewardship**: In order for the Area Plan to be effective in achieving the community's goals, people who live, learn, work, and play in the Antelope Valley will have to take an active role in ensuring the Area Plan's timely and thorough implementation. Community members and service providers can and should provide feedback on the insights into the Area Plan's effectiveness.

5. **Balance**: As the diverse and sometimes conflicting needs of current and future stakeholders evolve, the tools within the Area Plan create a framework which allows for balanced decisions to be made. For residents of the Antelope Valley, achieving a balance will unfold gradually. This shall be achieved by encouraging growth and development in appropriate areas of the Antelope Valley and ensuring that these enhance the quality of life of the communities without compromising their rural character.

II. BACKGROUND

Setting

The Antelope Valley planning area is bounded by the Kern County border to the north, the Ventura County border to the west, the Angeles National Forest (inclusive) to the south, and the San Bernardino County border to the east. It excludes the Cities of Lancaster and Palmdale. This area covers approximately 1,800 square miles and includes over two dozen communities.

For a map of the Antelope Valley and the immediate vicinity, please see Map 1.1: Planning Area Boundary.

History

The historic development of the Antelope Valley started in 1876 with the completion of the Southern Pacific Railroad line from San Francisco to Los Angeles via the Antelope Valley. Many communities began to develop, including Lancaster, Palmdale, Rio del Llano and Littlerock, all dependent upon stock raising, dry farming and fruit orchards.

The World War II years brought the development of Edwards Air Force Base and a doubling of the Antelope Valley population. Military defense work expanded in the 1950s, and Palmdale Airport emerged as a national center for jet testing. The latter part of the decade saw the start of an economic downturn throughout the country that slowed military investments in Antelope Valley projects.

The final decades of the 20th century saw the Antelope Valley emerge with major new housing opportunities as vast acreages were subdivided for affordable tract homes. Lancaster and Palmdale incorporated as independent cities, and rural communities continued to grow. Farming regained its status as a productive employer, but the area continued to develop without balancing the growth in housing with a corresponding growth in jobs and investment in infrastructure. Today, many who live in the Antelope Valley commute to jobs in other parts of the Los Angeles Basin. New local commercial centers are expanding the shopping, entertainment and employment opportunities of Antelope Valley residents. For additional information on the setting and history of the Antelope Valley, please see Background Report.

Past and Current Planning Efforts

The previous Antelope Valley Areawide General Plan was adopted by the Los Angeles County Board of Supervisors on December 4, 1986. It contained Valleywide goals and policies pertaining to land use, housing, community revitalization, community design, human resources, circulation, public services and facilities, governmental services, environmental resource management, noise abatement, seismic safety, public safety, and energy conservation. This Area Plan replaces the previous Antelope Valley Areawide General Plan in its entirety.

This Area Plan covers issues that were important in 1986 and are still important to the communities; for example, managing growth, minimizing disruption of ecological resources, placing development away from natural hazards, and ensuring a variety of housing types and costs. This Area Plan also addresses new issues that have emerged in recent years; for example, maintaining agricultural uses, improving mobility, developing renewable energy resources, and curbing greenhouse gas emissions.

Community Participation

The Area Plan is the result of a highly inclusive and extensive community participation program launched in the fall of 2007. Through a series of 23 community meetings, residents and other stakeholders worked alongside planners to develop a shared vision of the future, identify community issues, draft proposals for the future, and prioritize their recommendations, forming the foundation of the Area Plan.

Building on the foundation laid by the communities, planners partnered with other County departments to explore the recommendations, refine the proposed goals and policies, plan for program implementation, and gather support to ensure success. Plan development is an iterative process, and in this case, the communities were included in the earliest steps of development and subsequent rounds of review. The Area Plan began with, and will be realized by, the dedicated residents and stakeholders who have committed, and will continue to commit their time, energy and interests to the Antelope Valley.

III. VISION AND STRATEGY

Vision Statement

At the heart of the County's approach to community planning is the idea that the Area Plan is an adopted version of the communities' aspirations for the future. Collectively, those aspirations amount to a community vision, based on shared values and common goals. The communities reached consensus on the following vision statement:

> 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.

This vision of the Antelope Valley's future serves as a touchstone through the planning process, and it is reflected in the land use map, goals, and policies that comprise the Area Plan.

Issues

Through the planning and visioning process, the County identified issues of Valleywide significance that, it determined, were best addressed in a comprehensive and coordinated manner. In anticipation of future growth, the planning effort focused on ways to manage this growth and addressed the need for balance on the following issues:

1. Preservation and enhancement of each unique town's rural character, allowing for continued growth and development without compromising the rural lifestyle;
2. Preservation of 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;
3. Planning for integrated circulation systems, including bikeways, walkways, and multi-purpose trails;
4. Conservation of significant resources, including agricultural lands, mineral resources, water supply, and scenic areas;
5. Preservation of 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
6. Coordination on enhancing public and community services such as law enforcement, fire protection, and parks.

Rural Preservation Strategy

The Area Plan's Rural Preservation Strategy addresses issues of Valleywide significance in a manner that builds upon the communities' vision statement. While each community in the Antelope Valley possesses its own identity, they are all unified in the pursuit of preserving the rural lifestyle and the rural

character of the region. This rural character is what makes the Antelope Valley so unique and valuable to the rest of Southern California.

The term "rural" is defined by the following characteristics:

- Living in a low density environment without high intensity land uses, such as regional commercial centers;
- A natural, peaceful, quiet setting, with the ability to find a sense of solitude;
- Views of adjacent natural areas by day, such as hillsides and ridgelines, and views of starry skies by night;
- Agricultural and equestrian uses that are sensitive to the land; and
- An absence of infrastructure generally found in urban and suburban areas, including but not limited to curbs, gutters, sidewalks, street lighting, and traffic signals.

The Rural Preservation Strategy is based on four types of environments – rural town center areas, rural town areas, rural preserve areas, economic opportunity areas – that serve different purposes. Collectively, these environments preserve the rural character of the region, conserve environmental resources, and protect residents from potential hazards while allowing for additional growth and development. For more information on these environments, please see Chapter 2: Land Use Element.

Rural town center areas are the focal points of rural communities, serving the daily needs of residents and providing local employment opportunities. The majority of new locally-oriented public facilities and new locally-oriented commercial uses should be directed to these areas. These areas will provide pleasant pedestrian environments and will be accessible by a range of transportation options to reduce vehicle trips. Some of these areas will allow for a mix of commercial and residential uses.

Rural town areas provide a transition between rural town center areas and rural preserve areas, as they are occupied by a mix of residential and light agricultural uses. Residents living in these areas are willing to forego urban infrastructure and services in order to live in a rural environment. The majority of new residential development should be directed to these areas, provided that such development is consistent with the existing community character and allows for light agricultural, equestrian, and animal-keeping uses where appropriate. These areas will provide transportation linkages to rural town center areas and other nearby destination points.

Rural preserve areas are areas outside of the Town Areas, which are largely undeveloped and generally not served by existing or planned infrastructure and public facilities. Many of these areas contain environmental resources, such as Significant Ecological Areas, Scenic Resource Areas, and Agricultural Resource Areas. In addition, many of these areas contain safety hazards, such as Seismic Zones, Very High Fire Hazard Severity Zones, and Flood Zones. The primary benefit of these areas is that they provide habitat for regionally significant biological species while simultaneously providing scenic value to residents. A secondary benefit of these areas is that they contain natural resources which provide economic opportunities. Development in these areas should be limited to single family homes at very low densities, light and heavy agricultural uses, including equestrian and animal-keeping uses, and other uses where appropriate.

Economic opportunity areas are defined clusters of land along the routes of two new proposed major infrastructure projects in the Antelope Valley, namely the High Desert Corridor and the Northwest 138 Corridor Improvement Project. These areas were identified as having tremendous potential for economic growth and development. Thus, any development induced by these two infrastructure projects should be guided to these areas so that the areas around them can be preserved and maintained at low density, or agricultural uses. This is intended to balance the growth and development which the two projects will undoubtedly bring, with the general intent of this Area Plan to preserve the ecological value and rural character of the Antelope Valley.

The Rural Preservation Strategy necessitates a "trade-off" between preserving rural character and developing additional infrastructure, as infrastructure improvements are typically funded by increased property tax revenues and developer fees. In rural town center areas and rural town areas, the amount of potential development allowed by this Area Plan will be equal to, or greater than, the amount of potential development allowed by the previous Area Plan. Therefore, those areas are likely to benefit from increased property tax revenues and developer fees, which can help fund additional infrastructure. In rural preserve areas, the amount of potential development allowed by this Area Plan will be far less than the amount of potential development allowed by the previous Area Plan. Therefore, rural preserve areas are unlikely to benefit from increased property tax revenues and developer fees, which may make it difficult to fund additional infrastructure. The Area Plan acknowledges this "trade-off" by directing additional infrastructure to rural town center areas and rural town areas, where the placement of additional infrastructure may be more cost-effective and environmentally sensitive, and not to rural preserve areas, where the placement of additional infrastructure may not be necessary. Residents of rural preserve areas should be prepared to forego additional infrastructure in order to live in a very remote rural environment and enjoy the benefits offered by such an environment. On the other hand, the economic opportunity areas provide an opportunity for the Area Plan to maximize the investment that state and regional agencies are bringing into the area, while still achieving the general goal of rural preservation in the Antelope Valley.

IV. HOW TO USE THE ANTELOPE VALLEY AREA PLAN

Definitions

The following definition shall apply only as it specifically appears in this Area Plan and shall not be used in any other context outside of this Area Plan.

> "Legal lot" means any lot created in compliance with the provisions of the Subdivision Map Act, or would qualify for a conditional certificate of compliance as provided in the Subdivision Map Act. Where a conditional certificate of compliance is reviewed by the County, the conditions imposed therein will be based on those required at the time the lot was created, including land use density and required area under the zoning code.

Area Plan Format and Content

The Area Plan is organized into eight chapters. Chapter 1 (Introduction) presents the Area Plan's purpose and values, the geographic area, and the communities' vision statement. Chapter 2 (Land Use Element) discusses how the communities' vision translates into a development pattern through the concept of land use. Chapter 3 (Mobility Element) describes the multi-modal approach to moving around the Antelope Valley. Chapter 4 (Conservation and Open Space Element) describes conservation efforts to address potential threats to natural resources. Chapter 5 (Public Safety, Services and Facilities Element) provides measures to ensure services are in place to maintain the safety and welfare of residents. Chapter 6 (Economic Development Element) provides the blueprint for the planning area to build a healthy and sustainable economic base that will drive development and private-sector led conservation and preservation of open space in the area. Chapters 2 through 6 contain goals and policies specific to each chapter's respective topic but all work jointly to comprehensively implement the overall vision. Chapter 7 (Community-Specific Land Use Concepts) highlights each established town and describes its land use form in more detail. Finally, Chapter 8 (Plan Implementation) describes future planning activities that will be undertaken to further implement the goals and policies of this Area Plan. Appendix A includes descriptions of the Significant Ecological Areas within the Antelope Valley Area Plan.

Applicability

The following provisions shall apply to complete applications filed prior to the effective date of this Antelope Valley Area Plan.

The applicant can choose whether the application will be reviewed for consistency with the previously adopted Antelope Valley Areawide General Plan or this Antelope Valley Area Plan. In either case, approval of the application is not guaranteed.

If an application is reviewed for consistency with the previously adopted Antelope Valley Areawide General Plan, the applicant may modify the application prior to consideration by the Regional Planning Commission, Hearing Officer, or Director. The modification will be reviewed for consistency with the previously adopted Antelope Valley Areawide General Plan if it does not change the housing type (e.g., from single family to two family or multifamily) nor increase:

- The residential density;
- The floor area or lot coverage of non-residential space;
- The amount of grading; or
- The area of ground disturbance.

A modification may necessitate the submittal of revised, updated, or additional materials and reports, such as site plans, elevations, and oak tree reports. In addition, a modification may necessitate

additional environmental review pursuant to the California Environmental Quality Act and the County's environmental review procedures.

Modification to an application that is already approved but not used, can be reviewed for consistency with the previously adopted Antelope Valley Areawide General Plan if it is found to be in substantial conformance with such application as determined by the Director. Otherwise a modification shall be considered a new application and shall be reviewed for consistency with this Antelope Valley Area Plan.

If an approval is used and has a grant term, the approved use may be maintained until the end of the grant term. At the end of the grant term, the use shall be subject to the Antelope Valley Area Plan policies in effect at that time. During the grant term, a modification to the approved use will be reviewed for consistency with the previously adopted Antelope Valley Areawide General Plan if the modification is found to be in substantial conformance with such application as determined by the Director. Otherwise, a modification to the approved use shall be subject to the Antelope Valley Area Plan policies in effect at that time.

If an approval is used and does not have a grant term, the approved use may be maintained in perpetuity unless a time limit is specified in the Zoning Code. In addition, all applicable non-conforming use provisions of the Zoning Code shall apply to the approved use. A modification to the approved use will be reviewed for consistency with the previously adopted Antelope Valley Areawide General Plan if the modification is found to be in substantial conformance with the use originally approved as determined by the Director. Otherwise, a modification to the approved use shall be subject to the Antelope Valley Area Plan policies in effect at that time.

Guidance

The Antelope Valley Area Plan is a component of the Los Angeles County General Plan. All of its maps, goals, policies, and implementing actions must be consistent with the elements of the Countywide General Plan. Users should be guided by the following:

- **General Plan Applicability**: Should any areas of conflicting interpretation arise, unless specifically noted, the provisions of the Countywide General Plan shall prevail.

- **Comprehensive Area Plan**: The Land Use Policy Map is never to be interpreted as a stand-alone document, but must be interpreted in light of applicable written policies in the Area Plan.

- **Equally Weighted Policies**: No policy, whether in written or diagram form, shall be given greater weight than any other policy in evaluating the policy intent of this Antelope Valley Area Plan.

- **Vision and Rural Preservation Strategy**: The interpretation of policy should be governed by the Vision and Rural Preservation Strategy of the Antelope Valley Area Plan.

- **Established Town Descriptions**: Descriptions of established towns in Chapter 7 are intended to provide more detailed descriptions of existing land use patterns, local character, and desired local development patterns, and should be referred to in addition to the remainder of the Area Plan in planning for local projects.

- **Non-Conforming Uses**: All legally established uses in existence at the time of adoption of this Antelope Valley Area Plan are deemed to be consistent with this Area Plan, although Zoning Ordinance provisions regarding Non-Conforming Uses may apply.

- **Undersized Parcels**: Existing legal lots may be developed (following current development requirements) regardless of lot size. For example, a 10 acre parcel designated Rural Land 20 (1du/20ac) may still develop one home.

- **Pending Projects**: Completed applications filed prior to the effective date of this Area Plan shall be allowed to be reviewed for consistency with the previously adopted Area Plan. Projects may be maintained as originally approved provided the approval is still valid and has not expired. Any subsequent changes of use or intensity shall be subject to the policies of this Area Plan.

- **Community Standards Districts**: Community-specific zoning regulations shall be consistent with the goals and policies of this Area Plan. Such regulations shall be instituted only when a unique or detrimental condition exists within a community that prevents implementation of this Area Plan.

- **Regulatory Codes**: Title 21 (Subdivision) and 22 (Zoning) of the Los Angeles County Code provide detailed development guidelines that work to implement this Area Plan. Project applications shall refer to these codes, including Community Standards Districts, to ensure that development and land use activities are compatible with the zoning and to not threaten the health, safety, and welfare of the communities.

- **Staff Consultation**: While the Antelope Valley Area Plan is meant to be a guide for the public in determining allowable uses of private property, the public is encouraged to consult with members of the County's planning staff prior to investing in the preparation of development plans that might later prove to be inconsistent with the Antelope Valley Area Plan.

In addition to the direction provided by this Area Plan, new development and land use activities are regulated by many agencies other than the Department of Regional Planning. Obtaining approval for certain types of actions may require proof of the availability for public services, fair-share provisions for public facilities, and other permitting. The applicant for any such application is advised to consult with all applicable departments and agencies.

Chapter 2

LAND USE ELEMENT

Chapter 2: Land Use Element

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I. Background

Purpose

Land use is the act of defining compatible activities and built forms in order to determine their appropriate distribution within a given area. Land use authority is given to local governments to shape the physical environment by recognizing daily needs and directing future long-term changes in housing, business, recreation, and open space.

This Land Use Element contains two major components, the Land Use Goals and Policies, and Land Use Policy Map, which explain how development and preservation of land should occur in the Antelope Valley. The Land Use Goals and Policies articulate how the Area Plan's Vision Statement and Rural Preservation Strategy will be achieved by setting out intended land use outcomes. As a visual reflection of the Land Use Goals and Policies, the Land Use Policy Map provides land use designations that establish locations for various types and densities of land use in the unincorporated Antelope Valley. The Land Use Policy Map determines the highest intensity of future development that the land can accommodate within a certain timeframe.

Issues

Over the last few decades, the Antelope Valley experienced surges of development pressures. Policymakers and citizens gained greater knowledge of how new development contributes to environmental degradation, resource scarcity, and natural hazard risks. Accordingly, local governments needed to balance increased growth with obligations to protect existing natural resources. These new obligations, combined with a better understanding of the importance of balancing rural and urban areas in Los Angeles County, have created a new model for regional development. This new model, which directs new investment to areas with existing and/or planned services and facilities and away from areas with natural hazards and environmental resources, will shape land use in the Valley, with policies that emphasize resource efficiency, economic growth, and the preservation of rural character. Over the next 20 years, this Element will balance growth and economic development, the desires of residents to preserve their rural way of life, and the need for hazard avoidance and mitigation to determine the level of development that these factors can support.

Vision and Strategy

The Area Plan's Vision Statement sets the tone of this Element, which is intended to create opportunities for the Antelope Valley to change and grow while preserving the rural lifestyle enjoyed by current residents and support a vibrant economy. The Area Plan's Rural Preservation Strategy guides the Land Use Policy Map, creating a pattern of rural town center areas, rural town areas, rural preserve areas, and economic opportunity areas. Each town in the Valley will flow outward from vibrant town centers that offer a range of housing and local-serving activities for day-to-day living. Lower-density rural residences will surround these town centers, buffered by large contiguous open spaces that contain habitat areas, recreational spaces, and rural economic activities. In addition, the Rural Preservation Strategy and the Land Use Policy Map lay out the framework for how the Antelope Valley

will deal with the changes that result from, and take advantage of the opportunities brought on by, new state and regional infrastructure projects, particularly the High Desert Corridor and the Northwest 138 Corridor Improvement Project.

II. Goals and Policies

Goals LU 1: A land use pattern that maintains and enhances the rural character of the unincorporated Antelope Valley.

- Policy LU 1.1: Direct the majority of the unincorporated Antelope Valley's future growth to rural town center areas and identified economic opportunity areas, through appropriate land use designations, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 1.2: Limit the amount of potential development in rural preserve areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 1.3: Maintain the majority of the unincorporated Antelope Valley as Rural Land, allowing for agriculture, equestrian and animal-keeping uses, and single-family homes on large lots.
- Policy LU 1.4: Ensure that there are appropriate lands for commercial and industrial services throughout the unincorporated Antelope Valley sufficient to serve the daily needs of rural residents and to provide local employment opportunities.
- Policy LU 1.5: Provide varied lands for residential uses sufficient to meet the needs of all segments of the population, and allow for agriculture, equestrian uses and animal-keeping uses in these areas where appropriate.

Goal LU 2: A land use pattern that protects environmental resources.

- Policy LU 2.1: Limit the amount of potential development in Significant Ecological Areas, including Joshua Tree Woodlands, wildlife corridors, and other sensitive habitat areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 2.2: Except within economic opportunity areas, limit the amount of potential development within Scenic Resource Areas, including water features, significant ridgelines, and Hillside Management Areas, through appropriate land use designations, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 2.3: Except within economic opportunity areas, limit the amount of potential development in Agricultural Resource Areas, including important farmlands designated by the State of California and historical farmland areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 2.4: Except within economic opportunity areas, limit the amount of potential development in Mineral Resource Areas, through appropriate land use designations with

very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.

- Policy LU 2.5: Except within economic opportunity areas, limit the amount of potential development in riparian areas and groundwater recharge basins, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 2.6: Except within economic opportunity areas, limit the amount of potential development near the National Forests and on private lands within the National Forests, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.

Goal LU 3: A land use pattern that minimizes threats from hazards.

- Policy LU 3.1: Except within economic opportunity areas, prohibit new development on fault traces and limit the amount of development in Seismic Zones, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 3.2: Except within economic opportunity areas, limit the amount of potential development in Very High Fire Hazard Severity Zones, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 3.3: Except within economic opportunity areas, limit the amount of potential development in Flood Zones designated by the Federal Emergency Management Agency, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 3.4: Except within economic opportunity areas, limit the amount of potential development on steep slopes identified as Hillside Management Areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 3.5: Except within economic opportunity areas, limit the amount of potential development in landslide and liquefaction areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 3.6: Except within economic opportunity areas, limit the amount of potential residential development in airport influence areas and near military lands, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy LU 3.7: All development projects located on parcels that are within an airport influence area shall be consistent with all policies of that airport's land use compatibility plan.

Goal LU 4: A land use pattern that promotes the efficient use of existing and/or planned infrastructure and public facilities.

- Policy LU 4.1: Direct the majority of the unincorporated Antelope Valley's future growth to the economic opportunity areas and areas that are served by existing or planned infrastructure, public facilities, and public water systems, as indicated in the Land Use designations shown on the Land Use Policy Map (Map 2.1) of this Area Plan.

Goal LU 5: A land use pattern that decreases greenhouse gas emissions.

- Policy LU 5.1: Ensure that development is consistent with the Sustainable Communities Strategy adopted in 2012, an element of the Regional Transportation Plan developed by the Southern California Association of Governments.
- Policy LU 5.2: Encourage the continued development of rural town centers that provide for the daily needs of surrounding residents, reducing the number of vehicle trips and providing local employment opportunities.
- Policy LU 5.3: Preserve open space areas to provide large contiguous carbon sequestering basins.
- Policy LU 5.4: Ensure that there is an appropriate balance of residential uses and employment opportunities within close proximity of each other.

Goal LU 6: A land use pattern that makes the Antelope Valley a sustainable and resilient place to live.

- Policy LU 6.1: Periodically review changing conditions to ensure that land use policies are compatible with the Area Plan's Rural Preservation Strategy, including economic opportunity areas.
- Policy LU 6.2: Ensure that the Area Plan is flexible in adapting to new issues and opportunities without compromising the rural character of the unincorporated Antelope Valley.

III. Land Use Policy Map

The Land Use Policy Map (Map 2.1: Land Use Policy) implements the Goals and Policies through the framework of rural town center areas, rural town areas, rural preservation areas and economic opportunity areas outlined in the Area Plan's Rural Preservation Strategy (Map 2.2: Rural Preservation Strategy). These areas are described below and are further explained in the discussion of land use concepts for each community that is provided in Chapter 7: Community Specific Land Use Concepts.

Rural Town Center Areas

Rural town center areas are the focal points of rural communities, serving the daily needs of residents and providing local employment opportunities. The majority of new locally-oriented public facilities and new locally-oriented commercial uses should be directed to these areas. These areas will provide pleasant pedestrian environments and will be accessible by a range of transportation options to reduce

vehicle trips, as directed in the policies of the Mobility Element. Some of these areas will allow for a mix of commercial and residential uses.

Rural town center areas are located within the following Antelope Valley communities:

- Acton – Along Crown Valley Road between Gillespie Avenue and Soledad Canyon Road.
- Antelope Acres – Along 90th Street West between Avenue E-4 and Avenue E-12.
- Gorman – Along the Golden State Freeway surrounding the Gorman School Road interchanges.
- Lake Hughes – Along Elizabeth Lake Road between Trail I and Mountain View Road.
- Lake Los Angeles – Along Avenue O between 167th Street East and 172nd Street East, and along 170th Street East between Avenue O and Glenfall Avenue.
- Leona Valley – Intersection of Elizabeth Lake Road and 90th Street West.
- Littlerock – Along Pearblossom Highway between Little Rock Wash and 89th Street East.
- Pearblossom – Along Pearblossom Highway between 121st Street East and 133rd Street East.
- Quartz Hill – Along 50th Street West between Avenue L-6 and Avenue M-2.
- Roosevelt – Intersection of 90th Street East and Avenue J.
- Sun Village – Along Palmdale Boulevard between Little Rock Wash and 110th Street East, and along 90th Street East between Palmdale Boulevard and Avenue Q-14.

On the Land Use Policy Map, the primary land use designations in the rural town center areas include:

- Rural Commercial (CR)
- Mixed-Use – Rural (MU-R)
- Major Commercial (CM)
- Light Industrial (IL)

Rural Town Areas

Rural town areas provide a transition between rural town centers and rural preserve areas, as they are occupied by a mix of residential and a wide variety of agricultural uses. The majority of new residential development should be directed to these areas, provided that such development is consistent with the existing community character and allows for various agricultural, equestrian, and animal-keeping uses where appropriate. These areas will provide transportation linkages to rural town center areas and other nearby destination points, as directed in the policies of the Mobility Element.

On the Land Use Policy Map, rural town areas are designated as Residential or as Rural Land, depending on the density of existing residential development. These land use designations include:

- Residential 30 (H30) – Maximum density of 30 residential units for each 1 net acre of land.
- Residential 18 (H18) – Maximum density of 18 residential units for each 1 net acre of land.
- Residential 9 (H9) – Maximum density of 9 residential units for each 1 net acre of land.
- Residential 5 (H5) – Maximum density of 5 residential units for each 1 net acre of land.
- Residential 2 (H2) – Maximum density of 2 residential units for each 1 net acre of land.
- Rural Land 1 (RL1) – Maximum density of 1 residential unit for each 1 gross acre of land.

- Rural Land 2 (RL2) – Maximum density of 1 residential unit for each 2 gross acres of land.
- Rural Land 5 (RL5) – Maximum density of 1 residential unit for each 5 gross acres of land.

These maximum densities shall apply to all new land divisions. Existing legal lots may be developed with one residential unit each, regardless of lot size, provided that such development meets applicable County Code requirements, and the siting of the structure is supportive of the policies in this Area Plan.

In addition, some rural town areas are designated for commercial or industrial use. These land use designations acknowledge existing commercial or industrial uses or identify appropriate locations for future commercial and industrial uses to serve local residents.

Rural Preserve Areas

Rural preserve areas are areas of the unincorporated Antelope Valley outside of Rural Town Center and Town Areas, which are largely undeveloped and generally not served by existing infrastructure and public facilities. Many of these areas contain environmental resources, such as Significant Ecological Areas, Scenic Resource Areas, and Agricultural Resource Areas. In addition, many of these areas contain safety hazards, such as Seismic Zones, Very High Fire Hazard Severity Zones, and Flood Zones. The primary benefit of these areas is that they provide habitat for regionally significant biological species while simultaneously providing scenic values to residents. A secondary benefit of these areas is that they contain natural resources which provide economic opportunities. Development in these areas should be limited to single-family homes at very low densities, light and heavy agricultural uses, including equestrian and animal-keeping uses, and other uses where appropriate.

On the Land Use Policy Map, rural preserve areas are designated as Rural Land with a range of very low densities that reflect the underlying constraints, environmental resources, and safety hazards. These land use designations include:

- Rural Land 10 (RL10) – Maximum density of 1 residential unit for each 10 gross acres of land.
- Rural Land 20 (RL20) – Maximum density of 1 residential unit for each 20 gross acres of land.

The lowest land use densities (RL20) of the Area Plan have been used primarily for the Seismic Zones and Significant Ecological Areas, as these are areas where it is critical to limit development to ensure the safety of residents as well as the preservation of important ecological resources in the area. These maximum densities shall apply to all new land divisions. Existing legal lots may be developed with one residential unit each, regardless of lot size, provided that such development meets applicable County Code requirements, and the siting of the structure is supportive of the policies in this Area Plan.

In addition, some rural preserve areas are designated for commercial or industrial use. These land use designations acknowledge uses or identify appropriate locations for future commercial and industrial uses to serve local and regional needs.

Economic Opportunity Areas

The Land Use Policy Map of the Area Plan also identifies three economic opportunity areas (EOAs). These are areas where major infrastructure projects are being planned by state and regional agencies, which would bring tremendous opportunities for growth and economic development in the vicinity of these projects. These projects include the High Desert Corridor on the east side of the Antelope Valley, and the Northwest 138 Corridor Improvement Project on the west side. Both projects are being undertaken by Los Angeles County Metropolitan Transportation Authority (Metro) and California Department of Transportation (Caltrans).

The Area Plan identifies three EOAs located along the proposed route of the two projects. These are the East EOA, encompassing the communities of Lake Los Angeles, Sun Village, Littlerock, Pearblossom, Llano, and Crystalaire; the Central EOA, located along Avenue D, just north of William J. Fox Airfield and west of State Route 14 Freeway; and the West EOA near the Interstate 5 along State Route 138/Avenue D, immediately east and west of the California Aqueduct and including portions of the Neenach and Gorman communities.

The EOAs include areas identified as existing Rural Town Centers, or Rural Town Areas. The EOAs also include areas that have the potential to develop as future Rural Town Areas, as well as Non-Preserve Areas that may be used for a variety of rural uses compatible with the surrounding areas, such as residential, agricultural and open-space uses. Wherever appropriate, these EOAs are designated with land use designations that would allow for a balanced mix of residential, commercial, and light industrial uses, while preserving the rural character and ecological resources of the surrounding areas. A jobs-housing balance is achieved by using medium-density residential, commercial and industrial land use designations in areas appropriate for development, while designating areas with important ecological resources as open space conservation areas. The land use designations within the EOAs include:

- Residential 18 (H18) – Maximum density of 18 residential units for each 1 net acre of land.
- Residential 5 (H5) – Maximum density of 5 residential units for each 1 net acre of land.
- Residential 2 (H2) – Maximum density of 2 residential units for each 1 net acre of land.
- Rural Land 1 (RL1) – Maximum density of 1 residential unit for each 1 gross acre of land.
- Rural Land 2 (RL2) – Maximum density of 1 residential unit for each 2 gross acres of land.
- Rural Land 10 (RL10) – Maximum density of 1 residential unit for each 10 gross acres of land.
- Rural Land 20 (RL20) – Maximum density of 1 residential unit for each 20 gross acres of land.
- Conservation (OS-C)
- Rural Commercial (CR)
- Mixed Use – Rural (MU-R)
- Light Industrial (IL)
- Heavy Industrial (IH)

Public and Open Space Land

Existing open space lands throughout rural town center areas, rural town areas, rural preserve areas and EOAs are identified on the Land Use Policy Map as one of the following Open Space designations, depending on the use of the land:

- Parks and Recreation (OS-PR)
- Conservation (OS-C)
- Water (OS-W)
- Bureau of Land Management (OS-BLM)
- National Forest (OS-NF)
- Military Land (OS-ML)

Privately owned lands within the National Forest are designated on the Land Use Policy Map as Rural Land, indicating the underlying infrastructure constraints, environmental resources, and safety hazards.

Existing public and semi-public facilities are designated on the Land Use Policy Map as Public and Semi-Public Facilities (P).

Land Use Legend

Table L-1: Land Use Legend

Land Use	Code	Permitted Density or FAR	Purpose
RURAL			
Rural Land 1	RL1	Residential: Maximum 1du/1 gross ac Non-Residential: Maximum FAR 0.5	Single-family residences; equestrian and limited animal uses; and limited agricultural and related activities.
Rural Land 2	RL2	Residential: Maximum 1 du/2 gross ac Non-Residential: Maximum FAR 0.5	
Rural Land 5	RL5	Residential: Maximum 1 du/5 gross ac Non-Residential: Maximum FAR 0.5	
Rural Land 10	RL10	Residential: Maximum 1 du/10 gross ac Non-Residential: Maximum FAR 0.5	Single-family residences; equestrian and animal uses; and agricultural and related activities.
Rural Land 20	RL20	Residential: Maximum 1 du/20 gross ac Non-Residential: Maximum FAR 0.5	
RESIDENTIAL			
Residential 2	H2	Residential: 0–2 du/net ac	Single-family residences.
Residential 5	H5	Residential: 0–5 du/net ac	

Residential 9	H9	Residential: 0–9 du/net ac	
Residential 18	H18	Residential: 0–18 du/net ac	Single-family residences, two-family residences
Residential 30	H30	Residential: 0-30 du/net ac	Single-family residences, two-family residences, multifamily residences.
COMMERCIAL			
Rural Commercial	CR	Residential: 0-5 du/net ac Non-Residential: Maximum FAR 0.5	Limited, low-intensity commercial uses that are compatible with rural and agricultural activities, including retail, restaurants, and personal and professional offices.
MIXED USE			
Mixed Use - Rural	MU-R	Residential: 0-5 du/net ac Non-Residential: Maximum FAR 0.5 Mixed Use: 0-5 du/net ac and FAR 0.5	Limited, low intensity commercial uses that are compatible with rural and agricultural activities, including retail, restaurants, and personal and professional offices; residential and commercial mixed uses.
INDUSTRIAL			
Light Industrial	IL	Non-Residential: Maximum FAR: 1.0	Light industrial uses, including light manufacturing, assembly, warehousing and distribution.
Heavy Industrial	IH	Non-Residential: Maximum FAR: 1.0	Heavy industrial uses, including heavy manufacturing, refineries, and other labor and capital intensive industrial activities.
PUBLIC AND SEMI-PUBLIC			
Public and Semi-Public Facilties	P	Residential: Density Varies Non-Residential: Maximum FAR: 3.0	Public and semi-public facilities and community-serving uses, including public buildings and campuses, schools, hospitals, cemeteries, and fairgrounds; airports and other major transportation facilities. Other major public facilities, including planned facilities that may be public-serving but may not be publicly accessible, such as landfills, solid and liquid waste disposal sites, multiple use stormwater treatment facilities, and major utilities. * In the event that the public or semi-public use of mapped facilities is terminated, alternative uses that are compatible with the surrounding development, in keeping with community character, are permitted.
OPEN SPACE			

Conservation	OS-C	N/A	The preservation of open space areas and scenic resource preservation in perpetuity. Applies to land that is legally dedicated for open space and conservation efforts.
Parks and Recreation	OS-PR	N/A	Open space recreational uses, such as regional and local parks, trails, athletic fields, community gardens, and golf courses.
National Forest	OS-NF	N/A	Areas within the National Forest and managed by the National Forest Service.
Bureau of Land Management	OS-BLM	N/A	Areas that are managed by the Federal Bureau of Land Management.
Water	W	N/A	Bodies of water, such as lakes, reservoirs, natural waterways, and man-made infrastructure, such as drainage channels, floodways, and spillways. Includes active trail networks within or along drainage channels.
Military Land	ML	N/A	Military installations and land controlled by U.S. Department of Defense.
OVERLAYS			
Special Management Areas	SMA	N/A	Special Management Areas require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards. Development regulations are necessary to prevent loss of life and property, and to protect the natural environment.
-- Agricultural Resource Areas	ARA	N/A	Agricultural Resource Areas consist of farmlands identified by the California Department of Conservation and farms that have received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures. The County encourages the preservation and sustainable utilization of agricultural land, agricultural activities and compatible uses within these areas.
-- Mineral Resource Zones	MRZ	N/A	Mineral Resource Zones are commercially viable mineral or aggregate deposits, such as sand, gravel and other construction aggregate. The County's Mineral Resources consist of the California Geological Survey's identified deposits of regionally significant aggregate resources.
-- Significant Ecological Areas	SEA	N/A	Significant Ecological Areas are lands in the County that contain irreplaceable biological resources. Individual SEAs include undisturbed or lightly disturbed habitat supporting valuable and threatened species, linkages and corridors to promote species movement, and are sized to support sustainable populations of its component species. Note: the SEAs within the jurisdiction of cities are shown on the map for reference and visual continuity, and are intended to be used for informational purposes only.
Specific Plan	SP	N/A	Specific Plans contain precise guidance for land development, infrastructure, amenities and resource conservation. Specific plans must be consistent with the General Plan. Detailed policy and/or regulatory requirements are contained within each adopted Specific Plan document.

Irrespective of the residential densities specified for each land use category, existing prohibitions on further subdivision of previously subdivided lots shall apply and be strictly enforced.

IV. Additional Considerations

Special Management Areas

Special Management Areas, identified in the Countywide General Plan, are environmental features found throughout rural town areas and rural preserve areas. Goals and Policies regarding these Special Management Areas are provided in the other Elements of this Area Plan, as follows:

- Agricultural Resource Areas – Conservation and Open Space Element (Goal COS 6 and related policies, Goal COS 7 and related policies)
- Flood Zones – Public Safety, Services and Facilities Element (Goal PS 7 and related policies)
- Hillside Management Areas – Land Use Element (Goal LU 3 and related policies), Conservation and Open Space Element (Goal COS 5 and related policies, Goal COS 16 and related policies, Goal COS 19 and related policies), Public Safety, Services and Facilities Element (Goal PS 6 and related policies)
- Landslide Zones – Public Safety, Services and Facilities Element (Goal PS 6 and related policies)
- Liquefaction Zones – Public Safety, Services, and Facilities Element (Goal PS 6 and related policies)
- Mineral Resource Zones – Conservation and Open Space Element (Goal COS 8 and related policies)
- Scenic Resource Areas – Conservation and Open Space Element (Goal COS 5 and related policies, Goal COS 15 and related policies)
- Seismic Zones – Public Safety, Services and Facilities Element (Goal PS 6 and related policies)
- Significant Ecological Areas – Land Use Element (Goal LU 2 and related policies), Conservation and Open Space Element (Goal COS 4 and related policies, Goal COS 16 and related policies, Goal COS 18 and related policies, Goal COS 19 and related policies)
- Very High Fire Hazard Severity Zones – Conservation and Open Space Element (Goal COS 5 and related policies, Goal COS 16 and related policies), Public Safety, Services and Facilities Element (Goal PS 7 and related policies)

Major Planned Infrastructure Projects

There are two major infrastructure projects in the Antelope Valley that are in varying stages of planning and environmental review. These are the High Desert Corridor (HDC) and the Northwest 138 Corridor Improvement Project (NW138), which are both joint projects of Metro and Caltrans.

The HDC is a proposed new multi-purpose transportation link between State Route 14 in Los Angeles County and State Route 18 in San Bernardino County. This project is envisioned to connect some of the fastest growing residential, commercial and industrial areas in Southern California, including the cities of Palmdale, Lancaster, Adelanto, Victorville, and the Town of Apple Valley.

The NW138 is a proposed substantial upgrade of the existing State Route 138 segment from Interstate 5 to State Route 14. This corridor currently serves as a bypass for people and goods movement, which provides critical mobility to, from and within the western portion of the Antelope Valley.

Development of the HDC and the NW138 projects would significantly impact the land use pattern in the unincorporated Antelope Valley. Together, these two projects will connect the Antelope Valley to major economic centers in Northern and Southern California, Nevada and beyond. In some areas, these future projects could support commercial and industrial development, providing additional local employment opportunities and reducing the need for long-distance commuting.

As mentioned earlier, three EOAs have been identified along the proposed routes of these projects, where increased residential, commercial and industrial uses are encouraged. As more details of these infrastructure projects are finalized in the coming years (i.e. route alignments, location of on-off ramps, number of lanes etc.), a comprehensive study of each of these EOAs should be undertaken in order to make any necessary adjustments to the Area Plan to fit the final design of these projects. This will be undertaken through a community planning process that should carefully consider potential changes to the Area Plan, including the Land Use Policy Map, balancing the need for economic development and local employment with rural preservation and environmental priorities.

Utility-Scale Renewable Energy Production Facilities

Utility-scale renewable energy production facilities may be allowed in Rural Land designations without a Plan Amendment. However, applications for such facilities may require discretionary approval and shall be subject to the California Environmental Quality Act and the County's environmental review and public hearing procedures. Applications for such facilities must be carefully considered and must be consistent with the relevant Goals and Policies of the Area Plan, especially Goal COS 10 and related policies, Goal COS 13 and related policies, and Goal COS 14 and related policies. (For more information, see Chapter 4: Conservation and Open Space Element)

Palmdale Regional Airport

Los Angeles World Airports owns a number of parcels in the central portion of the Antelope Valley that are currently in unincorporated territory but are surrounded by the City of Palmdale. These parcels have been designated as Public and Semi-Public Facilities (P) to acknowledge the existing Palmdale Regional Airport, which will be significantly expanded to become a regional commercial airport. Policies in the Mobility Element, and the Public Safety, Services and Facilities Element support the development of Palmdale Regional Airport, and that is the primary vision for these parcels. However, at the time of this Area Plan's adoption, the airport is inactive and no commercial air service is offered. Until such time that the airport is expanded, this Area Plan recommends that commercial and industrial uses be allowed on these parcels without a Plan Amendment, as such development will offer opportunities for employment and economic growth. However, these uses must be compatible with airport operations and must not restrict or prohibit future expansion of the airport.

Amendments to the Land Use Policy Map

After the Area Plan is adopted, property owners may request amendments to the Land Use Policy Map. These applications will be subject to the County's environmental review and public hearing procedures for Plan Amendments.

Amendments to the Land Use Policy Map requested by property owners must be carefully considered and may be approved through a public hearing and recommendation by the Regional Planning Commission and subsequent public hearing and adoption by the Los Angeles County Board of Supervisors, subject to the following findings:

- The Plan Amendment is necessary to realize an unmet community need;
- The Plan Amendment will allow development that maintains and enhances rural character, protects environmental resources, minimizes threats from hazards, helps implement economic opportunity areas, and promotes the efficient use of existing infrastructure and public facilities in a manner that is equal or superior to the development allowed by the existing land use designation;
- The Plan Amendment is consistent with the relevant Goals and Policies of the various Elements of the Area Plan; and
- The Plan Amendment meets the applicable findings required by the Countywide General Plan.

Chapter 3

MOBILITY ELEMENT

Chapter 3: Mobility Element

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I. Background

Purpose

Mobility is the movement of people and goods. The Mobility Element outlines the improvements needed to ensure current and future mobility between land uses. The role of this Element is to identify missing linkages and alternative modes of transportation, then collaborate with government partners to implement solutions. This Element creates the framework for a balanced, multi-modal transportation system across the Antelope Valley through Goals and Policies that address three topics: regional movement of services and goods, local transportation meeting the needs of residents, and the balance required to meet the demands of both.

Issues

Within the State of California and across the country, attitudes have changed about the nature of the responsibilities governments have in assisting with overall mobility. Effective transportation systems are increasingly being seen as those that can offer diverse options for movement. The current expectation is that future citizens should gain greater access to a wider range of transportation choices to fit their needs, allowing them to be a pedestrian, equestrian, cyclist, bus or rail rider, motorist, or air passenger. In addition, this Mobility Element aims to improve the economy of the region by developing a framework where efficient modes of transit move goods and services freely through the Antelope Valley. These wider choices for both people and goods will have the added benefit of increasing the overall efficiency of regional movement, which could reduce greenhouse gas emissions.

Vision and Strategy

Upholding the Area Plan's Vision Statement, this Element will improve future mobility in the Antelope Valley by connecting local populations to activity areas and by accommodating regional pressures and demands without compromising the comfort and access of local transportation. In order to achieve the Area Plan's Rural Preservation Strategy, travel links will be provided from the Valley's rural preserve areas and rural town areas to local-serving businesses and rural town center areas, as well as identified economic opportunity areas. While the communities are currently automobile-dependent due to their largely rural character, this Element will increase access to alternative modes of travel, such as trails, bikeways, and bicycle routes.

II. Goals and Policies

Travel Demand Management

Goal M 1: Land use patterns that promote alternatives to automobile travel.

- Policy M 1.1: Direct the majority of the unincorporated Antelope Valley's future growth to rural town centers and economic opportunity areas, to minimize travel time and reduce the number of vehicle trips, as indicated in the Land Use designations shown on the Land Use Policy Map (Map 2.1) of this Area Plan.

- Policy M 1.2: Encourage the continued development of rural town center areas that provide for the daily needs of local residents, reducing the number of vehicle trips and providing local employment opportunities.
- Policy M 1.3: Encourage new parks, recreation areas, and public facilities to locate in rural town center areas, rural town areas, and economic opportunity areas.
- Policy M 1.4: Ensure that new developments have a balanced mix of residential uses and employment opportunities as well as park, recreation areas and public facilities within close proximity of each other.
- Policy M 1.5: Promote alternatives to automobile travel in rural town center areas and rural town areas by linking these areas through pedestrian walkways, trails, and bicycle routes.

Goal M 2: Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking.

- Policy M 2.1: Encourage the reduction of home-to-work trips through the promotion of home-based businesses, live-work units, and telecommuting.
- Policy M 2.2: Encourage trip reduction through promotion of carpools, vanpools, shuttles, and public transit.
- Policy M 2.3: In evaluating new development proposals, require trip reduction measures to relieve congestion and reduce air pollution from vehicle emissions.
- Policy M 2.4: Develop multi-modal transportation systems that offer alternatives to automobile travel by implementing the policies regarding regional transportation, local transit, bicycle routes, trails, and pedestrian access contained in this Mobility Element.
- Policy M 2.5: As residential development occurs in communities~~,~~ require transportation routes, including alternatives to automotive transit, to link to important local destination points such as shopping, services, employment, and recreation.
- Policy M 2.6: Within rural town center areas, explore flexible parking regulations such as allowing residential and commercial development to meet parking requirements through a combination of on-site and off-site parking, where appropriate, or encouraging the provision of different types of parking spaces.

Highways and Streets

Goal M 3: An efficient network of major, secondary, and limited secondary highways to serve the Antelope Valley.

- Policy M 3.1: Implement the adopted Highway Plan for the Antelope Valley, in cooperation with the cities of Lancaster and Palmdale. Ensure adequate funding on an ongoing basis through financing programs, such as grants, congestion pricing, bonding, fair share cost assignments, etc.
- Policy M 3.2: In rural areas, require rural highway standards that minimize the width of paving and placement of curbs, gutters, sidewalks, street lighting, and traffic signals, as adopted by the Department of Public Works.

- Policy M 3.3: Implement highway improvements only when necessitated by increasing traffic or new development or for safety reasons.
- Policy M 3.4: Maintain existing highways to ensure safety, and require adequate street and house signage for emergency response vehicles.
- Policy M 3.5: As future land use changes occur, periodically review traffic counts and traffic projections and revise the Highway Plan accordingly.
- Policy M 3.6: Engage local communities and agencies in the planning and implementation of transportation improvements.

Goal M 4: A network of local streets that support the rural character of the unincorporated Antelope Valley without compromising public safety.

- Policy M 4.1: Require rural local street standards that minimize the width of paving and placement of curbs, gutters, sidewalks, street lighting, and traffic signals, as adopted by the Department of Public Works.
- Policy M 4.2: Maintain existing local streets to ensure safety, and require adequate signage for emergency response vehicles.
- Policy M 4.3: Encourage ongoing maintenance of private local streets to ensure public safety.

Truck Traffic

Goal M 5: Long-haul truck traffic is separated from local traffic, reducing the impacts of truck traffic on local streets and residential areas.

- Policy M 5.1: Support development of the High Desert Corridor and the Northwest 138 Corridor Improvement Project, to provide a route for truck traffic between Interstate 5, State Route 14, and Interstate 15.
- Policy M 5.2: Direct truck traffic to designated truck routes and prohibit truck traffic on designated scenic routes, to the greatest extent feasible.
- Policy M 5.3: Require that designated truck routes are designed and paved to accommodate truck traffic, preventing excessive pavement deterioration from truck use.
- Policy M 5.4: Add rest stops along designated truck routes to provide stopping locations away from residential uses.
- Policy M 5.5: Develop appropriate regulations for truck parking on local streets to avoid impacts to residential areas.

Regional Transportation

Goal M 6: A range of transportation options to connect the Antelope Valley to other regions.

- Policy M 6.1: Support the development of Palmdale Regional Airport and encourage a range of commercial air travel options.
- Policy M 6.2: Support the development of William J. Fox Airfield as a facility for general aviation, air cargo operations, and commuter air travel.
- Policy M 6.3: Support the development of the High Desert Corridor and the Northwest 138 Corridor Improvement Project between Interstate 5, State Route 14, and Interstate 15, and encourage the participation of private enterprise and capital.
- Policy M 6.4: Support increases in Metrolink commuter rail service, and support the expansion of commuter rail service on underutilized rail lines where appropriate.
- Policy M 6.5: Support the development of the California High Speed Rail System, with a station in Palmdale to provide links to Northern California and other portions of Southern California, and encourage the participation of private enterprise and capital.
- Policy M 6.6: Support the development of a high-speed rail system linking Palmdale to Victorville and Las Vegas, and encourage the participation of private enterprise and capital.
- Policy M 6.7: Establish a regional transportation hub in Palmdale with feeder transit service to the rural areas of the unincorporated Antelope Valley.
- Policy M 6.8: In planning for all regional transportation systems, consider and mitigate potential impacts to existing communities, and minimize land use conflicts.
- Policy M 6.9: Engage regional agencies, such as Caltrans, SCAG, Metro, and the California High Speed Rail Authority in the implementation of an effective and efficient integrated multi-modal regional transportation network. Ensure adequate funding on an ongoing basis through financing programs, such as grants, congestion pricing, bonding, fair share cost assignments, etc.

Local Transit

Goal M 7: Bus service is maintained and enhanced throughout the Antelope Valley.

- Policy M 7.1: Maintain and increase funding to the Antelope Valley Transit Authority for bus service.
- Policy M 7.2: Support increases in bus service to heavily traveled areas and public facilities, such as parks and libraries.
- Policy M 7.3: Support increases in bus service to rural communities, linking them to a regional transportation hub in Palmdale and shopping and employment centers in Lancaster and Palmdale.
- Policy M 7.4: Improve access for all people, including seniors, youth, and the disabled, by maintaining off-peak service and equipping transit services for wheelchairs and bicycles.
- Policy M 7.5: Encourage the use of advanced technologies in the planning and operation of the transit system.

Policy M 8: Alternative transit options in areas not reached by bus service.

- Policy M 8.1: Support the expansion of dial-a-ride services to rural communities, linking them to a regional transportation hub in Palmdale and shopping and employment centers in Lancaster and Palmdale.
- Policy M 8.2: Evaluate the feasibility of alternative transit options, such as community shuttle services and privately operated transit, to increase accessibility.

Bikeways and Bicycle Routes

Goal M 9: A unified and well-maintained bicycle transportation system throughout the Antelope Valley with safe and convenient routes for commuting, recreation, and daily travel.

- Policy M 9.1: Implement the adopted Bikeway Plan for the Antelope Valley in cooperation with the cities of Lancaster and Palmdale. Ensure adequate funding on an ongoing basis.
- Policy M 9.2: Along streets and highways in rural areas, add safe bicycle routes that link to public facilities, a regional transportation hub in Palmdale, and shopping and employment centers in Lancaster and Palmdale.
- Policy M 9.3: Ensure that bikeways and bicycle routes connect communities and offer alternative travel modes within communities.
- Policy M 9.4: Encourage provision of bicycle racks and other equipment and facilities to support the use of bicycles as an alternative means of travel.

Trails

Goal M 10: A unified and well-maintained multi-use (equestrian, hiking, and mountain bicycling) trail system that links destinations such as rural town centers and recreation areas throughout the Antelope Valley.

- Policy M 10.1: Implement the adopted Trails Plan for the Antelope Valley in cooperation with the cities of Lancaster and Palmdale. Ensure adequate funding on an ongoing basis.
- Policy M 10.2: Connect new development to existing population centers with trails, requiring trail dedication and construction through the development review and permitting process.
- Policy M 10.3: Maximize fair and reasonable opportunities to secure additional trail routes (dedicated multi-use trail easements) from willing property owners.
- Policy M 10.4: Ensure trail access by establishing trailheads with adequate parking and access to public transit, where appropriate and feasible.
- Policy M 10.5: Locate and design trail routes to minimize impacts to sensitive environmental resources and ecosystems.
- Policy M 10.6: Where trail connections are not fully implemented, collaboratively work to establish safe interim connections.
- Policy M 10.7: Ensure that existing trails and trailheads are properly maintained by the relevant agencies.

- Policy M 10.8: Solicit community input to ensure that trails are compatible with local needs and character.

Pedestrian Access

Goal M 11: A continuous, integrated system of safe and attractive pedestrian routes linking residents to rural town center areas, schools, services, transit, parks, and open space areas.

- Policy M 11.1: Improve existing pedestrian routes and create new pedestrian routes, where appropriate and feasible. If paving is deemed necessary, require permeable paving consistent with rural community character instead of concrete sidewalks.
- Policy M 11.2: Within rural town center areas, require that highways and streets provide pleasant pedestrian environments and implement traffic calming methods to increase public safety for pedestrians, bicyclists, and equestrian riders.
- Policy M 11.3: Within rural town center areas, promote pedestrian-oriented scale and design features, including public plazas, directional signage, and community bulletin boards.
- Policy M 11.4: Within rural town center areas, encourage parking to be located behind or beside structures, with primary building entries facing the street. Encourage also the provision of direct and clearly delineated pedestrian walkways from transit stops and parking areas to building entries.
- Policy M 11.5: Implement traffic calming methods in areas with high pedestrian usage, such as school zones.

Chapter 4

CONSERVATION AND OPEN SPACE ELEMENT

Chapter 4: Conservation and Open Space Element

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I. Background

Purpose

Conservation is the planned utilization and preservation of natural resources and landscapes in order to ensure their existence in the future. Many resources, including land, animals, plants, water, air, minerals, views, and energy, are fundamental components to the prosperity of the Valley. Conservation of these resources provides the most cost-effective strategy to assure a reliable supply of resources to meet current and future demands.

This Conservation and Open Space Element provides Goals and Policies to protect the Antelope Valley's environmentally significant undisturbed natural spaces, make use of natural resources, and provide open space areas for recreation and enjoyment. This Element identifies the resources and open spaces which may be developed, and gives guidance as to how sustainable development can be conducted in the future. In addition, this Element identifies areas which ought to be preserved from development, or are unsuitable for development due to hazards (see Map 4.1: Hazards and Environmental Constraints Model).

Issues

The Antelope Valley contains the largest remaining undisturbed natural and rural lands left in Los Angeles County. The Valley possesses a unique rural character that serves both residents and visitors alike, drawing from a wide range of resources, such as dark night skies, significant ridgelines, Joshua Trees, wild poppies, grazing lands, and cherry orchards. In the years to come, as the cities of Lancaster and Palmdale continue to grow, the potential lure of these rural areas in proximity to surrounding cities may create development patterns that would be incompatible with rural activities.

The natural areas of the Valley also contain valuable resources for the economic prosperity of the region. The Valley is home to most of the agricultural activities that are conducted in the County. To protect the future of the County's farming industry, it will be necessary for the County to support creative ideas and strategies that help farmers earn a livelihood. The mineral resources in the Valley help build regional roadways and construction sites and must be carefully managed and protected to ensure they remain available for future use. Alternative energy production is a growth industry and the Valley has favorable weather patterns and settings that may provide suitable sites for these activities, which will enhance the local economy. These, however, would need to be balanced with the preservation of the rural character and conservation of ecological resources in the area as utility-scale renewable energy development also present significant land use impacts on the surrounding rural areas and communities. As technologies and resources change, the Goals and Policies of this Element will be used to assist in the orderly, non-impactful and sustainable transition to reliance on renewable forms of energy, which will reduce greenhouse gas emissions.

Vision and Strategy

In order to serve the Area Pan's Vision Statement, the Antelope Valley will continue to include many open spaces that are undeveloped or developed with exceptionally low-intensity uses that respect natural environment landforms and are compatible with open space uses. When growth occurs, this Element will direct sustainable development to suitable locations in rural town areas, and rural town center areas and economic opportunity areas, with existing and/or planned infrastructure, protecting natural areas that provide sources of material and scenic value, as provided in the Area Plan's Rural Preservation Strategy. The future economic resiliency of the Antelope Valley requires careful stewardship of existing natural resources with a focus towards creative solutions, especially in regard to energy creation, minerals extraction, and agricultural pursuits.

II. Goals and Policies

Water Resources

Goal COS 1: Growth and development are guided by water supply constraints.

- Policy COS 1.1: Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.
- Policy COS 1.2: Limit the amount of potential development in areas that are not or not expected to be served by existing and/or planned public water infrastructure through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy COS 1.3: Limit the amount of potential development in groundwater recharge areas through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy COS 1.4: Promote the use of recycled water, where available, for agricultural and industrial uses and support efforts to expand recycled water infrastructure.

Goal COS 2: Effective conservation measures provide an adequate supply of clean water to meet the present and future needs of humans and natural ecosystems.

- Policy COS 2.1: Require new landscaping to comply with applicable water efficiency requirements in the County Code.
- Policy COS 2.2: Require low-flow plumbing fixtures in all new developments.
- Policy COS 2.3: Require onsite stormwater infiltration in all new developments through the use of appropriate measures, such as permeable surface coverage, permeable paving of parking and pedestrian areas, catch basins, and other low impact development strategies.
- Policy COS 2.4: Discourage water intensive recreational uses, such as golf courses, unless recycled water is used to sustain these uses.
- Policy COS 2.5: Discourage the use of potable water for washing outdoor surfaces.
- Policy COS 2.6: Support experiments in alternate forms of water provision and re-use, such as "air to water technology" and gray water systems.

- Policy COS 2.7: Limit use of groundwater sources to their safe yield limits.
- Policy COS 2.8: Coordinate with federal, state, regional and local agencies to develop and implement new technologies in water management.

Goal COS 3: A clean water supply untainted by natural and man-made pollutants and contaminants.

- Policy COS 3.1: Discourage the use of chemical fertilizers, herbicides and pesticides in landscaping to reduce water pollution.
- Policy COS 3.2: Restrict the use of septic systems in areas adjacent to aqueducts and waterways to prevent wastewater intrusion into the water supply.
- Policy COS 3.3: Require a public or private sewerage system for land use densities that would threaten nitrate pollution of groundwater if unsewered, or when otherwise required by County regulations.
- Policy COS 3.4: Support preservation, restoration and strategic acquisition of open space to preserve natural streams, drainage channels, wetlands, and rivers, which are necessary for the healthy functioning of ecosystems.
- Policy COS 3.5: Protect underground water supplies by enforcing controls on sources of pollutants.
- Policy COS 3.6: Support and encourage water banking facilities throughout the Antelope Valley, including within Significant Ecological Areas.

Biological Resources

Goal COS 4: Sensitive habitats and species are protected to promote biodiversity.

- Policy COS 4.1: Direct the majority of the unincorporated Antelope Valley's future growth to rural town centers and economic opportunity areas, minimizing the potential for habitat loss and negative impacts in Significant Ecological Areas.
- Policy COS 4.2: Limit the amount of potential development in Significant Ecological Areas, including the Joshua Tree Woodlands, wildlife corridors, and other sensitive habitat areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy COS 4.3: Require new development in Significant Ecological Areas to comply with applicable Zoning Code requirements, ensuring that development occurs on the most environmentally suitable portions of the land.
- Policy COS 4.4: Require new development in Significant Ecological Areas, to consider the following in design of the project, to the greatest extent feasible:
    - Preservation of biologically valuable habitats, species, wildlife corridors and linkages;
    - Protection of sensitive resources on the site within open space;
    - Protection of water sources from hydromodification in order to maintain the ecological function of riparian habitats;

    - Placement of development in the least biologically sensitive areas on the site, prioritizing the preservation or avoidance of the most sensitive biological resources onsite;
    - Design of required open spaces to retain contiguous undisturbed open space that preserves the most sensitive biological resources onsite and/or serves to maintain connectivity;
    - Maintenance of watershed connectivity by capturing, treating, retaining and/or infiltrating storm water flows on site; and
    - Consideration of the continuity of onsite open space with adjacent open space in project design.
- Policy COS 4.5: Subject to local, state or federal laws, require new development to provide adequate buffers from preserves, sanctuaries, habitat areas, wildlife corridors, State Parks, and National Forest lands, except within Economic Opportunity Areas.
- Policy COS 4.6: Encourage connections between natural open space areas to allow for wildlife movement.
- Policy COS 4.7: Restrict fencing in wildlife corridors. Where fencing is necessary for privacy or safety, require appropriate development standards that maximize opportunities for wildlife movement.
- Policy COS 4.8: Ensure ongoing habitat preservation by coordinating with the California Department of Fish and Game to obtain the latest information regarding threatened and endangered species.
- Policy COS 4.9: Ensure water bodies are well-maintained to protect habitat areas and provide water to local species.
- Policy COS 4.10: Restrict development that would reduce the size of water bodies, minimizing the potential for loss of habitat and water supply.

Scenic Resources

Goal COS 5: The Antelope Valley's scenic resources, including scenic drives, water features, significant ridgelines, buttes, and Hillside Management Areas, are enjoyed by future generations.

- Policy COS 5.1: Identify and protect natural landforms and vistas with significant visual value, such as the California Poppy Preserve, by designating them as Scenic Resource Areas.
- Policy COS 5.2: Except within economic opportunity areas, limit the amount of potential development in Scenic Resource Areas through appropriate land use designations with very low densities in order to minimize negative impacts from future development.
- Policy COS 5.3: Require new development in Hillside Management Areas to comply with applicable Zoning Code requirements, ensuring that development occurs on the most environmentally suitable portions of the land.
- Policy COS 5.4: Require appropriate development standards in Hillside Management Areas that minimize grading and alteration of the land's natural contours, ensure that development pads

mimic natural contours, and ensure that individual structures are appropriately designed to minimize visual impacts.

- Policy COS 5.5: Require adequate erosion control measures for all development in Hillside Management Areas, both during and after construction.
- Policy COS 5.6: Restrict development on buttes and designated significant ridgelines by requiring appropriate buffer zones.
- Policy COS 5.7: Ensure that incompatible development is discouraged in designated Scenic Drives by developing and implementing development standards and guidelines for development within identified viewsheds of these routes (Map 4.2: Antelope Valley Scenic Drives).

Agricultural Resources

Goal COS 6: Farming is a viable profession for Antelope Valley residents, contributing to the Valley's rural character and economic strength.

- Policy COS 6.1: Limit the amount of potential residential development in Agricultural Resource Areas (Map 4.3: Agricultural Resource Areas) through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan, minimizing the potential for future land use conflicts.
- Policy COS 6.2: Limit incompatible non-agricultural uses in Agricultural Resource Areas. Where non-agricultural uses are necessary to meet regional or community needs, require buffering and appropriate development standards to minimize potential conflicts with adjacent agricultural uses.
- Policy COS 6.3: Ensure that agricultural activities are included within the Antelope Valley's economic development strategies and pursue funding to support rural economic development and agriculture.
- Policy COS 6.4: Encourage the establishment of community farms, community gardens, and similar agricultural operations to produce local food and demonstrate the history, importance, and value of agriculture in the Antelope Valley.
- Policy COS 6.5: Encourage the establishment of local farmer markets, roadside stands, wineries and tasting rooms, and other forms of "agricultural tourism" throughout the Antelope Valley to expand potential sources of farm income.
- Policy COS 6.6: Provide educational resources to farmers.
- Policy COS 6.7: Investigate the feasibility of financial and/or zoning incentive programs for farmers, such as Williamson Act contracts, conservation easements and flexible zoning provisions.
- Policy COS 6.8: Support innovative agricultural business practices, such as agricultural tourism and farmers' cooperatives, necessary for adapting to changing economic and environmental conditions by streamlining regulations.

Goal COS 7: Farming practices are sustainable, balancing economic benefits with water and biological resource management priorities, and minimize greenhouse gas emissions and water pollution.

- Policy COS 7.1: Promote agricultural uses which sequester carbon and fix nitrogen.
- Policy COS 7.2: Support the use of alternative and renewable energy systems in conjunction with agricultural activities.
- Policy COS 7.3: Encourage sustainable agricultural and water quality best management practices such as runoff detention basins, use of vegetation filter strips, and organic farming.
- Policy COS 7.4: Ensure that agricultural activity is managed to minimize soil erosion and the release of contaminants into surface and groundwater resources.

Mineral Resources

Goal COS 8: Mineral resources are responsibly extracted.

- Policy COS 8.1: Allow new mineral resource extraction activities only in designated Mineral Resource Areas.
- Policy COS 8.2: Where new mineral resource extraction activities are allowed, ensure that applications undergo full environmental review and public noticing. Require site remediation after completion of mineral resource extraction activities.
- Policy COS 8.3: Provide strict enforcement of illegal or unpermitted mineral extraction activities.
- Policy COS 8.4: Protect MRZ-2's and access to MRZ-2's in the Antelope Valley from incompatible development and discourage incompatible adjacent land uses.
- Policy COS 8.5: Work collaboratively with agencies to identify Mineral Resource Zones in the Antelope Valley and to prioritize mineral land use classifications in regional efforts.
- Policy COS 8.6: Manage mineral resources in the Antelope Valley in a manner that effectively plans for the access to, and the development and conservation of mineral resources for existing and future generations.

Air Quality

Goal COS 9: Improved air quality in the Antelope Valley.

- Policy COS 9.1: Implement land use patterns that reduce the number of vehicle trips, reducing potential air pollution, as directed in the policies of the Land Use Element.
- Policy COS 9.2: Develop multi-modal transportation systems that offer alternatives to automobile travel to reduce the number of vehicle trips, including regional transportation, local transit, bicycle routes, trails, and pedestrian networks, as directed in the policies of the Mobility Element.
- Policy COS 9.3: In evaluating new development proposals, consider requiring trip reduction measures to relieve congestion and reduce air pollution from vehicle emissions.
- Policy COS 9.4: Promote recycling and composting throughout the Antelope Valley to reduce air quality impacts from waste disposal activities and landfill operations.
- Policy COS 9.5: Encourage the use of alternative fuel vehicles throughout the Antelope Valley.
- Policy COS 9.6: Educate Antelope Valley industries about new, less polluting equipment, and promote incentives for industries to use such equipment.

- Policy COS 9.7: Encourage reforestation and the planting of trees to sequester greenhouse gas emissions.
- Policy COS 9.8: Coordinate with the Antelope Valley Air Quality Management District and other local, regional, state, and federal agencies to develop and implement regional air quality policies and programs.

Energy

Goal COS 10: Diverse energy systems that utilize existing renewable or waste resources to meet future energy demands.

- Policy COS 10.1: Encourage the use of non-hazardous materials in all individual renewable energy systems and all utility-scale renewable energy production facilities to prevent the leaching of potentially dangerous run-off materials into the soil and watershed.
- Policy COS 10.2: Ensure that all individual renewable energy systems and all utility-scale renewable energy production facilities do not interfere with commercial and military flight operations or communication facilities. Consult with Edwards Air Force Base and U.S. Air Force Plant 42 on all proposed renewable energy projects that require discretionary approval.
- Policy COS 10.3: Encourage the safe and orderly development of biomass conversion facilities as an alternative to burning agricultural wastes.
- Policy COS 10.4: Promote methane recapture at landfills for purpose of generating energy and reducing fugitive greenhouse gas emissions.
- Policy COS 10.5: Encourage the development of emerging energy technologies, such as “solar roads.”
- Policy COS 10.6: Encourage the development of Conversion Technologies such as anaerobic digestion and gasification for converting post recycled residual waste into renewable fuels and energy.

Goal COS 11: Energy systems for use in public facilities that reduce consumption of non-renewable resources while maintaining public safety.

- Policy COS 11.1: Promote energy retrofits of existing public facilities throughout the County to complement and reduce dependence upon utility-scale renewable energy production facilities.
- Policy COS 11.2: Promote the use of solar-powered lighting for highways, streets, and public facilities, including parks and trails.
- Policy COS 11.3: Promote the use of renewable energy systems in public facilities, such as hospitals, libraries, and schools, to ensure access to power in the case of major disasters.

Goal COS 12: Individual energy systems for onsite use that reduce consumption of non-renewable resources and dependence on utility-scale energy production facilities.

- Policy COS 12.1: Promote the use of individual renewable energy systems throughout the County to complement and reduce dependence upon utility-scale renewable energy facilities.

- Policy COS 12.2: Require appropriate development standards for individual renewable energy systems to minimize potential impacts to surrounding properties. Simplify the permitting process for individual renewable energy systems that meet these development standards.

Goal COS 13: Utility-scale energy production facilities for offsite use that reduce consumption of non-renewable resources while minimizing potential impacts on natural resources and existing communities.

- Policy COS 13.1: Direct utility-scale renewable energy production facilities, such as solar facilities, to locations where environmental, noise, and visual impacts will be minimized.
- Policy COS 13.2: Restrict development of utility-scale wind energy production facilities within the vicinity of Edwards Air Force Base to limit interference with military operations.
- Policy COS 13.3: Require all utility-scale renewable energy production facilities to develop and implement a decommissioning plan, with full and appropriate financial guarantee instruments that will restore the full site to its natural state upon complete discontinuance of operations and will restore non-operational portions of the site while the remainder continues operating.
- Policy COS 13.4: Promote the use of recycled water in utility-scale renewable energy production facilities to limit impacts on the available fresh water supply.
- Policy COS 13.5: Where development of utility-scale renewable energy production facilities cannot avoid sensitive biotic communities, require open space dedication within Significant Ecological Areas as a mitigation measure.
- Policy COS 13.6: Ensure that all utility-scale renewable energy production facilities, such as solar facilities, do not create land use conflicts with adjacent agricultural lands or existing residential areas in the vicinity. Require buffering and appropriate development standards to minimize potential conflicts.
- Policy COS 13.7: Limit the aesthetic impacts of utility-scale renewable energy production facilities to preserve rural character.
- Policy COS 13.8: Coordinate with other jurisdictions to plan for utility-scale renewable energy production facilities in order to minimize impacts to sensitive biotic communities and existing residential areas.
- Policy COS 13.9: Prohibit ground-mounted utility-scale renewable energy production facilities within Significant Ecological Areas and Economic Opportunity Areas.

Goal COS 14: Energy infrastructure that is sensitive to the scenic qualities of the Antelope Valley and minimizes potential environmental impacts.

- Policy COS 14.1: Require that new transmission lines be place underground whenever physically feasible.
- Policy COS 14.2: If new transmission lines cannot feasibly be placed underground due to physical constraints, require that they be collocated with existing transmission lines, or along existing transmission corridors, whenever physically feasible.
- Policy COS 14.3: If new transmission lines cannot be feasibly be placed underground or feasibly collocated with existing transmission lines or along existing transmission corridors due to

physical constraints, direct new transmission lines to locations where environmental and visual impacts will be minimized.

- Policy COS 14.4: Discourage the placement of new transmission lines on undisturbed lands containing sensitive biotic communities.
- Policy COS 14.5: Discourage the placement of new transmission lines through existing communities or through properties with existing residential uses.
- Policy COS 14.6: Review all proposed transmission line projects for conformity with the Goals and Policies of the Area Plan, including those listed above. When the California Public Utilities Commission is the decision-making authority for these projects, provide comments regarding conformity with the Goals and Policies of the Area Plan.
- Policy COS 14.7: Require that electrical power lines in new residential developments be placed underground.

Dark Night Skies

Goals COS 15: Humans and wildlife enjoy beautiful dark Antelope Valley skies unimpeded by light pollution.

- Policy COS 15.1: Ensure that outdoor lighting, including street lighting, is provided at the lowest possible level while maintaining safety.
- Policy COS 15.2: Prohibit continuous all-night outdoor lighting in rural areas, unless required for land uses with unique security concerns, such as fire stations, hospitals, and prisons.
- Policy COS 15.3: Replace outdated, obtrusive, and inefficient light fixtures with fixtures that meet dark sky and energy efficiency objectives.
- Policy 15.4: Require compliance with the provisions of the Rural Outdoor Lighting District throughout the unincorporated Antelope Valley.

Vegetation Conservation

Goal COS 16: Native vegetation thrives throughout the Antelope Valley, reducing erosion, flooding, and wind-borne dust and sand.

- Policy COS 16.1: Except within Economic Opportunity Areas, require new development to minimize removal of native vegetation. Discourage the clear-scraping of land and ensure that a large percentage of land is left in its natural state.
- Policy COS 16.2: Maximize the use of native vegetation in landscaped areas, provided that vegetation meets all applicable requirements of the Fire Department and the Department of Public Works.

Green Building

Goal COS 17: Buildings are sustainable, conserving energy, water, and other resources, and limiting greenhouse gas emissions.

- Policy COS 17.1: Promote green building techniques for the construction and operation of public and private buildings in the unincorporated Antelope Valley.
- Policy COS 17.2: Require that new buildings be sited and designed in a manner that maximizes efficient use of natural resources, such as air and light, to reduce energy consumption, heat profiles, and greenhouse gas emissions.
- Policy COS 17.3: Promote energy retrofits of existing buildings.
- Policy COS 17.4: Promote the use of individual renewable energy systems and require appropriate development standards for such systems to minimize potential impacts to surrounding properties. Simplify the permitting process for individual renewable energy systems that meet these development standards.
- Policy COS 17.5: Protect active and passive solar design elements and systems from shading by neighboring structures and trees through appropriate development standards.
- Policy COS 17.6: Require new landscaping to comply with applicable water efficiency requirements in the County Code.
- Policy COS 17.7: Require low-flow plumbing fixtures in all new developments.
- Policy COS 17.8: Require onsite stormwater infiltration in all new developments through use of appropriate measures, such as permeable surface coverage, permeable paving of parking and pedestrian areas, catch basins, and other low impact development strategies.
- Policy COS 17.9: Require reduction, reuse, and recycling of construction and demolition debris.

Open Space

Goal COS 18: Permanently preserved open space areas throughout the Antelope Valley.

- Policy COS 18.1: Encourage government agencies and conservancies to acquire mitigation lands in the following areas and preserve them as permanent open space:
    - Significant Ecological Areas, including Joshua Tree Woodlands, wildlife corridors, and other sensitive habitat areas:
    - Hillside Management Areas;
    - Scenic Resource Areas, including water features such as the privately owned portion of Elizabeth Lake, significant ridgelines, buttes, and other natural landforms;
    - Land adjoining preserves, sanctuaries, State Parks, and National Forests; and
    - Privately owned lands within the National Forest.
- Policy COS 18.2: Ensure that open space acquisition is conducted in a fair and equitable manner.
- Policy COS 18.3: Maintain permanently preserved open space areas to ensure attractiveness and safety.
- Policy COS 18.4: Pursue funding for open space acquisition and maintenance on an ongoing basis.
- Policy COS 18.5: Provide parks and recreational facilities, as directed in the policies of the Public Safety, Services, and Facilities Element.

Goal COS 19: New development meets open space objectives while maintaining rural character.

- Policy COS 19.1: When new development is required to preserve open space, require designs with large contiguous open space areas that maximize protection of environmental and scenic resources.
- Policy COS 19.2: Allow large contiguous open space areas to be distributed across individual lots so that new development preserves open space while maintaining large lot sizes that are consistent with a rural environment, provided that such open space areas are permanently restricted through deed restrictions.
- Policy COS 19.3: Pursue innovative strategies for open space acquisition and preservation through the land development process, such as Transfers of Development Rights, Land Banking, and Mitigation Banking, provided that such strategies preserve rural character.

Chapter 5

PUBLIC
SAFETY, SERVICES AND FACILITIES ELEMENT

Chapter 5: Public Safety, Services and Facilities Element

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Disaster Preparedness and Emergency Response
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Health Facilities

I. Background

Purpose

Public services and facilities, such as fire protection, law enforcement, libraries, schools, and parks are amenities provided by the government to ensure the health, safety, and welfare of its residents. These services and facilities help to protect the population as a whole and contribute to community maintenance.

This Public Safety, Services and Facilities Element contains Goals and Policies outlining strategies to fulfill the overall mission of the County of Los Angeles: "to enrich lives through effective and caring service." This Element identifies local hazards that include fire, geology, and floods, and then elaborates on community expectations for enhanced and efficient local services that include law enforcement, parks, schools, libraries, health facilities, and economic development.

Issues

Public services require long-range planning to account for anticipated population and environmental changes that necessitate modification of service levels. Fire and sheriff's services must anticipate the extent and location of future needs to determine what enhancements can be offered. The provision of trails, parks, and roads requires coordination among multiple government agencies to achieve service goals. Schools, libraries and health services need to be accessible to the local residents they serve. A strong economic base ensures that all these public services and facilities can continue to be offered.

The level of public services and facilities are often dependent upon population numbers. Higher population numbers equate to higher demand, and thus larger communities receive greater quantities of service. The Antelope Valley is comprised of dispersed towns with smaller populations that correspond to relatively limited service availability, which underscores the necessity of long-range planning to ensure an adequate supply of life and safety services to maintain and enhance the quality of life.

Local environmental features, such as buttes, floodplains, and forests, make the Antelope Valley a uniquely rural setting in Los Angeles County but also give rise to many of the natural hazards that can compromise the safety of residents. Remote areas pose challenges to safety personnel trying to protect residents when responding to earthquake, flood and fire disasters. While many of these hazards are pre-existing and unpreventable, there are many actions that can be taken to reduce risks.

Vision and Strategy

The Area Plan's Vision Statement requires this Element to provide quality social, education, and recreational services and facilities. To implement the Area Plan's Rural Preservation Strategy, this Element will improve the quality of life and increase residents' safety and well-being by guiding future development to rural town center areas, rural town areas, and economic opportunity areas where services are already provided or are being planned and which contain less hazardous portions of the

Antelope Valley. As changes occur in the future, Valley residents will continue to receive high-caliber public services that accommodate current and future needs.

II. Goals and Policies

Fire Hazards

Goal PS 1: Protection of the public through fire hazard planning and mitigation.

- Policy PS 1.1: Limit the amount of potential master-planned development in Very High Fire Hazard Severity Zones through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy PS 1.2: Require that all new developments provide sufficient access for emergency vehicles and sufficient evacuation routes for residents and animals.
- Policy PS 1.3: Promote fire prevention measures, such as brush clearance and the creation of defensible space, to reduce fire protection costs.
- Policy PS 1.4: Provide strict enforcement of the Fire Code and all Fire Department policies and regulations.

Geological Hazards

Goal PS 2: Protection of the public through geological hazard planning and mitigation.

- Policy PS 2.1: Limit the amount of potential development in Seismic Zones and along the San Andreas Fault and other fault traces, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy PS 2.2: Limit the amount of development on steep slopes (Hillside Management Areas) and within landslide and liquefaction areas, through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy PS 2.3: Prohibit the construction of new structures on or across a fault trace.
- Policy PS 2.4: Ensure that new development does not cause or contribute to slope instability.

Flood Hazards

Goal PS 3: Protection of the public through flood hazard planning and mitigation.

- Policy PS 3.1: Limit the amount of potential development in Flood Zones designated by the Federal Emergency Management Agency through appropriate land use designations with very low residential densities, as indicated in the Land Use Policy Map (Map 2.1) of this Area Plan.
- Policy PS 3.2: Require onsite stormwater filtration in all new developments through use of appropriate measures, such as permeable surface coverage, permeable paving of parking and pedestrian areas, catch basins, and other low impact development strategies.
- Policy PS 3.3: Review the potential local and regional drainage impacts of all development proposals to minimize the need for new drainage structures.

- Policy PS 3.4: Ensure that new drainage structures are compatible with the surrounding environment by requiring materials and colors that are consistent with the natural landscape. Discourage concrete drainage structures.

Law Enforcement

Goal PS 4: Protection of public safety through law enforcement and crime prevention strategies.

- Policy PS 4.1: Support an increased law enforcement presence in every Antelope Valley community and explore new funding mechanisms to expand law enforcement services.
- Policy PS 4.2: Support a strong law enforcement presence on highways and streets to strictly enforce speed limits and other vehicle safety laws.
- Policy PS 4.3: Promote and support neighborhood watches to create more eyes and ears in the community.
- Policy PS 4.4: Educate the public on crime prevention programs and resources offered by the Sheriff's Department.

Goal PS 5: Protection of public health, safety, and welfare through code enforcement.

- Policy PS 5.1: Support neighborhood preservation programs, such as graffiti abatement, removal of abandoned or inoperable vehicles, and removal of trash and debris.
- Policy PS 5.2: Strictly enforce laws against illegal dumping and support the Antelope Valley Illegal Dumping Task Force.
- Policy PS 5.3: Educate the public on existing codes and the value of maintaining their property, encouraging voluntary compliance.
- Policy PS 5.4: Administer code enforcement activities in a fair, equitable, respectful, and cooperative manner.
- Policy PS 5.5: Create proactive code enforcement programs where desired by community residents.

Disaster Preparedness and Emergency Response

Goal PS 6: Government officials work with community members to promote community safety.

- Policy PS 6.1: Ensure safety information is available at local public areas.
- Policy PS 6.2: Encourage residents and business owners to create an evacuation plan and maintain emergency supplies.
- Policy PS 6.3: Promote the formation and coordination of Certified Emergency Response Teams.
- Policy PS 6.4: Provide assistance to local communities that wish to create a local emergency evacuation plan.
- Policy PS 6.5: Strengthen coordination and collaboration between citizens, public agencies, and non-profit groups to plan for disaster response.

- Policy PS 6.6: Develop an inclusive master emergency plan that designates evacuation routes, emergency relief centers, emergency animal keeping shelters, and information centers in every Antelope Valley community.

Goal PS 7: Emergency services that respond in a timely manner.

- Policy PS 7.1: Require visible addresses on buildings and at entrances to properties as required by the Fire Code.
- Policy PS 7.2: Ensure that Fire Stations are adequately staffed.
- Policy PS 7.3: Strive for a timely response to every call for service.

Parks and Recreation

Goal PS 8: Antelope Valley residents enjoy access to parks and recreational facilities.

- Policy PS 8.1: Maintain existing parks to ensure attractiveness and safety and make improvements as necessary. Ensure adequate funding on an ongoing basis.
- Policy PS 8.2: Provide recreational activities at parks that serve all segments of the population.
- Policy PS 8.3: Provide new parks as additional development occurs or as the population grows, with a goal of four acres of parkland for every 1,000 residents.
- Policy PS 8.4: Prioritize new parks for existing park deficient communities.
- Policy PS 8.5: Encourage the use of school playgrounds and sporting fields for community recreation ("joint use") when school is not in session.
- Policy PS 8.6: Within rural town center areas, promote the inclusion of parks, recreational facilities, and other gathering places that allow neighbors to meet and socialize.
- Policy PS 8.7: Provide trails, bikeways, and bicycle routes for recreational purposes, as directed in the policies of the Mobility Element.
- Policy PS 8.8: Maintain existing facilities for public water recreation to ensure attractiveness and safety and make improvements as necessary. Ensure adequate funding on an ongoing basis.
- Policy PS 8.9: Provide new facilities for public water recreation in appropriate areas.

Goal PS 9: Safe spaces for the recreational use of off-road vehicles and other motorized sporting.

- Policy PS 9.1: Reduce illegal off-road vehicle use by providing off-road vehicle trails and parks in appropriate areas.
- Policy PS 9.2: Reduce illegal drag racing by providing appropriate locations for safe and properly monitored drag racing.
- Policy PS 9.3: Provide strict enforcement of illegal off-road vehicle use and illegal drag racing.

Schools

Goal PS 10: A wide range of educational opportunities for Antelope Valley residents.

- Policy PS 10.1: Coordinate with all Antelope Valley school districts to ensure that new schools are provided as additional development occurs or as the population grows.
- Policy PS 10.2: Encourage new schools to locate in rural town center areas, rural town areas, and economic opportunity areas, where they will be accessible by pedestrian walkways, trails, bikeways, and bicycle routes.
- Policy PS 10.3: Encourage new schools to locate near parks and recreational facilities.
- Policy PS 10.4: Encourage the use of school playgrounds and sporting fields for community recreation ("joint use") when school is not in session.
- Policy PS 10.5: Promote the creation of a four-year public university in the Antelope Valley to provide opportunities for continuing education and workforce development.

Libraries

Goal PS 11: Antelope Valley residents enjoy easy access to public library services.

- Policy PS 11.1: Maintain existing public libraries and make improvements as necessary. Ensure adequate funding on an ongoing basis.
- Policy PS 11.2: Expand public library collections and services to meet community needs.
- Policy PS 11.3: Provide new public libraries as additional development occurs or as the population grows.
- Policy PS 11.4: Encourage new public libraries to locate in rural town center areas, rural town areas, and economic opportunity areas, where they will be accessible by pedestrian walkways, trails, bikeways, and bicycle routes.
- Policy PS 11.5: Provide bookmobile services in areas that are not served by permanent public libraries.
- Policy PS 11.6: Encourage the use of technology in library operations to increase efficiency and accessibility.

Health Facilities

Goal PS 12: A range of facilities and service that maintain the health and well-being of Antelope Valley residents at all ages and income levels.

- Policy PS 12.1: Provide preventative health services to reduce the need for emergency medical care.
- Policy PS 12.2: Support the development of regional health care facilities in Lancaster and Palmdale.
- Policy PS 12.3: Support existing community health care clinics in rural areas by preventing the encroachment of incompatible land uses. Allow expansion when required to meet community needs.

- Policy PS 12.4: Encourage the development of new community health care clinics where required to meet community needs. Encourage these clinics to locate in rural town center areas and economic opportunity areas, where they will be accessible by pedestrian walkways, trails, bikeways, and bicycle routes.
- Policy PS 12.5: Pursue funding to support daily operations at community health care clinics.

Chapter 6

ECONOMIC DEVELOPMENT ELEMENT

Chapter 6: Economic Development Element

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High-Tech Manufacturing
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Renewable Energy
Construction and Housing
Recreation, Tourism and Filmmaking
Regional Economic Development Strategies

I. Background

Purpose

In a market-based and private sector-led system, the primary driver of overall development in a given area is its economy. This economy is affected by local, regional and to a certain extent, national and global factors. This Economic Development Element of the Area Plan contains Goals and Policies to anticipate and plan for these factors in order to ensure that sustainable economic development is achieved throughout the Antelope Valley in the years to come. This Element also aims to balance economic growth with the preservation of the unique rural character and rich environmental resources of the Antelope Valley.

Issues

The Antelope Valley has a number of competitive advantages that can help it become the premier destination for high tech manufacturing firms in aerospace and other cutting-edge industries. These include the abundance of large, flat and relatively less expensive land; availability of a variety of transportation options such as truck, rail and air; close proximity to renewable energy sources; and other such factors. One issue facing the Antelope Valley in terms of Economic Development is its physical distance from the major urban areas of Los Angeles County. Thus, people who live in the area but work elsewhere or vice versa, may have very long home-work commutes. An improved jobs-housing balance will provide a vibrant economy in the Antelope Valley.

Vision and Strategy

The Area Plan's Vision Statement requires this Element to address the growing population's need for employment opportunities. This Area Plan provides for a jobs-to-household ratio of approximately 1.3 jobs for every household in the unincorporated Antelope Valley, a far improvement from the ratio of approximately one job for every five households established by the previous 1986 Antelope Valley Areawide General Plan.

The primary strategy of this Area Plan is to identify more areas appropriate for light and heavy industrial uses. These are areas in close proximity to major transportation corridors; and/or provide renewable energy, raw materials such as those from surface mining, a high concentration of skilled labor force, or other such important components for a successful and sustainable economy.

II. Goals and Policies

Goal ED1: A healthy and balanced economic base in the Antelope Valley that attracts a wide range of industries and businesses and provides high-paying jobs for local residents.

High-tech Manufacturing

With the availability of land, easy access to transportation corridors and proximity to renewable energy resources, the Antelope Valley is a prime destination for high-tech manufacturing to relocate to as they are more and more crowded out of their current urban locations. One of the main drivers of economic development in the Antelope Valley will be the relocation of high-tech industries to appropriate locations in the unincorporated Antelope Valley

- Policy ED 1.1: Promote the continued development of regional commercial and industrial employment centers in economic opportunity areas in the Antelope Valley.
- Policy ED 1.2: Allow the development of commercial and industrial uses at the Palmdale Regional Airport site, provided that those uses are compatible with airport operations and do not restrict or prohibit future expansion of the airport.
- Policy ED 1.3: Support the growth of "high-tech" industries to employ the Antelope Valley population's highly educated workforce.

Transportation and Logistics

As manufacturing and other industrial activities in the Antelope Valley increase, so will the demand for transportation and logistics services. With a wide expanse of relatively flat terrain and the availability of a variety of transport options such as by truck, rail or air, the Antelope Valley is poised to attract a number of companies specializing in logistics services.

- Policy ED 1.4: Support the development of the High Desert Corridor and the Northwest 138 Corridor Improvement projects to improve the east-west movement of goods, particularly between the Antelope Valley and the industrial areas of Kern and San Bernardino counties and beyond.
- Policy ED 1.5: Promote the development of an "Inland Port" in the Antelope Valley, providing additional employment in the trade and logistics sectors.
- Policy ED 1.6: Support the development of a range of travel options that better connect the Antelope Valley to existing regional trade and employment in other regions, including the High Desert Corridor and the Northwest 138 Corridor Improvement Projects.

Agriculture

The AV has vast expanses of land that are suitable for large-scale farming and other agricultural activities. The AV Area Plan will encourage and continuation and possible expansion of such activities in order to ensure that agriculture continues to be one of the main economic drivers of growth in the area.

- Policy ED 1.7: Promote farming and other agricultural activities that contribute to the Antelope Valley economy.
- Policy ED 1.8: Promote alternative sources of income for farmers, including commercial and industrial activities, to supplement their income during low production years and encourage them to continue farming in the Antelope Valley.

- Policy ED 1.9: Support water management projects, including the use of modern technology to increase available water supply in the area, in conjunction with the Integrated Regional Water Management Plan.

Renewable Energy

The demand for renewable energy in California is expected to dramatically increase in the near future. The AV has one of the most abundant sunshine in the country. This, along with the availability of undeveloped open spaces, gives the AV a lot of potential for solar energy development as well as other forms of renewable energy sources.

- Policy ED 1.10: Promote small-scale, household based renewable energy systems to enable Antelope Valley residents to become energy independent.
- Policy ED 1.11: Encourage the development of utility-scale renewable energy projects at appropriate locations and with appropriate standards to ensure that any negative impacts to local residents are sufficiently mitigated.
- Policy ED 1.12: Adopt regulations that ensure that local residents receive a fair share of the benefits of utility-scale renewable energy projects that are commensurate to their impacts.
- Policy ED 1.13: Ensure early discussions with Edwards Air Force Base and U.S. Air Force Plant 42 regarding new industries, such as utility-scale renewable energy production facilities, to limit potential impacts on mission capabilities.

Construction and Housing

The growth of the cities of Palmdale and Lancaster, as well as the increase in economic activity in the AV as a whole, will spur demand for new housing and other construction projects. The Antelope Valley Area Plan identifies the appropriate areas for this residential growth to occur and promote a variety of different types of residential development to occur there.

- Policy ED 1.14: Promote appropriate types of residential development in the vicinity of existing communities and town centers that are in reach of existing infrastructure and utilities.
- Policy ED 1.15: Where appropriate, promote residential development as part of a wider mixed-use strategy in communities that desire such uses in their areas and where plans for major infrastructure and facilities are currently underway. These areas have been identified as economic opportunity areas as shown in the Land Use Policy Map (Map 2.1) of this Area Plan.

Recreation, Tourism and Filmmaking

The vast open spaces, unique landscape and natural resources of the AV make it an ideal destination for recreational activities, tourism, filming and other industries that put a premium on preservation of the natural environment. The Antelope Valley Area Plan aims to protect and preserve these resources, while promoting compatible activities that allow landowners to derive economic benefit from their properties.

- Policy ED 1.16: Preserve the scenic resources of the Antelope Valley, including Scenic Drives, Significant Ridgelines and Significant Ecological Areas, in such a~~s~~ way that can contribute to the economic activities in the area.
- Policy ED 1.17: Promote uses and activities that rely on the natural state of the environment to take advantage of the vast areas of relatively undisturbed natural areas in the Antelope Valley. These include recreational, tourism and film-making uses.

Regional Economic Development Strategies

The Antelope Valley is the largest Planning Area in Los Angeles County. Thus, there is a need to develop comprehensive and long-term economic development plans, not just at the local, but also the regional level. This will help ensure the orderly and sustainable economic development of the area in the long-term.

- Policy ED 1.18: Coordinate with the Los Angeles County Economic Development Corporation, the Greater Antelope Valley Economic Alliance, and other organizations to create and implement regional economic development strategies.
- Policy ED 1.19: Promote the creation of a four-year public university in the Antelope Valley to provide opportunities for continuing education and workforce development.
- Policy ED 1.20: Support the development of a range of travel options that better connect the Antelope Valley to existing regional trade and employment centers in other regions, including the High Desert Corridor and the Northwest 138 Corridor Improvement Project, as directed in the policies of the Mobility Element.
- Policy ED 1.21: Ensure early discussions with Edwards Air Force Base and U.S. Air Force Plant 42 regarding new industries, such as utility-scale renewable energy production facilities, to limit potential impacts on mission capabilities.

Chapter 7

COMMUNITY-SPECIFIC LAND USE CONCEPTS

Chapter 7: Community-Specific Land Use Concepts Element

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Gorman
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Lake Los Angeles
Lakeview
Leona Valley
Littlerock and Sun Village (Southeast Antelope Valley)
Llano
Neenach
Pearblossom
Quartz Hill
Roosevelt
Three Points

I. Background

Purpose

The previous Chapters of this Area Plan set forth general goals and policies that may be applied throughout the unincorporated Antelope Valley. However, each community varies in its nature, form, and character. The Community-Specific Land Use Concepts contained in this Chapter describe in greater detail how this Area Plan, particularly the Land Use Element, is to be implemented in each community within the unincorporated Antelope Valley.

The Land Use Concepts (Concepts) attempt to provide expectations for how each rural community may change and grow throughout the life of this Area Plan. The Concepts specify the desired land uses for each area and identify potentially incompatible land uses that would not be desirable. Residents, stakeholders, and decision-makers should refer to the Concepts to familiarize themselves with the setting and character of each community and should use this information when considering the appropriateness of land use development projects, infrastructure improvements, and consideration efforts.

The following communities are addressed in this Chapter:

- Acton
- Antelope Acres
- Crystalaire
- El Dorado and White Fence Farms
- Elizabeth Lake and Lake Hughes (The Lakes)
- Fairmont
- Gorman
- Green Valley
- Juniper Hills
- Lake Los Angeles
- Lakeview
- Leona Valley
- Littlerock and Sun Village (Southeast Antelope Valley)
- Llano
- Neenach
- Pearblossom
- Quartz Hill
- Roosevelt
- Three Points

Vision and Strategy

The Area Plan's Vision Statement acknowledges that the unincorporated Antelope Valley "is a mosaic of unique small towns" and the Community-Specific Land Use Concepts are intended to reflect each community's unique nature, form, and character, as well as each community's unique vision of the future. The Area Plan's Rural Preservation Strategy seeks to achieve the Area Plan's Vision Statement

through a framework of rural town centers, rural town areas, rural preserve areas, and economic opportunity areas. The Community-Specific Land Use Concepts describe how this framework has been applied to each community and refines the framework in a manner that addresses each community's individual needs. Overall, this Chapter ensures that the Area Plan will serve as a living document that will shape future implementation efforts in a manner that is both complementary of the overall Vision Statement and Rural Preservation Strategy and relevant to, and appropriate for, each community within the unincorporated Antelope Valley.

Community Standards Districts

Some of the communities described in this Chapter are within Community Standards Districts (CSD's). CSD's are overlays in the Zoning Code that provide specific development standards with unique land use issues that are not adequately addressed by the County's Subdivision and Zoning Codes. CSD's, as well as other applicable County Code requirements, should be consulted when projects are being considered in a community.

II. Land Use Concepts

Acton

The community of Acton is located in the southwestern portion of the Antelope Valley, south of the City of Palmdale along State Route 14. The community is adjacent to the National Forest, and natural hillsides and significant ridgelines separate the community from the City of Palmdale and the remainder of the Antelope Valley. Community residents are concerned about urbanization of the area and wish to remain an unincorporated rural community with a unique identity. Some portions of the community are partially developed with a variety of agricultural uses and single-family homes on large lots. Other portions are largely undeveloped, are generally not served by existing infrastructure, contain environmental resources, such as Significant Ecological Areas and Hillside Management Areas, and are subject to safety constraints, such as Very High Hazard Severity Zones.

The community has a rural town center area along Crown Valley Road between Gillespie Avenue and Soledad Canyon Road. The rural town center area has been designated as Rural Commercial (CR) to serve the daily needs of residents and provide local employment opportunities. New buildings in the rural town center area shall be limited to two stories in height and shall include Old West design elements with earth tone colors at a pedestrian-oriented scale, with primary building entries facing Crown Valley Road or adjacent local streets. New development in the rural town center that would require the installation of urban infrastructure, such as concrete curbs and gutters, street lights, and traffic signals, shall be strongly discouraged as this does not fit with the community's unique rural character and identity.

The rural town centers shall continue to be the focal point of the community and shall be linked to the surrounding rural town area through trails and pedestrian routes. Pedestrian routes shall have permeable paving, consistent with rural community character, instead of concrete sidewalks. Public amenities, such as plazas and community bulletin boards, are encouraged in this area.

Some areas outside the rural town center area have also been designated as Rural Commercial (CR) to acknowledge existing uses and to provide additional commercial services and local employment opportunities. The intent of these designations is to allow low-intensity local commercial uses that

serve community residents and to prohibit high-intensity regional commercial uses that serve travelers along State Route 14. Moving west to east through the community, areas with this designation include:

- Two parcels along Sierra Highway, generally between Sand Creek Drive and Wanstead Drive, north of State Route 14;
- A parcel along Sierra Highway, east of Red Rover Mine Road and north of State Route 14;
- Several parcels surrounding the intersection of Crown Valley Road and Sierra Highway and of Crown Valley Road and Antelope Woods Road, both of which are adjacent to State Route 14;
- A parcel at the northeast corner of Soledad Canyon Road and Santiago Road;
- Several parcels at the northwest and northeast corners of the intersection of Sierra Highway and Santiago Road, north of State Route 14;
- Several parcels along the south side of Sierra Highway between San Gabriel Avenue and State Route 14; and
- Several parcels along the north side of Sierra Highway, west of State Route 14.

New buildings in these CR designations shall also be limited to two stories in height, shall include Old West design elements with earth tone colors at a pedestrian-oriented scale, and shall be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes shall have permeable paving, consistent with rural community character, instead of concrete sidewalks. Development in these CR designations that would require the installation of urban infrastructure, such as concrete curbs and gutters, street lights and traffic signals, shall be discouraged as this does not fit with the community's unique rural character and identity. New commercial uses outside of these CR designations, or outside the CR designation within a rural town center area, are also strongly discouraged, as they are not compatible with the community character.

Some areas within the community have been designated as Light Industrial (IL) to acknowledge existing uses and to provide additional local employment opportunities. Moving west to east through the community, areas with this designation include:

- Several parcels at the northeast and southeast corners of Sierra Highway and Red Rover Mine Road;
- Several parcels along Soledad Canyon Road, south of the Crown Valley Road intersection and the rural town center area;
- Several parcels along Soledad Canyon Road, northeast of the Crown Valley Road intersection, and also along Syracuse Avenue and Gillespie Avenue, all east of the rural town center area;
- Several parcels along the south side of Soledad Canyon Road between Santiago Road and Malinta Avenue; and

- Several parcels along Sierra Highway, west and north of the Vincent Grade/Acton Metrolink Station.

New buildings in these IL designations shall be limited to two stories in height, shall include Old West design elements with earth tone colors at a pedestrian-oriented scale, and shall be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes shall have permeable paving, consistent with rural community character, instead of concrete sidewalks. Development in these IL designations that would require the installation of urban infrastructure, such as concrete curbs and gutters, street lights and traffic signals shall be strongly discouraged as this does not fit with the community's unique rural character and identity. New industrial uses outside of these IL designations are also strongly discouraged, as they are not compatible with the community character.

All advertising signs shall be limited to no more than 35 feet. More restrictions on the allowed Floor Area Ratio (FAR), drive-through services and other such regulations may be adopted by the community through their Community Standards District. Please see Chapter 8 (Plan Implementation) of this Area Plan for more details.

Most of the community is considered to be a rural town area. The rural town area has been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land, Rural Land 2 (RL2), with a maximum density of 1 residential unit for each 2 gross acres of land, and Rural Land 1 (RL1), with a maximum density of 1 residential unit for each 1 gross acre of land. Small portions of the rural town area have other designations, as follows:

- The area generally bounded by Syracuse Avenue to the north, Bartlett Street and 1st Street to the west, Cory Avenue and 9th Street to the south, and 3rd Street to the east has been designated as Residential 5 (H5), with a maximum density of 5 residential units for each 1 net acre of land. In addition, a few parcels between Syracuse Avenue and Gillespie Avenue, east of Crown Valley Road, have been designated as H5; and

- The area surrounding the H5 designation, generally bounded by Sacramento Avenue to the north, 41st Street West and 40th Street West to the west, 9th Street and Spring Avenue to the south, and Crown Valley Road to the east, has been designated as Residential 2 (H2), with a maximum density of 2 residential units for each 1 net acre of land.

- The RL5, RL2, RL1, H2, and H5 designations are intended to reflect the existing densities within various parts of the rural town area, which are developed or partially developed as the result of previous land divisions. The RL5, RL2, RL1, H2, and H5 designations are not intended to promote further land divisions. New land divisions in the rural town area shall maintain a large minimum lot size to ensure consistency with the desired community character.

The majority of new residential development in Acton shall be directed to the rural town area instead of the surrounding rural preserve area, provided that such development is consistent with existing community character. New land divisions shall maintain a large minimum lot size. Various types of agriculture, equestrian, and animal-keeping uses should be allowed through the rural town area, provided that lots meet Zoning Code requirements for those uses. Home-based occupations may also be permitted throughout the rural town area, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit per 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit per 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area shall be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Antelope Acres

The community of Antelope Acres is located in the northwestern portion of Antelope Valley, west of the City of Lancaster. Community residents are concerned about urbanization of the area and wish to remain an unincorporated rural community with a unique identity. Some portions of the community are partially developed with light agricultural uses and single-family homes on large lots, while other portions are largely undeveloped and contain environmental resources, such as Significant Ecological Areas and Agricultural Resource Areas.

The community has a rural town center area located along 90th Street West between Avenue E-4 and Avenue E-12. The rural town center area has been designated as Rural Commercial (CR) to serve the daily needs of residents and provide local employment opportunities. New buildings in the rural town center area should be limited to one story in height and should include Old West design elements at a pedestrian-oriented scale, with primary building entries facing 90th Street West. No other portions of the community have been designated for commercial or industrial use, and new commercial and industrial uses outside the rural town center area are strongly discouraged, as they are incompatible with the community character.

Over time, the rural town center areas should become the focal point of the Antelope Acres community and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Public amenities, such as plazas and community bulletin boards, are encouraged in this area.

The community includes rural town areas that surround the rural town center area and are generally bounded by Avenue E and Avenue C to the north, 80th Street West to the east, Avenue F and Avenue F-8 to the south, and 95th Street West and 90th Street West to the west. These areas have been designated as Rural Land 2 (RL2), with a maximum density of 1 residential unit per 2 gross acres of land. This designation is intended to reflect the existing density of the rural town areas and is not intended to promote further land divisions. New land divisions in the rural town areas shall maintain a large minimum lot size to ensure consistency with the existing community character.

The majority of new residential development in Antelope Acres should be directed to the rural town areas instead of the surrounding rural preserve areas, provided that such development is consistent with the existing community character and allows for light agriculture, equestrian, and animal-keeping uses should be allowed through the rural town area, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be discouraged in the rural town areas because of potential impacts on existing residents. Home-based occupations are also appropriate in the rural town areas, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints and environmental resources. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Crystalaire

The community of Crystalaire is located in the southeastern portion of the Antelope Valley, south of Llano, and includes a golf course and a small airport which are described in more detail below. Some portions of the community are developed with single-family homes on large lots. Other portions are largely undeveloped and contain environmental resources, such as Significant Ecological Areas, and are subject to safety hazards, such as Flood Zones, particularly along Big Rock Creek and Big Rock Wash..

The community currently does not have a rural town center area but a stretch of 165th Street East between East Avenue W-12 and East Avenue X, in front of Crystalaire Airport has been designated Mixed Use – Rural (MU-R) in anticipation of a future town center to develop in this area. New commercial uses outside of this MU-R designation are strongly discouraged, as they are not compatible with the community character.

The community includes a rural town area that includes the existing subdivision near the Crystalaire Country Club and adjacent lands that are generally bounded by 165th Street East to the east and Avenue Y-4 to the south. This area has been designated as Residential 2 (H2), with a maximum density of 2 residential units for each 1 net acre of land. This designation is intended to reflect the existing density of the rural town area. New land divisions in this area shall have large lot sizes that are consistent with the existing subdivision near the Crystalaire Country Club.

The majority of new residential development in Crystalaire should be directed to the rural town area instead of the surrounding rural preserve areas, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be prohibited because of potential impacts on existing residents. Home-based occupations may also be permitted in this area, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Crystalaire Airport

The Crystalaire Airport is a privately owned and operated aviation facility that occupies several parcels. These parcels have been designated as Public and Semi-Public (P) to acknowledge the existing airport use and to allow for its continued operation. However, the Area Plan acknowledges that these parcels

also contain commercial and industrial uses and are an appropriate location for such uses given its proximity to the communities of Crystalaire and Llano. Accordingly, at the time of this Area Plan's adoption, the parcels were zoned Rural Commercial – Mixed Use (MXD-RU) and Light Industrial (M-1). This Area Plan allows commercial mixed-use and industrial uses on these parcels without a Plan Amendment, provided that these are compatible with airport operations and that these do not restrict or prohibit the operations of the airport.

Crystalaire Golf Course

The Crystalaire Golf Course is a privately owned golf facility that occupies several parcels. These parcels have been designated as Open Space – Parks (OS-PR) and zoned Commercial – Recreation (C-R) to acknowledge the existing residential recreational use and its open space character on the property, and to allow for its continued operation. The Area Plan also acknowledges that some limited residential uses may be appropriate as accessory to the primary use as a golf course. Thus the Area Plan allows some limited residential uses on these parcels without a Plan Amendment, provided that the golf course is in continued operation and that the residential uses occupy not more than 10 percent of the total area. All requirements of the base zone shall apply, including but not limited to, an approved conditional use permit.

El Dorado and White Fence Farms

The communities of El Dorado and White Fence Farms are located in the central portion of the Antelope Valley and are surrounded by the cities of Lancaster and Palmdale. Although these communities are adjacent to urbanized areas, such as the Rancho Vista community and the Antelope Valley Mall, they have a distinctly rural character. The communities are partially developed with light agricultural uses and single-family homes on large lots.

These communities do not have a rural town center area, but they are served by the rural town center area in Quartz Hill and by commercial centers in the adjacent cities. Two parcels on 10th Street West and one parcel on Avenue N have been designated as Rural Commercial (CR) in recognition of existing commercial uses. No other portions of the communities have been designated for commercial or industrial use, and new commercial uses outside of these CR designations and new industrial uses are strongly discouraged, as they are not compatible with the communities' character.

The communities are considered to be a rural town area and have been designated as Rural Land 2 (RL2), with a maximum density of 1 residential unit for each 2 gross acres of land. This designation is intended to reflect the communities' existing density and is not intended to promote further land divisions. New land divisions shall maintain a large minimum lot size to ensure consistency with the existing character of the communities.

Light agriculture, equestrian, and animal-keeping uses are appropriate in these communities, but heavy agriculture uses should be discouraged because of potential impacts on existing residents. Home-based businesses are also appropriate in these communities, provided that they meet Zoning Code requirements.

Elizabeth Lake and Lake Hughes (The Lakes)

The communities of Elizabeth Lake and Lake Hughes are located in the southwestern portion of the Antelope Valley, northwest of Leona Valley, and are partially within the National Forest. Some portions of the community are developed or partially developed with single-family homes, light agricultural uses, and a limited amount of commercial and industrial uses. Other portions are largely undeveloped, are generally not served by existing infrastructure, contain environmental resources, such as Significant Ecological Areas and Hillside Management Areas, and are subject to safety constraints, such as the San Andreas Fault and Very High Fire Hazard Severity Zones.

The communities share one rural town center area in Lake Hughes, located along Elizabeth Lake Road between Trail I and Mountain View Road, west of the Lake Hughes Community Center. The rural town center area has been designated as Rural Commercial (CR) and Light Industrial (IL) to serve the daily needs of residents and provide local employment opportunities. New buildings in the rural town center area should be limited to two stories in height and should be designed at a pedestrian-oriented scale, with primary building entries facing Elizabeth Lake Road or adjacent local streets.

The rural town center area should continue to be the focal point of the communities and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Public amenities, such as plazas and community bulletin boards, are encouraged in this area.

Some areas outside the rural town center area have been designated as Rural Commercial (CR) to acknowledge existing uses and to provide additional commercial services and local employment opportunities. Moving west to east through the communities, areas with this designation include:

- Several parcels along Lake Hughes Road between Elizabeth Lake Road and Desswood Road (Lake Hughes); and

- Two parcels at the southwest corner of Elizabeth Lake Road and Johnson Road (Elizabeth Lake).

New buildings in these CR designations should also be limited to two stories in height, should be designed at a pedestrian-oriented scale, and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. New commercial uses outside of these CR designations, or outside the CR designations within the rural town center area, are strongly discouraged, as they are not compatible with the communities' character.

Several parcels at the southwest corner of Elizabeth Lake Road and Lake Hughes Road have been designated as Light Industrial (IL) to acknowledge an existing use. New industrial uses outside of this IL designation, or outside the IL designation within the rural town center area, are strongly discouraged, as they are not compatible with the communities' character.

The community of Elizabeth Lake includes rural town areas. The primary rural town area surrounds the Elizabeth Lake water body. North of Elizabeth Lake Road, the primary rural town area is generally bounded by Hawk Drive, Gist Drive, and hillsides to the north, Munz Ranch Road to the west, and Pekaboo Road and hillsides to the east. South of Elizabeth Lake Road, the primary rural town area is generally bounded by Sandrock Drive, Ranch Club Road, and Elizabeth Lake Road to the north, the

National Forest boundary to the west, the National Forest boundary, Ranch Club Road, and Kiptree Drive to the south, and Elizabeth Lake Road to the east. The primary rural town area has been designated as Residential 5 (H5), with a maximum density of 5 residential units for each 1 net acre of land. A few parcels north of Elizabeth Lake Road have been designated as Rural Land 2 (RL2), with a maximum density of 1 residential unit for each 2 gross acres of land. The H5 and RL2 designations are intended to reflect the existing densities within the primary rural town area, which resulted from previous land division activities. The H5 and RL2 designations are not intended to promote further land divisions. The privately owned portion of Elizabeth Lake water body is considered to be one of the communities' rural preserve areas, which are discussed below.

A secondary rural town area in Elizabeth Lake is located north of Johnson Road between Leadhill Drive and Limeridge Drive and is partially developed as the result of previous land division activities. The secondary rural town area has been designated as Residential 9 (H9), with a maximum density of 9 residential units for each 1 net acre of land. The H9 designation is intended to reflect the existing density of this area and is not intended to promote further land divisions.

The community of Lake Hughes also includes a rural town area. The rural town area extends west from the rural town center area and is generally bounded by Elizabeth Lake Road, Elderberry Street, High Trail, Lone Pine Trail, and hillsides to the north, Muir Drive and a line approximately 1,500 feet west of Lake Hughes Road to the west, Desswood Road, New View Drive, and South Shore Drive to the south, and Mountain View Road to the east. The rural town area has been designated as Residential 5 (H5), with a maximum density of 5 residential units for each 1 net acre of land. A few parcels west of Lake Hughes Road have been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land. The H5 and RL5 designations are intended to reflect the existing densities within the rural town area, which resulted from previous land division activities. The H5 and RL5 designations are not intended to promote further land divisions.

The majority of new residential development in Elizabeth Lake and Lake Hughes (collectively known as The Lakes) should be directed to the rural town areas instead of the surrounding rural preserve areas, provided that such development is consistent with existing community character. New land divisions in the rural town area shall maintain a large minimum lot size to ensure consistency with the desired community character. Light agriculture, equestrian, and animal-keeping uses should be allowed throughout the rural town ares, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be prohibited throughout the rural town areas because of potential impacts on existing residents. Home-based businesses may be permitted throughout the rural town areas, provided that they meet Zoning Code requirements.

The remaining lands in the communities are considered to be rural preserve areas and have been designated as Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. This very low density reflects the underlying infrastructure constraints, environmental resources, and safety constraints. Development in rural preserve areas should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate. The privately owned portion of the Elizabeth Lake water body has been designated as RL20 and the Area Plan supports efforts to acquire this area and preserve it as open space (see Conservation and Open Space Element, Policy COS 18.1).

Fairmont

The community of Fairmont is located in the northwestern portion of the Antelope Valley, west of Antelope Acres and near the Antelope Valley California Poppy Reserve. The community is largely undeveloped and is generally not served by existing infrastructure and public facilities, but it does contain some single-family homes on large lots and some agricultural uses. The community includes environmental resources, such as Significant Ecological Areas, and is subject to safety hazards, such as fault zones.

The community does not have a rural town center area. No portion of the community has been designated for commercial or industrial use, except for a parcel along Avenue D to reflect an existing use. New commercial or industrial uses are strongly discouraged, as they are not compatible with the community character.

The entire community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Gorman

The community of Gorman is located in the far northwestern portion of Antelope Valley along the Golden State Freeway (Interstate 5). A portion of the community is partially developed with commercial uses that primarily serve travelers along the Freeway, along with some single-family homes and light agricultural uses. The remainder of the community is largely undeveloped, is generally not served by existing infrastructure, and contains environmental resources such as Hillside Management Areas and Significant Ecological Areas.

The community has a rural town center area surrounding the Golden State Freeway interchanges at Gorman School Road. The rural town center area has been designated as Major Commercial (CM) to serve the daily needs of residents and interstate travelers.

Some areas outside the rural town center area have also been designated Rural Commercial (CR) in recognition of existing commercial uses and future opportunities to serve interstate travelers. The existing Flying J Travel Plaza on Frazier Park Road and two parcels east of it also have been designated as Rural Commercial (CR). Several parcels surrounding Smokey Bear Road have been designated as Rural Commercial. No other portions of the community have been designated for commercial or industrial use, and new commercial uses outside these CR and CM designations and new industrial uses are strongly discouraged, as they are incompatible with the community character.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. This very low density reflects the underlying infrastructure constraints and environmental resources. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Green Valley

The community of Green Valley is located in the southwestern portion of the Antelope Valley, south of Elizabeth Lake, and is completely within the National Forest. A large portion of the community is developed with single-family homes and commercial uses, while the remaining portion is largely undeveloped and contains scenic hillsides that are located in a Very High Fire Hazard Severity Zone.

The community does not have a rural town center area but is served by the rural town center areas in Lake Hughes Road and Leona Valley. Two areas, generally located at the intersections of Spunky Canyon Road and San Francisquito Canyon Road and of Spunky Canyon Road and Calle Olivera, have been designated as Rural Commercial (CR), recognizing existing uses that serve the daily needs of residents and provide local employment opportunities. New buildings in these areas should be limited to one story in height and should be designed at a pedestrian-oriented scale. No other portions of the community have been designated for commercial or industrial use, and new commercial uses outside these CR designations and new industrial uses are strongly discouraged, as they are incompatible with the community character.

The community includes rural town areas which are developed or partially developed as the result of previous land division activities. These areas generally extend southeast from San Francisquito Canyon Road and generally extend both north and south from Spunky Canyon Road, and are bounded by hillsides. These areas have been designated as Residential 9 (H9), with a maximum density of 9 residential units for each 1 net acre of land. The H9 designation is intended to reflect these areas' existing densities and development pattern, and is not intended to promote further land divisions.

The majority of new residential development in Green Valley should be directed to the rural town areas instead of the surrounding rural preserve area, provided that such development is consistent with existing community character. Light agriculture, equestrian and animal-keeping uses should be allowed in these areas, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be prohibited in these areas because of potential impacts on existing residents. Home-based occupations may also be permitted in these areas, provided that they meet Zoning Code requirements.

The remainder of the privately-owned land in the community is considered to be a rural preserve area and has been designated as Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. This very low density reflects the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Juniper Hills

The community of Juniper Hills is located in the southern portion of the Antelope Valley, south of Littlerock and Pearblossom. The community is largely developed and is generally not served by existing infrastructure and public facilities, but it does contain many single-family homes on large lots and some agricultural uses. The community is adjacent to the National Forest, includes scenic hillside areas, and is subject to several safety hazards, including the San Andreas Fault and Very High Fire Hazard Severity Zones.

The community does not have a rural town center area but is served by the rural town center areas in Littlerock and Pearblossom. The Juniper Hills Community Center on 106th Street East serves as a community meeting place, in lieu of a rural town center area, and residents have expressed a desire for a Post Office. No portion of the community has been designated for commercial or industrial use, and new commercial or industrial uses are strongly discouraged, as they are not compatible with the community character.

The entire community is considered to be a rural town area and has been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land. This very low density reflects the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural town area should be limited to single-family homes on large lots, light agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Lake Los Angeles

The community of Lake Los Angeles is in the eastern portion of the Antelope Valley. As of the 2000 Census, it had the largest population of any unincorporated community in the Valley. Many portions of the community are developed or partially developed with a wide range of uses and a distinctly rural character. The remaining portions are largely undeveloped and generally not served by existing infrastructure, include environmental resources, such as buttes and Significant Ecological Areas, and are subject to safety hazards, such as Flood Zones.

The community has a rural center area along Avenue O between 167th Street East and 172nd Street East, and along 170th Street East between Avenue O and Glenfall Avenue. The rural town center area has been designated as Rural Commercial (CR) to serve the daily needs of residents and provide local employment opportunities. New buildings in the rural town center area should be limited to two stories in height and include Old West or Southwestern design elements at a pedestrian-scale, with primary building entries facing Avenue O or 170th Street East. New development in the rural town center area should not require the installation of urban infrastructure, such as concrete curbs and gutters and traffic signals.

The rural town center area should continue to be the focal point of the community and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Streetscape improvements are recommended for Avenue O and 170th Street East, including native landscaping, “Old West” style street lights that meet dark sky objectives (only where necessary for public safety), and coordinated street furniture, such as benches, bus shelters, and bicycle racks. Other public amenities, such as plazas and community bulletin boards, are also encouraged in this area.

Some areas outside of the rural town center area have also been designated as Rural Commercial (CR) to provide additional commercial services, such as feed and tack stores. These areas include the intersection of Avenue P and 170th Street East and the northwest and northeast corners of the intersection of Avenue) and 175th Street East. New buildings in these areas should also be limited to two stories in height and include Old West or Southwestern design elements at a pedestrian-oriented scale with transportation links to surrounding rural town areas. No other portions of the community have been designated for commercial or industrial use, and new commercial uses outside these CR

designations and new industrial uses are strongly discouraged, as they are incompatible with the community character.

The community includes several rural town areas. One area is generally bounded by Avenue Q to the north, 150th Street East to the west, Palmdale Boulevard to the south, and 160th Street East to the east. This area has been designated as Rural Land 1 (RL1), with a maximum density of 1 residential unit per 1 gross acre of land. This designation is intended to reflect the area's existing density and is not intended to promote further land divisions. Another similar area is generally bounded by Avenue M-8, Penfield Avenue, and Avenue N to the north, 155th Street East, 150th Street East, and 152nd Street East to the west, Avenue N and Avenue O to the south, and 160th Street East and 165th Street East to the east. This area has also been designated as RL1, and this designation is also intended to reflect the area's existing density and is not intended to promote further land divisions.

Another rural town area is generally bounded by Avenue M, Avenue M-4, and Avenue M-12 to the north, 160th Street East to the west, Avenue N to the south, and 170th Street East, 175th Street East, and 180th Street East to the east. This area has been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit per 5 gross acres of land. This designation is intended to reflect the area's existing density and is not intended to promote further land divisions. The final rural town area is generally bounded by Avenue O and Avenue N to the north, 165th Street East and 160th Street East to the west, Avenue Q, Avenue P-12, Rawhide Avenue, and Avenue P to the south, and 165th Street East, 170th Street East, 175th Street East, and 180th Street East to the east. This area has been designated as Residential 2 (H2), with a maximum density of 2 residential units per 1 net acre of land. This designation is intended to reflect the area's existing density and is not intended to promote further land divisions. However, the buttes east of 170th Street East have been designated as RL5, acknowledging the need to limit development in scenic resource areas. The buttes west of 170th Street East, which are in a Significant Ecological Area, are considered to be in the rural preserve area, which is discussed below.

The majority of new residential development in Lake Los Angeles should be directed to the rural town areas instead of the surrounding rural preserve area, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be prohibited because of potential impacts on existing residents. Home-based businesses may also be permitted in the rural town areas, provided that they meet Zoning Code requirements. New land divisions in the rural town areas shall maintain a large minimum lot size to ensure consistency with the existing community character.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land or Rural Land 20 (RL20, with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Lakeview

The community of Lakeview is located in the southern central portion of the Antelope Valley, adjoining the City of Palmdale to the north and east, and includes Lake Palmdale. Although this community is adjacent to urbanized areas, it has a distinctly rural character. Some portions of the community are

partially developed with light agricultural uses and single-family homes on large lots. Other portions are largely undeveloped and generally not served by existing infrastructure, include environmental resources such as Hillside Management Areas, and are subject to safety hazards, such as Very High Fire Hazard Severity Zones.

The community does not have a rural town center area but is served by commercial centers in the adjacent City of Palmdale. A few parcels at the intersection of the State Route 14 and Avenue S, and two parcels along Sierra Highway between Pearblossom Highway and Barrel Springs Road, have been designated as Rural Commercial (CR). In addition, several parcels at the intersection of Pearblossom Highway and Sierra Highway, and a parcel on Avenue S west of State Route 14 have been designated as Light Industrial (IL). These designations recognize existing uses and opportunities for additional local services and employments. No other portions of the community have been designated for commercial or industrial use, and new commercial or industrial uses outside of these CR and IL designations are strongly discouraged, as they are not compatible with the community character.

The community includes a rural town area that is generally bounded by the City of Palmdale boundary to the north, the City of Palmdale boundary, Farnborough Avenue and Tovey Avenue to the west, a line approximately 1,300 feet south of Lakeview Drive and Barrel Springs Road to the south, and the City of Palmdale boundary to the east. North of Avenue S, this area has been designated as Rural Land 2 (RL2), with a maximum density of 1 residential unit for each 2 gross acres of land. South of Avenue S, this area has been designated as Rural Land 1 (RL1), with a maximum density of 1 residential unit for each 1 gross acre of land, with the following exceptions:

- West of Tovey Avenue – RL2; and
- South of Lakeview Drive and west of El Camino Drive – RL2.

The RL1 and RL2 designations are intended to reflect this area's existing densities. New land divisions in this area shall maintain large lot sizes that are compatible with the community character.

The majority of new residential development in Lakeview should be directed to the rural town area instead of the surrounding rural preserve area, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be prohibited because of potential impacts on existing residents. Home-based businesses may also be permitted in this area, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. This very low density reflects the underlying infrastructure constraints, environmental resources, and safety hazards. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Leona Valley

The community of Leona Valley is located in the southwestern portion of the Antelope Valley, adjacent to the National Forest, and is bounded by the City of Palmdale to the north and east. Community residents are concerned about urbanization of the area and wish to remain in an unincorporated rural

community with a unique identity. Some portions of the community are partially developed with light agricultural uses and single-family homes on large lots. Other portions are largely undeveloped, are generally not served by existing infrastructure, contain environmental resources, such as Significant Ecological Areas and Hillside Management Areas, and are subject to safety constraints, such as the San Andreas Fault and Very High Fire Hazard Severity Zones.

The community has a rural town center located at the intersection of Elizabeth Lake Road and 90th Street West. The rural town center area has been designated as Rural Commercial (CR) to serve the daily needs of residents and provide local employment opportunities. New buildings in the rural town center area should be limited to one story in height and should be designed at a pedestrian-oriented scale, with primary building entries facing Elizabeth Lake Road or 90th Street West. No other portions of the community have been designated for commercial or industrial use, and new commercial uses outside of this CR designation and new industrial uses are strongly discouraged, as they are incompatible with community character.

The rural town center area should continue to be the focal point of the community and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Public amenities, such as community bulletin boards, are encouraged in this area.

The community includes a rural town area that surrounds the rural town center. North of Elizabeth Lake Road, the rural town area is generally bounded by North Side Drive, Babia Street, and Penhaven Lane to the north, 100th Street West to the west, Elizabeth Lake Road to the south, and 86th Street West to the east. South of Elizabeth Lake Road, the rural town area is generally bounded by Leona Avenue and Elizabeth Lake Road to the north, 107th Street West, 98th Street West, and 92nd Street West to the west, hillsides and Odd Road to the south, and 86th Street West to the east. The rural town area has been designated as Rural Land 2 (RL2), with a maximum density of 1 residential unit for each 2 gross acres of land. This designation is intended to reflect the existing density of the rural town area and is not intended to promote further land divisions.

The majority of new residential development in Leona Valley should be directed to the rural town area instead of the surrounding rural preserve area, provided that such development is consistent with existing community character. New land divisions shall maintain a large minimum lot size to ensure compatibility with the community character. Each new home should have a unique architectural design. Light agriculture, equestrian, and animal-keeping uses should be allowed throughout the rural town area, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture should be prohibited throughout the rural town area because of potential impacts on existing residents. Home-based businesses may also be permitted throughout the rural town area, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. This very low density reflects the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots (2.5 net acres or greater), light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Littlerock and Sun Village (Southeast Antelope Valley)

The communities of Littlerock and Sun Village are located in the southeastern portion of the Antelope Valley, east of the City of Palmdale. Residents of the communities are concerned about urbanization of the area and wish to remain as unincorporated rural communities with unique identities. Many portions of the communities are developed or partially developed with a wide range of uses and a distinctly rural character. The remaining portions are largely undeveloped and generally not served by existing infrastructure, include environmental resources such as Significant Ecological Areas, and are subject to safety hazards, such as Flood Zones.

Each community has a rural town center area. The Littlerock rural town center area is located along Pearblossom Highway between Little Rock Wash and 90th Street East. This rural town center area has been designated as Rural Commercial (CR), and Light Industrial (IL) to serve the daily needs of residents and provide local employment opportunities. This rural town center area also serves travelers along Pearblossom Highway. A possible expansion of the town center has also been identified further to the east where additional parcels have been designated Rural Commercial (CR) and Light Industrial (IL). New buildings in this rural town center area should be limited to two stories in height and include Old West or Southwestern design elements with earth tone colors at a pedestrian-oriented scale, with primary building entries facing Pearblossom Highway. The industrial designations in this rural town center have been expanded to accommodate light industrial uses appropriate for rural areas, such as truck storage facilities.

The Sun Village rural town center area is located along Palmdale Boulevard between Little Rock Wash and 95th Street East, and along 90th Street East between Palmdale Boulevard and Avenue Q-14. This rural town center area has been designated as Rural Commercial (CR) to serve the daily needs of residents and provide local employment opportunities. New buildings in this rural town center area should be limited to three stories in height and include Southwestern, Spanish Mission, or Mediterranean design elements with earth tone colors at a pedestrian-oriented scale, with primary building entries facing Palmdale Boulevard or 90th Street East.

The two rural town center areas should continue to be the focal point of their respective communities and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Streetscape improvements are recommended for Palmdale Boulevard and 90th Street East in the Sun Village rural town center area, including native landscaping, “Southwestern” style street lights that meet dark sky objectives (only where necessary for public safety), and coordinated street furniture, such as benches, bus shelters, and bicycle racks. If Pearblossom Highway is relinquished by the State of California (Caltrans), similar streetscape improvements are recommended in the Littlerock rural town center area. Other public amenities, such as plazas and community bulletin boards, are encouraged in both rural town center areas.

Some areas outside the two town center areas have also been designated as Rural Commercial (CR) to provide additional commercial services and local employment. These areas include the intersection of Avenue T and 87th Street East and the northeast corner of Avenue S and 90th Street East. New buildings in these areas should also be limited to two stories in height and include Old West or Southwestern design elements with a pedestrian-oriented scale and transportation links to surrounding rural town areas. New commercial uses outside of these CR designations, are strongly discouraged, as they are not compatible with the communities’ character.

Several parcels near the intersection of Avenue R-8 and 90th Street East and a parcel at the northwest corner of Avenue T-8 and 80th Street East have been designated as Heavy Industrial (IH), recognizing existing uses appropriate for rural areas, such as truck storage facilities. New industrial uses outside of these IH designations, or outside the IL designations within the Littlerock rural town center area, are strongly discouraged, as they are not compatible with the communities' character.

The community includes several rural town areas. The first rural town area surrounds the Littlerock rural town center area and is generally bounded by Avenue U to the north, the Little Rock Wash to the west, the California Aqueduct and Avenue U-4 to the south, and 89th Street East and 94th Street East to the east. This area has been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land, with the following exceptions:

- The area generally bounded by Avenue U to the north, the Littlerock Wash to the west, Pearblossom Highway to the south, and 75th Street East to the east, has been designated as Residential 5 (H5), with a maximum density of 5 residential units for each 1 net acre of land.

A second rural town area surrounds the Sun Village rural town center area and is generally bounded by Avenue Q to the north, the Little Rock Wash to the west, Avenue R to the south, and 115th Street East to the east. This rural town area has been designated as Rural Land 1 (RL1), with a maximum density of 1 residential unit for each 1 gross acre of land; and Rural Land 2 (RL2), with a maximum density of 1 residential unit for each 2 gross acres of land.

A third rural town area is generally bounded by Avenue R to the north, the Little Rock Wash and 87th Street East to the west, Avenue U to the south, and 106th Street East, 116th Street East and 120th Street East to the east. This rural town area has been designated as RL1-and RL2.

The RL1, RL2, RL5 and H5 designations are intended to reflect the rural town area's existing densities and are not intended to promote further land divisions. All future land divisions must comply with any minimum lot sizes as set forth in the Southeast Antelope Valley Community Standards District.

The majority of new residential development in Littlerock and Sun Village (collectively known as Southeast Antelope Valley) should be directed to rural town areas instead of the surrounding rural preserve area, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses, provided that lots meet Zoning Code requirements for those uses. Heavy agriculture uses should be prohibited in the rural town areas because of potential impacts on existing residents. Home-based businesses may also be permitted in the rural town areas, provided that they meet Zoning Code requirements. New land divisions in the rural town areas shall maintain a large minimum lot size to ensure consistency with the desired community character.

The remainder of the communities is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Llano

The community of Llano is located in the southeastern portion of the Antelope Valley, along Pearblossom Highway (State Route 138). Some portions of the community are partially developed with light agricultural uses and single-family homes on large lots, while other portions are largely undeveloped, generally not served by existing infrastructure, and contain environmental resources, such as Significant Ecological Areas.

The community does not have a rural town center area but is served by the rural town center area in Pearblossom. A few parcels along Pearblossom Highway have been designated as Rural Commercial (CR) or Light Industrial (IL), recognizing existing uses and opportunities for additional local services and employment. No other portions of the community have been designated for commercial or industrial use, and new commercial or industrial uses outside these CR and IL designations are strongly discouraged, as they are not compatible with the community character.

The community includes a rural town area that is generally bounded by Pearblossom Highway to the north, 170th Street East and 172nd Street East to the west, Avenue W-14 to the south, and 175th Street East on the east. This area has been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land. This designation is intended to reflect the existing density of the rural town area and is not intended to promote further land divisions.

The majority of new residential development in Llano should be directed to the rural town area instead the surrounding rural preserve area, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses. Heavy agriculture uses should be prohibited in this area because of potential impacts on existing residents. Home-based businesses may also be permitted in this area, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints and environmental resources. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Neenach

The community of Neenach is located in the far western portion of the Antelope Valley, along Avenue D (State Route 138). Some portions of the community are partially developed with light agricultural uses and single-family homes on large lots, while other portions are largely undeveloped and contain environmental resources, such as Significant Ecological Areas and Agricultural Resource Areas.

The community does not have a rural town center area but is served by the rural town center areas in Antelope Acres and Lake Hughes. A few parcels on Avenue D have been designated as Rural Commercial (CR) or Light Industrial (IL) in recognition of existing and/or planned commercial and industrial uses. No other portions of the community have been designated for commercial or industrial use, and new

commercial and industrial uses outside of these CR and IL designations are strongly discouraged, as they may not be compatible with the community character.

The community includes rural town areas that are generally bounded by Avenue B to the north, 270th Street West and 260th Street West to the west, Avenue D to the south, and 250th Street West on the east. These areas have been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land. This designation is intended to reflect the existing density of the rural town areas and is not intended to promote further land divisions.

The majority of new residential development in Neenach should be directed to the rural town areas instead of the surrounding rural preserve areas, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses. Heavy agriculture uses should be prohibited in rural town areas because of potential impacts on existing residents. Home-based businesses are also appropriate in the rural town areas, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints and environmental resources. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Pearblossom

The community of Pearblossom is located in the southeastern portion of the Antelope Valley, along Pearblossom Highway between Littlerock and Llano. Some portions of the community are developed with a wide range of uses and a distinctly rural character, while other portions are largely undeveloped, generally not served by existing infrastructure, and subject to safety hazards, such as Seismic Zones and Flood Zones.

The community has a rural town center area along Pearblossom Highway between 121st Street East and 133rd Street East. The rural town center area has been designated as Rural Commercial (CR) or Light Industrial (IL) to serve the daily needs of the residents and provide local employment opportunities. New buildings in the rural town center area should be limited to two stories in height and include Old West or Southwestern design elements at a pedestrian-oriented scale, with primary building entries facing Pearblossom Highway. No other portions of the community have been designated for commercial or industrial use, and new commercial and industrial uses outside of the rural town center area are strongly discouraged, as they are incompatible with the community character.

The rural town center area should continue to be the focal point of the communities and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Public amenities, such as plazas and community bulletin boards, are encouraged in this area.

The community includes rural town areas that are generally bounded by Pearblossom Highway to the north, 121st Street East to the west, Avenue W, the California Aqueduct, and Avenue W-11 to the south, and 135th Street East on the east. North of Avenue W, these areas have been designated as Residential

2 (H2), with a maximum density of 2 residential units for each 1 net acre of land or Residential 18 (H18), with a maximum density of 18 residential units for each 1 net acres of land. South of Avenue W and west of 128th Street East, these areas have been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land. South of Avenue WE and east of 128th Street East, these areas have been designated as Rural Land 1 (RL1), with a maximum density of 1 residential unit for each 1 gross acre of land. These designations are intended to reflect existing densities of the area and are not intended to promote further land divisions.

The majority of new residential development in Pearblossom should be directed to the rural town areas instead of the surrounding rural preserve area, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses. Heavy agriculture uses should be prohibited in these areas because of potential impacts on existing residents. Home-based businesses may also be permitted in these areas, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, or Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure and safety resources. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Quartz Hill

The community of Quartz Hill is located in the central portion of the Antelope Valley and is surrounded by the cities of Lancaster and Palmdale. The community is adjacent to urbanized areas and is largely developed with a wide range of uses, but it retains a semi-rural character and residents wish to keep it an unincorporated community with a unique identity.

The community has a rural town center area along 50th Street West between Avenue L-6 and Avenue M-2. The town center area has been designated as Mixed Use – Rural (MU-R) and Light Industrial (IL) to serve the daily needs of residents and provide local employment opportunities. No other portions of the community have been designated for industrial use, and new industrial uses outside of the rural town center area are strongly discouraged, as they are incompatible with the community character. New buildings in the rural town center area should be limited to two stories in height, include Old West or Southwestern design elements with earth tone colors, and should be designed at a pedestrian-oriented scale, with primary building entries facing 50th Street West. In the MU-R designation, a vertical mix of commercial and residential uses is encouraged – for example, a building with commercial uses on the first floor and residential or office uses on the second floor. A horizontal mix of commercial and residential uses may also be appropriate – for example, a commercial building facing 50th Street West, with a residential building located towards the rear of the same lot.

The rural town center area should continue to be the focal point of the community and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Streetscape improvements are recommended for 50th Street West, including native landscaping, “Western” street lights that meet dark sky objectives, and coordinated street furniture, such as benches,

bus shelters, and bicycle racks. Other public amenities, such as plazas and community bulletin boards, are also encouraged in this area.

Some areas outside the rural town center area have also been designated as MU-R to provide additional commercial services and housing opportunities. These areas include the northwest corner of Avenue N and 50th Street West and the Avenue L corridor between 42nd Street West and 50th Street West. New buildings in these areas should also be limited to two stories in height, include Old West or Southwestern design elements with earth tone colors, and should be designed at a pedestrian-oriented scale with transportation links to surrounding rural town areas. A vertical or horizontal mix of commercial and residential uses may be appropriate in these areas. No other portions of the community have been designated for commercial use, and new commercial uses outside these MU-R designations, or outside the MU-R within the rural town center area, are strongly discouraged, as they are incompatible with the community character.

As the Avenue L corridor between 42nd Street West and 50th Street West develops over time, it will become a secondary rural town center area and should be linked to surrounding rural town areas through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Streetscape improvements are recommended for the Avenue L corridor between 42nd Street West and 50th Street West, including native landscaping, "Western" street lights that meet dark sky, and coordinated street furniture, such as benches, bus shelters, and bicycle racks. Other public amenities, such as plazas and community bulletin boards, are also encouraged in this corridor.

The remainder of the community is considered to be a rural town area. Two properties along Avenue M have been designated as Residential 30 (H30), with a maximum density of 30 residential units for each 1 net acre of land, in recognition of existing multi-family uses. Several parcels adjoining the rural town center area between Avenue L-8 and Columbia Way have been designated as Residential 18 (H18), with a maximum density of 18 residential units for each 1 net acre of land, recognizing existing multi-family units and providing additional housing opportunities. In addition, a property at the northwest corner of Avenue M and 70th Street West, and several parcels on the south side of Avenue L near 40th Street West, has been designated as H18. New multi-family buildings in the H18 designation should be limited to two stories in height and should be designed in a manner that is compatible with nearby single-family homes.

South of Avenue L, the remaining rural town area has been designated as Residential 5 (H5), with a maximum density of 5 residential units for each 1 net acre of land, or Residential 2 (H2), with a maximum density of 2 residential units for each 1 net acre of land. These designations are intended to reflect the area's existing density and are not intended to promote further land divisions, although properties along Columbia Way between 40th Street West and 45th Street West present some land division opportunities. Light agriculture, equestrian, and animal-keeping uses may be permitted in these areas, provided that lots meet Zoning Code requirements for those uses. Home-based businesses may also be permitted in these areas, provided that they meet Zoning Code requirements.

North of Avenue L, the remaining rural town area has been designated as Rural Land 1 (RL1), with a maximum density of 1 residential unit for each 1 gross acre of land. This designation is intended to reflect the area's existing density and is not intended to promote further land divisions. Light agriculture, equestrian, and animal-keeping uses are appropriate in this area, but heavy agriculture uses

should be prohibited because of potential impacts to existing residents. Home-based businesses are also appropriate in this area, provided that they meet Zoning Code requirements.

Roosevelt

The community of Roosevelt is located in the northeastern portion of the Antelope Valley, north of the City of Lancaster. Community residents are concerned about the urbanization of the area and wish to remain an unincorporated rural community with a unique agricultural identity. Some portions of the community are partially developed with light agricultural uses and single-family homes on large lots, while some portions are in Agricultural Resource Areas and are partially undeveloped with farms and heavy agricultural uses. The remaining portions are largely undeveloped and contain environmental resources, such as Significant Ecological Areas.

The community has a rural town center area located at the intersection of Avenue J and 90th Street East. The rural town center area has been designated as Rural Commercial (CR) to serve the daily needs of the residents and provide local employment opportunities. New buildings in the rural town center area should be limited to one story in height and should be designed at a pedestrian-oriented scale, with primary building entries facing Avenue J or 90th Street East.

The rural town center area should continue to be the focal point of the communities and should be linked to the surrounding rural town area through trails and pedestrian routes. Pedestrian routes should have permeable paving, consistent with rural community character, instead of concrete sidewalks. Public amenities, such as community bulletin boards, are encouraged in this area.

Two parcels on 90th Street East have been designated as CR and Light Industrial (IL) in recognition of existing commercial and industrial uses. No other portions of the community have been designated for commercial or industrial use, and new commercial uses outside of this IL designation are strongly discouraged, as they are not compatible with the community character.

The community includes rural town areas that are generally bounded by Lancaster Boulevard to the north, 85th Street East to the west, Avenue J-12 and Avenue J to the south, and 90th Street East on the east. These areas have been designated as Rural Land 5 (RL5), with a maximum density of 1 residential unit for each 5 gross acres of land. This designation is intended to reflect the existing density of the rural town areas and is not intended to promote further land divisions. New land divisions in the rural town areas shall maintain a large minimum lot size to ensure consistency with the existing community character.

The majority of new residential development in Roosevelt should be directed to the rural town areas instead of the surrounding rural preserve area, provided that such development is consistent with existing community character and allows for light agriculture, equestrian, and animal-keeping uses. Heavy agriculture uses should be prohibited in these areas because of potential impacts on existing residents. Home-based businesses may also be permitted in these areas, provided that they meet Zoning Code requirements.

The remainder of the community is considered to be a rural preserve area and has been designated as Rural Land 10 (RL10), with a maximum density of 1 residential unit for each 10 gross acres of land, and Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. These very low densities reflect the underlying infrastructure constraints and environmental resources.

Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate. Agricultural uses in Agricultural Resource Areas will be protected and promoted, as directed in the policies of the Conservation and Open Space Element.

Three Points

The community of Three Points is located in the far western portion of the Antelope Valley, south of Neenach and northwest of Lake Hughes. The community is largely undeveloped and is generally not served by existing infrastructure and public facilities, but it does contain some single-family homes on large lots and some agricultural uses. The community is adjacent to the National Forest, includes environmental resources, such as scenic hillsides and Significant Ecological Areas, and is subject to several safety hazards, including the San Andreas Fault and Very High Fire Hazard Severity Zones.

The community does not have a rural town center area but is served by the rural town center area in Lake Hughes. A parcel at the southwest corner of Three Points Road and Pine Canyon Road has been designated as Rural Commercial (CR) in recognition of an existing commercial use. No other portions of the community have been designated for commercial or industrial use, and new commercial uses outside of this CR designation and new industrial uses are strongly discouraged, as they are not compatible with the community character.

The entire community is considered to be a rural preserve area and has been designated as Rural Land 20 (RL20), with a maximum density of 1 residential unit for each 20 gross acres of land. This very low density reflects the underlying infrastructure constraints, environmental resources, and safety constraints. Development in the rural preserve area should be limited to single-family homes on very large lots, light and heavy agriculture, equestrian and animal-keeping uses, and other uses where appropriate.

Chapter 8

PLAN IMPLEMENTATION

Chapter 8: Plan Implementation

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I. Introduction

The California Government Code Section 65400 requires that upon adoption of a general plan, a planning agency shall "investigate and make recommendations to the legislative body regarding reasonable and practical means for the implementing the general plan or element of the general plan, so that it will serve as an effective guide for orderly growth and development, preservation and conservation of open-space land and natural resources, and the efficient expenditure of public funds relating to the subjects addressed in the general plan". The Antelope Valley Area Plan (Area Plan) is part of the General Plan and the two documents must be consistent with each other. The Area Plan refines countywide goals and policies in the General Plan by addressing issues specific to the Antelope Valley. This Chapter describes the intent of the Area Plan with regards to the specific implementation programs that are to be enacted after the adoption of the Area Plan, as well as provide clear guidelines as to how these programs will be designed and implemented.

II. Implementation Programs

A. Significant Ecological Areas

The Significant Ecological Areas (SEAs) in this Area Plan are based on conservation biology principles that seek to conserve habitats of unique and threatened species, and retain linkages and wildlife movement across important ecological areas. The SEA Program recognizes that many of the properties within the SEAs are privately owned. The SEA Program, as detailed in this implementation program, alongside the goals and policies of this Area Plan is created to conserve the biological resources in the SEAs while recognizing these private property rights, facilitating development compatible with the SEAs, and incentivizing conservation and preservation of these important ecological areas. The SEA Program within this Area Plan is intended to complement and where appropriate, further refine aspects of the General Plan SEA Program, and will be consistent with it.

The SEAs established in this Area Plan are intended to change gradually over time. Development and conservation within and around the SEAs will affect the ecological value and biological resources they contain. Additionally, the location or value of biological resources in the Antelope Valley may change. It is anticipated that the future will include new forms of development and new techniques in conservation planning. In order to respect the diverse ecological values of areas within the SEAs, the SEA Program must retain a flexible regulatory approach that connects levels of review to the potential impacts of individual development projects. The SEA Program is intended to change and adapt alongside the SEAs. In order to ensure the Antelope Valley SEA Program continues to remain relevant and appropriately located, the County will review the performance of the SEA Program periodically.

This implementation program may be subsumed by a more comprehensive, countywide program as part of a General Plan update and/or Zoning Ordinance amendment

Incentives for Conservation and Mitigation

As SEAs provide value as important habitat, privately owned land within SEAs can be important sources for conservation and mitigation land required for development within the Antelope Valley. Projects in the Antelope Valley that require mitigation land shall meet their mitigation requirements from land within the SEAs identified in this Area Plan, to the greatest extent feasible.

B. Agricultural Resource Areas Program

In order to encourage the continued operation of local farms in the Antelope Valley, it is the intent of this Area Plan to develop a program allowing greater flexibility for local farms to establish and operate additional compatible uses as incidental or accessory to their primary farming operation. This would allow property owners to explore and develop additional sources of income to augment their primary farming use. This program may consist of developing more flexible zoning regulations for parcels used for farming purposes ; allowing the transfer of development rights from agricultural lands with the option of retaining agricultural easements on the property; creating a more streamlined process for permits on identified farmlands; and other such incentives for continuing their farming operations on their properties.

C. Economic Opportunity Areas (EOAs)

As more details are finalized with the High Desert Corridor and the Northwest 138 Corridor Improvement projects (i.e. route alignments, location of on-ramps, number of lanes etc.), further planning activities may be necessary for each EOA to ensure that the Area Plan's Goals and Policies, as well as Land Use Policy and zoning are consistent with the final design of the two projects. Future planning activities may involve the preparation of a Community Plan or Specific Plan, with associated land use and zoning changes as well as specific goals, policies and implementing strategies that would ensure that the economic opportunities presented by these infrastructure projects are balanced with preserving the rural character and ecological value of the surrounding areas and communities. In addition, any development within the Antelope Valley Area Plan boundaries shall be required to further analyze infrastructure impacts at a project level. This may require additional feasibility engineering studies so that infrastructure development requirements can be established to the satisfaction of the County Department of Public Works (DPW).

1. East EOA

   The East EOA is located in the eastern part of the Antelope Valley, along the proposed route of the High Desert Corridor. It includes the communities of Lake Los Angeles, Sun Village, Littlerock, Pearblossom, Llano and Crystalaire, as previously described in Chapter 7 (Community-Specific Land Use Concepts). Further planning activities for the East EOA may be pursued with the development of the High Desert Corridor Project.

2. Central EOA

The Central EOA is located in the general vicinity of the intersection of Avenue D and State Route 14, north of William J. Fox Air Field. It includes areas just outside the eastern border of Antelope Acres, as well as a concentration of light and heavy industrial uses in the vicinity of the Lancaster Landfill. It is also encompasses the Lancaster Water Reclamation Plant, which provides the area with potential access to recycled water that can help support the residential, commercial and industrial uses being proposed for the area. Further planning activities for the Central EOA may be pursued with the development of the Northwest 138 Corridor Improvement Project.

3. West EOA

The West EOA is located in the northwestern part of the Antelope Valley along the proposed route of the Northwest 138 Corridor Improvement Project. The area includes large contiguous landholdings that have been proposed for master-planned developments, as well as the western portion of Neenach. Due to its proximity to Interstate 5, new retail and housing in Kern County to the north, and to ensure orderly development in the area, any master-planned community within the West EOA will require further planning activities in addition to this Area Plan.

With the number and size of contiguous parcels owned by two property owners (Tejon Ranch Company and Bruce Burrows), a Specific Plan or similar planning activity will be required for more specific master-planning activities for these specific parcels. This is necessary to ensure that development in the area occurs in an orderly and sustainable way, and that the required infrastructure and public utilities are in place at a master-planned level before these new developments are established. Thus, this Area Plan specifically requires the preparation and adoption of a Specific Plan or similar planning document for these parcels before any development of five or more residential dwelling units, any commercial use, any industrial use, or any combination thereof, can be approved. In order to allow for more flexibility in the future detailed site design of specific neighborhoods in this area, a Specific Plan for a project in the West EOA may be allowed to convert the areas designated as Residential 5 (H5) to General Commercial (CG) or Public and Semi-public (P) designations without amending this Area Plan, so long as the resulting residential densities do not exceed those provided for by this Area Plan and no change in unmitigated significant impacts occurs. The Specific Plan may also include provisions for the conversion of residential to commercial areas, provided the amount of planned commercial building square footage does not result in any new unmitigated significant impacts. The Specific Plan shall also stipulate that these provisions (i.e. converting residential to commercial or other designations) are subject to a traffic study that confirms that no new unmitigated significant traffic impacts will occur.

Overall, land use adjustments within designations are permitted as part of a Specific Plan provided that the adjustments: 1) do not increase the total number of developable acres, dwelling units or square footage; 2) increase the total amount of open space and do not decrease the total amount of natural open space; and 3) do not result in new unmitigated significant impacts.

If a complete application for a Specific Plan or similar planning document is not submitted within five years of the effective date of this Area Plan, the Department of Regional Planning may initiate a Community Plan for the West EOA.

D. Transfer of Development Rights Program

This Area Plan recognizes that increasing or limiting residential densities through Land Use designations can only go so far in terms of either encouraging development or protecting the environment, respectively, in the areas where they are appropriate. Thus, it is the intent of this Area Plan to develop a Transfer of Development Rights (TDR) Program for the Antelope Valley in order to fully realize the potential development in the EOAs and encourage preservation of SEA lands.

1. Sending Areas

   Sending Areas shall be lands designated or identified as SEAs or Seismic Zones or are otherwise located in the Rural Preserve Areas, with land use designations of Rural Land 10 (RL10) or Rural Land 20 (RL20). The Department of Regional Planning shall explore ways to give property owners incentives to take advantage of the program, such as, but not limited to, density bonuses in transferring development rights. For example, while development proposed in these areas are subject to a maximum density of 1 dwelling unit for each 10 or 20 acres of land, the development rights in these areas may be transferrable to receiving areas at densities as high as 1 dwelling unit for each two acres of land.

2. Receiving Areas

   Receiving Areas should be those areas identified as EOAs. Depending on the specific circumstances within each EOAs, development rights transferred into these areas may either be part off or in addition to those densities established by the Land Use Policy Map (Map 2.1) of this Area Plan. This shall be determined through further analysis in a comprehensive, Antelope Valley-wide TDR Program.

E. Antelope Valley Scenic Drives Program

This Area Plan has identified a number of Scenic Drives in the Antelope Valley (Map 4.2) that should be preserved to ensure that their scenic value is maintained in the years to come. Thus, it is the

intent of this Area Plan to develop and implement a program for future review of proposed developments within viewsheds of these Scenic Drives, which may include:

- Required Visual Impact Assessment for proposed development within the viewsheds of identified Scenic Drives;
- Required finding for discretionary entitlements that the proposed development is compatible with the scenic character of the route; or
- Applicable development standards for development along a Scenic Drive.

F. Antelope Valley Community Standards Districts

As indicated in Title 22 (Zoning Code) Chapter 22.44.090, the "Community Standards Districts (CSDs) are established as supplemental districts to provide a means if implementing special development standards contained in adopted neighborhood, community, area, specific and local coastal plans within the unincorporated areas, or to provide a means of addressing special problems which are unique to certain geographic areas within the unincorporated areas of Los Angeles County."

There are currently five adopted CSDs in the Antelope Valley: in the rural communities of Acton, the Lakes (Elizabeth Lake and Lake Hughes), Juniper Hills, Leona Valley, and Southeast Antelope Valley (Littlerock and Sun Village). In addition to these, the Department of Regional Planning has received proposal for six new CSDs: for the rural communities of Antelope Acres, Fairmont, Green Valley, Lake Los Angeles, Quartz Hill, and Roosevelt as well proposed amendments to the CSDs of Leona Valley and Southeast Antelope Valley (Littlerock and Sun Village).

This Area Plan is the foundational planning document for the development of the Antelope Valley for the next 20 to 30 years. As part of its implementation, this Plan shall require a comprehensive review of all the existing CSDs in the Antelope Valley. This review may also include a program to prepare and adopt any proposed new CSDs or amendments to existing CSDs in the next several years after the adoption of the Area Plan. When a comprehensive review has been conducted, and new and/or updated CSDs have been adopted, these CSDs may specify whether a variance shall be granted only under extraordinary circumstances.

Appendix A: Conservation and Open Space Element Resources

I. Open Space and Natural Areas in the Antelope Valley

Los Angeles County offers a wide variety of open space and natural areas. The following open space and natural areas are managed by the County or are located primarily within the unincorporated areas:

Angeles National Forest

The Angeles National Forest was established by Executive Order in 1892 and is managed by the U.S. Forest Service. The Forest covers over 650,000 acres. The Angeles National Forest manages the watersheds within its boundaries to provide water to Southern California and to protect surrounding communities from catastrophic floods. The land within the Angeles National Forest is diverse in appearance and terrain, and provides many opportunities for recreational and scenic enjoyment. Much of the Angeles National Forest is covered with dense chaparral, pine and fir covered slopes as elevations in the Angeles National Forest range from 1,200 to 10,064 feet.

Devil's Punchbowl Natural Area

Devil's Punchbowl is a 1,310-acre natural area that consists of rugged wilderness rock formations along the San Andreas Fault on the northern slope of the San Gabriel Mountains. The terrain climbs from 4,200 feet to 6,500 feet in elevation, with natural plant and animal communities ranging from desert scrub to pine forests. A seasonal stream runs through the natural area.

High Desert Wildlife and Wild Flower Sanctuaries

The County currently operates eight wildlife sanctuaries and one wildflower sanctuary in the high desert of Antelope Valley. Ranging from 2,500 to over 3,600 feet in elevation and encompassing more than 2,000 acres, the sanctuaries offer opportunities for spring wildflower viewing, bird watching, hiking and horseback riding. Wildlife seen on the preserves vary from horned lizards, chuckwallas and rattlesnakes, to prairie falcons and golden eagles. Insect life is most abundant during the warmer months, and in spring, the Joshua tree and other large shrubs provide nesting sites for a variety of songbirds. Other protected animals are the kit fox, desert tortoise and Mojave ground squirrel.

Michael D. Antonovich Open Space Preserve

The Michael D. Antonovich Open Space Preserve offers 500 acres of dedicated open space in the Santa Susana Mountains and is managed by the Mountains Recreation and Conservation Authority (MRCA). Located on the northern border of Los Angeles, this open space preserve contains a diversity of flora and fauna, from big cone Douglas fir, California walnut and oak trees to black bears, deer and mountain lions. The Preserve also provides important habitat connections through its numerous wilderness trails in the Rim of the Valley corridor of the Santa Clarita Woodlands Park.

II. Conservancies

The County works with various conservancies to maintain and protect open space land in Los Angeles County. Land conservancies are private, nonprofit organizations and public agencies that share a

common goal: to conserve land for the benefit of people and nature. Land conservancies are generally started by community residents who wish to preserve a certain area or piece of open space land on a local or regional scale. Land conservancies have the flexibility to acquire, hold and manage land in the public interest, and also to preserve open space through voluntary conservation agreements with landowners, which permanently protect the land from development, while the title remains with the landowner. Most conservancies work in partnership with local governments and provide various levels of educational programs and land restoration and/or land enhancement projects. In the Antelope Valley, the primary conservancy group in operation is the Antelope Valley Conservancy.

Antelope Valley Conservancy

The Antelope Valley Conservancy is a local land trust conservancy that obtains and stewards lands that are important to the community for quality of life, scenic beauty, and plant and animal habitat. AVC focuses on Joshua tree woodlands, the keystone species of the Mojave Desert, which supports a wide variety of native species. Most of the Conservancy's targeted preservation lands are in the County's designated Significant Ecological Areas. (http://www.avconservancy.org/)

III. Regional Habitat Linkages

Habitat linkages are defined as area within the overall range of a species or suite of species that possess sufficient cover, food, forage, water and other essential elements to serve as a movement pathway, or between two or more larger areas of habitat. Depending on the species, linkages vary in size. For example, a belt of coastal sage scrub traversing a golf course, connecting sage scrub habitat areas on either side, providing a safe passage zone for smaller, slower-moving species (such as lizards and rodents) to maintain population connectivity between the two sides of the golf course is one form of habitat linkage.

Wildlife corridors, which are areas of open space of sufficient width to permit larger, mobile species (such as foxes, bobcats and coyote) to pass between larger areas of open space, or to disperse from one major open space region to another, are another type of habitat linkage. Such areas are generally several hundred feet wide, unobstructed, and usually possess cover, food and water. The upland margins of a creek channel, open ridgelines, open valleys or the bottoms of drainages often serve as major corridors locally, as do riparian alignments.

Biological resources are important in a regional context, serving to connect resources in adjacent local jurisdictions. Critical biological resources are maintained through habitat connectivity, which sustains population genetic diversity, and provides refuge for migrant species. Regional habitat linkages are identified in the Conservation and Natural Resources Element. The Antelope Valley, Puente Hills, San Andreas, Santa Clara River, Santa Felicia, Santa Monica Mountains, and Santa Susana Mountains and Simi Hills SEAs serve as important regional habitat linkages. More details about linkages between and within each of these SEAs are provided below:

Antelope Valley SEA

The SEA extends from the Angeles National Forest to the playa lakes within Edwards Air Force Base, encompassing most of the two largest drainages exiting the northern slope of the San Gabriel Mountain range. The geographical features of the SEA serve as a major habitat linkage and movement corridor for all wildlife species within its vicinity and, in an intergenerational sense, many of the plant species. Ecologically generalist species (such as mountain lion, bobcat, coyote, gray fox,) have the ability to move

across such vast areas and through changing habitat types. For such species, the SEA may serve as an important system for long-term and genetic exchange among populations. For smaller or less-mobile species or taxa, which are narrowly restricted in their habitat needs, the SEA can serve as a broad linkage zone, in which individual movement can take place during seasonal population dispersal or over generations. This provides essential genetic exchange within and between metapopulations. The two drainages, combined with the upland terrestrial Desert-Montane transect portion of the SEA, ensure linkage and direct movement areas for all of the wildlife species present within the County portion of the Antelope Valley.

San Andreas SEA

The SEA includes several important linkages for wildlife movement. The foothills in the western-most part of the SEA are an important linkage between the San Gabriel Mountains, the Tehachapi Mountains, and the Coastal Ranges. The linkage to the Tehachapi Mountains is important because the Tehachapis connect to the southern-most extent of the Sierra Nevada Mountains. The Tehachapi Mountains represent the only mountain linkage from the Transverse Ranges and the Coast Ranges to the Sierra Nevada Range. This feature may be an important topographic reference for migrating birds, and provides high elevation foraging grounds along the migratory route. The several ranges that meet at the western end of the SEA provide a valuable link for gene flow between divergent subspecies, varieties, and populations of many species. The SEA includes numerous drainages that extend onto the Antelope Valley floor towards resources such as the Fairmont and Antelope buttes. These washes provide an important linkage for animals traveling between the Valley floor, the buttes and the western part of the San Gabriel Mountains. In addition, Anaverde Creek, Amargosa Creek, and Pine Canyon facilitate east-west wildlife movement through the mountains, Portal Ridge, and Ritter Ridge. Tributary drainages from the Santa Clara River, such as Elizabeth Lake Canyon and San Francisquito Canyon, connect coastal drainages and the coastal ecoregion to the San Andreas Fault and interior watersheds. The frequency of valuable riparian communities along this travel route, which is located within an otherwise arid climate, further contributes to the SEA's importance for wildlife and habitat linkages in the region.

Santa Clara River SEA

Historically (and prehistorically) the riparian corridor along the Santa Clara River has served as the primary east-west linkage between the Pacific coastline, Coast Ranges, interior ranges, high desert and southern Sierra (via the Tehachapi Range). Animals moving through the Santa Clara River at one time had unobstructed passage along the river and within its tributaries. The present configuration of the tributary drainages has reduced connectivity from the Santa Clarita Valley to the north, but the Santa Clara River remains relatively intact and open. The SEA embraces the river corridor and the linkage zones that are considered essential to ensuring connectivity and resource values within the historic movement zones for all of the wildlife species present within the County portion of the Santa Clara River.

IV. Significant Ecological Areas

History of the SEA Program

Los Angeles County's Significant Ecological Areas (SEAs) Program has schematic roots in an initial General Plan guiding document, the 1970 Environmental Development Guide, which was adopted as a preliminary General Plan for the County. The Open Space Concept Plan and 1990 Open Space Policy Map depict greenbelt areas and rural lands that reasonably correspond to the current SEA map.

The original Significant Ecological Area Report was prepared in 1972 by scientists from the University of California, Los Angeles, the Los Angeles County Museum of Natural History and other local academic institutions, at the request of the Los Angeles County Department of Regional Planning (DRP). The DRP asked the report authors to identify "significant ecological areas," which due to their high biological resource value, should receive special consideration during the formulation of the 1973 General Plan. In the final report, 81 such areas were mapped and brief descriptions of the value of each were given. The 81 areas were then included on the Vegetation and Wildlife Map in the Conservation Element of the 1973 General Plan.

In 1976, following the 1975 court decision requiring the preparation of a revised General Plan, the DRP and the Environmental Systems Research Institute commissioned the Los Angeles County Significant Ecological Area Study (1976 SEA Study), from the environmental consulting firm, England and Nelson. After excluding the Channel Islands and national forest lands from the study area, the 1976 SEA Study reviewed the data and criteria used to establish the original significant ecological area list, analyzed new information, developed of a set of eight criteria to be used to select and prioritize significant ecological areas and concluded with individual maps and descriptions for each. From an initial list of 115 sites, 62 areas met the criteria and were recommended for adoption by the study. In 1980, 61 of these biologically significant areas were adopted as part of the Conservation and Open Space Element of the Los Angeles County General Plan on the Special Management Areas Policy Map and through individual descriptions of the SEAs in Technical Supplement E of the 1980 General Plan.

In 1991, supplemental studies further assessing the biological resources within seven SEAs were conducted. The Phase I Studies, conducted by Michael Brandman Associates, assessed the following SEA areas: Cold Creek Significant Ecological Area No.9, San Fransciquito Canyon Significant Ecological Area No.19, Dudleya Densiflora Population Significant Ecological Area No.45, Kentucky Springs Significant Ecological Area No.61, Las Virgenes Significant Ecological Area No.6, Tonner Canyon and Chino Hills SEA No. 15, and Tuna Canyon SEA No. 10. The studies looked at current ownership patterns, existing resources, development pressures and made recommendations into the future management of the SEAs. All of the Phase I studies found either that the SEA boundaries were adequate in size or recommended the expansion of the boundaries to better encompass and protect biotic resources.

In 2000, the DRP commissioned the Los Angeles County Significant Ecological Area Update Study (2000 Update Study) prepared by PCR Services Corporation, Frank Hovore & Associates and Forma Systems. The 2000 Update Study included an Executive Summary, Background Report and twelve biological resources assessments for the Proposed Antelope Valley SEA, Proposed Cruzan Mesa Vernal Pools SEA, Proposed East San Gabriel Valley SEA, Proposed Joshua Tree Woodlands SEA, Proposed Puente Hills SEA, Proposed San Andreas SEA, Proposed San Dimas Canyon and San Antonio Wash SEA, Proposed San Gabriel Canyon SEA, Proposed Santa Catalina Island SEA, Proposed Santa Clara River SEA, Proposed Santa Monica Mountains SEA, and the Proposed Santa Susana Mountains and Simi Hills SEA. These twelve biological resource assessment areas consolidated the 1980 unincorporated area SEAs into larger areas for study and proposed inclusion as SEAs.

The 2000 Update Study also examined the assumptions of the original eight SEA designation criteria from the 1976 SEA Study, modifying one criterion and deleting two. The modification of Class 1 changed the language from "the habitat of rare, endangered, and threatened plant and animal species," to specify "the habitat of *core populations* of rare, endangered and threatened plant and animal species." Class 6: "areas important as game species habitat or as fisheries" was removed due to the questionable contribution of these areas towards maintaining biotic diversity. Class 8: "special areas" was deleted due to the vague nature of that designation. The six SEA criteria are contained within this Appendix E, and

each SEA description lists which criteria it meets.

From 2001 to 2011, the DRP conducted public outreach, solicited additional recommendations on the SEA boundaries and checked the SEA boundaries with an expert panel ofbiologists convened in 2010.

SEA Designation Principles

Previously, areas were assigned SEA designations in an attempt to slow or modify the type of development within their boundaries. However, as the County underwent a period of unanticipated growth, many of the SEAs experienced a reduction and/or degradation of their biotic diversity. Appendix E uses the definition of biotic or biological diversity provided by the 1990 U.S. Congressional Biodiversity Act, HR1268, which is defined as a full range of variety and variability within and among living organisms and the ecological complexes in which they occur.

Currently, the design of the SEAs is based on scientifically-grounded concepts regarding size and connectivity. Where feasible, SEAs form linkages between core habitats, which are large blocks of habitat generally conforming to a significant topographical feature, such as a watershed, major river, butte, etc., in order to ensure regional species movement.

Most SEA designations do not focus on a single resource or habitat type and, over time, conservation plans have come to employ a fluid approach to conserving an everincreasing list of sensitive resources (e.g., endangered species, habitats of limited distribution, and "patchy" habitats such as coastal sage scrub). The SEA designations rely on two primary conservation principles: namely that species extinction rates are lower on larger “islands,” or blocks of land, than smaller islands; and that isolated habitat areas have less opportunity to regain species by re-colonization from other areas.

Many wildlife species, particularly carnivores and other wide ranging species, require large areas of suitable habitat for genetically and demographically viable populations. In addition, large islands are more likely to encompass diverse habitat types and are more easily buffered against potential impacts from surrounding developed lands. The SEAs are designed to provide habitat linkages between related habitat types (such as the Antelope Valley buttes, or the San Andreas Rift Zone wetlands), by encompassing areas of sufficient width to function as wildlife movement routes between these open space areas.

The current SEA designations provide local resources (such as sensitive species) and their habitats, as well as the seasonal support habitats for those resources, with connections to essential sustaining resource areas (such as corridor areas and hydrological systems). For example, zones of lower intensity human impacts that exist between essential habitat resources have been included in the current SEA designations, thereby helping to maintain the biotic diversity in the County. The designation of Coastal Resource Area (CRA) is given to those SEAs located with the California Coastal Zone.

SEA Selection Criteria

All of the County’s SEAs and CRAs must satisfy at least one of the six SEA selection criteria:

A. The habitat of core populations of endangered or threatened plant or animal species.

Intent of Criterion A: These areas are important in maintaining viable plant and/or animal populations for those species recognized by state and or federal resource agencies as being extremely low in numbers or having a very limited amount of suitable habitat available. The terms "endangered" and

"threatened" have precise meanings defined in both state and federal law. The identification of "core population"' will be determined by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). The term "core population" as used here is a general biological term referring to a known and/or a viable population. Other locations of endangered or threatened plant or animal species may also occur in the County, which are not within an SEA. It should also be noted that the concept of core populations is consistent with current thinking of the USFWS and the CDFW.

This criterion is not meant to constitute a recovery program for listed species, but one element of a more comprehensive conservation effort for the long term sustainment of listed species within the County. At the local level, recovery programs of both the CDFW and the USFWS have measures in place that can impose severe penalties for the "take"of listed species or their habitat.

- Federally Endangered: "any species which is in danger of extinction throughout all or a significant portion of its range...."

- Federally Threatened: "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

- State Endangered: "....a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."

- State Threatened: "....a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter." [California Code of Regulations, Title 1, Sec 670.5]

B. On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.

Intent of Criterion B: The purpose of this criterion is to identify biotic resources that are uncommon on a regional basis. The geographical region considered could be as small as the Southern California coastal plains, the Transverse Mountain Ranges, the Mojave Desert, the Southern California coastline, etc. The geographical region could also be as large as Southern California, the Pacific coast, all of California, the western United States, or even larger. The community, association, or habitat is either unique or restricted in distribution in an area larger than the political boundaries of the County (i.e., coastal sage scrub, native grasslands, or vernal pools). Resources that are limited in distribution in the region being considered, but common elsewhere, are also included under this category.

C. Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.

Intent of Criterion C: The purpose of this criterion is to identify biotic resources that are uncommon within the political boundaries of the County, regardless of their availability elsewhere. The County has a high diversity of biological components. The County and San Diego County are the only counties in the U.S. that possess coastal, montane, and desert subregions within their boundaries. It is a rich heritage that few local governments have an opportunity to preserve.

Many biotic communities that were once common in the County have been severely reduced due to urban and agricultural development. This is especially true south of the San Gabriel Mountains, and among the agricultural fields of the North County. Other biotic features have never been common.

D. Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or in the County.

Intent of Criterion D: Species or groups of species, at various points in their life cycles, tend to congregate in certain areas. These areas possess resources that are essential to the maintenance of specific wildlife species. This criterion is intended to identify those areas that are limited in distribution either regionally or in the County, and not the primary habitat of common species or groups of species.

E. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.

Intent of Criterion E: Oftentimes scientists learn the most about a biological phenomenon by studying it at an extreme in its distribution. This frequently reveals the biological and ecological parameters under which it can survive. In addition, isolated populations and communities often are relicts of what was present in an area at some previous time, and may show genetic traits not found elsewhere in the species. These biological and ecological parameters may be useful in determining taxonomic relationships.

F. Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.

Intent of Criterion F: The intent of this criterion was to identify examples of the primary biotic resources in the County. At least one example (e.g., native grassland, valley oak savannah) of each vegetation type will be selected from the various geographical regions in the County in order to preserve basic biogeographic diversity.

SEA Descriptions

The following descriptions of the 21 SEAs include descriptions of the boundaries, resources, wildlife movement, and designation criteria for each. More detailed information about the specific plant and animal species of interest for each SEA is contained within the SEA Program Guide, which is maintained by the Department of Regional Planning. The SEA descriptions, followed by the CRA descriptions, are listed in alphabetical order.

Altadena Foothills and Arroyos SEA

Boundary and Resources Description

The Altadena Foothills and Arroyos SEA is located in the westernmost portion of the San Gabriel Valley. This SEA includes incorporated and unincorporated areas. The SEA represents the lower elevation/urban interface portions of Millard, Alzada, Chiquita, Las Flores, Rubio, and Eaton canyons from the urban edge, to undeveloped wildland areas of the lower elevations of the Angeles National Forest.

The SEA is located within the Mount Wilson and Pasadena United States Geological Survey (USGS) 7.5' California Quadrangles.

On the west side of the Altadena Foothills and Arroyos, the western and southwestern boundaries track along the urban-wildland interface in the undeveloped areas of the Arroyo Seco, Fern, and El Prieto canyons, and the boundary pulls back around a small area of development at the northern-eastern edge of La Cañada-Flintridge. A developed area northeast of the junction of Millard Canyon and El Prieto is excluded. The SEA designation includes the undeveloped portions of sub-watersheds of the Arroyo Seco, and also encompasses undeveloped parts of drainages, including Alzada and Chiquita, which flow into the Devils Gate Reservoir of the Arroyo Seco. The Arroyo Seco is within the Los Angeles River watershed. This SEA includes portions of the cities of Pasadena and La Cañada-Flintridge, the unincorporated community of Altadena, and the Angeles National Forest. The eastern side of the southern boundary encompasses undeveloped areas of the sub-watersheds of Las Flores, Rubio and Eaton canyons, which are tributary to the Rio Hondo and historically to the San Gabriel River. Much, but not all, of the Rio Hondo catchment is diverted via flood-control channels to the Los Angeles River. The southern boundary of the SEA is bordered by developed properties. The southern boundary moves east along the urban-wildland interface to include undeveloped parts of watersheds, which closely follow the perimeter of Devil's Gate Reservoir, in the Hahamongna Park in Pasadena. From Hahamongna Park, the SEA boundary continues east along the edge of development into the San Gabriel River watershed. The eastern border of the SEA is the eastern ridge of Eaton Canyon near the canyon mouth. A finger of the SEA extends downstream along Eaton Wash to include the Eaton Debris Basin and Reservoir. The northern boundary is formed along ridgelines within the Angeles National Forest that define the catchment of the local canyons. Within the Angeles National Forest, development is much less dense, in the form of in-holdings and Angeles National Forest leases, and is often naturally landscaped, albeit disturbed.

The chief attribute of this SEA is a high diversity of species, which is due to the SEA's position between the mountain biome and the valley biome, caused by an abrupt change of slope formed by the thrust fault complex that borders the San Gabriel Mountains. Furthermore, the SEA has as its center the dividing ridge between the two principal rivers of the Los Angeles Basin, the Los Angeles River and the San Gabriel River.

The wide range of elevation, topography, aspect, and geology represent a diverse array of physical habitats within this SEA. In general, the topography of the SEA is moderately steep to very steep, which results in a number of very narrow corridors with elevations ranging from a high of approximately 2,400 feet above mean sea level (MSL) to a low of approximately 1,200 feet above MSL. Consequently, a variety of plant communities exist, including riparian and upland shrublands and woodlands. Within these major community types, there are many vegetation series that varyaccording to plant species dominance.

Of particular note for this SEA is its potential to accommodate lower elevation east-west linkages. This is significant because of the constraints of development at lower elevations, the very steep terrain, and seasonal snow storms above the SEA, beginning at about 3000 feet—all of which limit potential movement for many species. There is also potential for north-south wildlife movement between the Angeles National Forest and the Verdugo Mountains via the Arroyo Seco and the San Rafael Hills. The Arroyo Seco is the eastern limit of this link and creates a potential movement corridor from the Angeles National Forest, over and under the Interstate-210. Across the Interstate-210, the linkage enters the San Rafael Hills, where blocks of habitat remain in the cities. Some are conserved in natural open space, such as the Cherry Canyon Park and Open Space Preserve of the City of La Cañada-Flintridge, just south of the County Descanso Gardens. These open spaces are interspersed with residential development and are not part of the SEA. From the San Rafael Hills, linkage potential may be traced to the west across State Route-2 and Verdugo Wash, past enclaves of residential development to access the Verdugo Mountains.

Wildlife Movement

Wildlife movement within the SEA takes on two major forms. First, due to the extremely steep intervening topography, considerable movement of wildlife up and down the drainages, which course through this SEA to connect the forest interior with foothill areas, is expected. Consequently, this type of movement occurs on a seasonal basis, particularly for large mobile mammalsthat typically meet their full range of habitat needs over broad areas.

The second major type of movement occurs across the flanks of the foothills in an east-west direction. Particularly for riparian-obligate and riparian-favoring migratory birds, the corridor linking lower elevation riparian habitats in the SEA are of high importance and heavily utilized.

Regional Biological Value

The SEA meets important SEA designation criteria and supports many regional biological values. Each criterion and how it is met is described below.

CRITERIA ANALYSIS OF THE ALTADENA FOOTHILLS AND ARROYOS SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not Met	None within this SEA.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA is designating one of the principle ecotones of the Southern California coastal areas: the area where the sediment of the coastal alluvial fans from the mountain streams and drainages is exiting the abrupt upthrust rock of the mountains. Here one finds the biotic communities of the mountains meeting the communities of the coastal plain areas, combining with the organisms that are only found at the junction. The natural habitats of this kind of biological area are fast dwindling as urban communities expand to the limits of easily buildable space.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA is designating one of the principle ecotone areas of the County coastal exposure: the area where the sediment of the alluvial fans from the mountain streams and drainages is adding to the mile-deep sediments of the Los Angeles Basin, as the watercourses exit the abrupt upthrust rock of the San Gabriel Mountains. It is an area where one can often encounter flora that is characteristic of the Peninsular Ranges to the south and flora of the coastal ranges and

Criterion		Status	Justification
			Sierra Nevada to the north, among typical flora of the Transverse Ranges. The SEA contains prime examples of coastal sage scrub and other kinds of chaparral, riparian oaks, woodlands of the canyon oak of the mountains, woodlands of the coast live oak, which occurs both in the lower mountains and the valleys, good stands of the San Gabriel endemic oak (*Quercus dumosa* var. *gabrielensis*), diverse and beautiful flora characteristic of the continually changing beds of the mountain streams, both perennial and intermittent, and the wildlife that reside in these various habitats.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The SEA provides a low-elevation constrained corridor. The SEA serves as the only corridor to provide interacting component habitat areas for species to feed, rest, and migrate from low basin and foothill elevations to the sub-alpine elevations of the high San Gabriel Mountains.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Not met	None within this SEA.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	Areas encompassed within the SEA represent the only remaining stands of low-elevation foothill scrub, chaparral, and canyon woodland communities within the north San Gabriel Valley. These communities once extended throughout what are now the communities of the north San Gabriel Valley, bridging the transition between high chaparral on the southern slope of the San Gabriel Mountains to the alluvial fans extending beneath the mountains to the coastal basin.

In conclusion, the area is an SEA because it contains (B - C) a good example of the biotic communities typical of the area where the abrupt upthrust of the mountains meets the alluvial fans of the valleys, a natural habitat that is limited in availability in the County and the coastal Southern California region; (D) it has a constrained connective corridor area near the Devil's Gate Dam where the freeway underpasses provide access between the San Rafael Hills and the San Gabriel Mountains; and (F) it supports intact remant stands of low-elevation chaparral and scrub communities that were once more widespread within the region.

Antelope Valley SEA

Boundary and Resources Description

The Antelope Valley SEA is located in the central portion of the Antelope Valley, primarily east of the cities of Palmdale and Lancaster, within a predominantly unincorporated area of the County. The SEA is focused on the principal watercourses of the area: Little Rock Wash and Big Rock Wash and tributaries, such as Mescal Creek. Audubon California recognizes the area of Edwards Air Force Base as a Globally Important Bird Area (IBA), which is visited by tens of thousands of migrant birds during the spring and fall migratory seasons, and supports the breeding of rare and endangered birds during the spring and summer months.

The SEA is located, at least partially, in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Rosamond, Rosamond Lake, Redman, Rogers Lake South, Jackrabbit Hill, Lancaster East, Alpine Butte, Hi Vista, Adobe Mountain, Palmdale, Littlerock, Lovejoy Buttes, El Mirage, Pacifico Mountain, Juniper Hills, Valyermo, and Mescal Creek.

Watercourses and water features, such as dry lakes and springs, are the focus for desert wildlife and central to connectivity and biodiversity in this region. The SEA was delineated to emphasize the importance of the Little Rock Wash and Big Rock Wash watersheds to the surface and subsurface hydrology of the Antelope Valley and to the dry lakes. The western portion of the SEA extends along the margin of the Little Rock Wash and floodplain zone, while the eastern margin follows a tributary of Big Rock Wash, which is Mescal Creek Wash and its tributaries. The origins of the watercourses in the Angeles National Forest are an important aspect of their diversity and connectivity, and the importance of the diverse forest vegetation of this SEA is discussed below. The SEA includes several major buttes and numerous minor ones, which have highly diverse biota along with diverse desert habitats, which range from sand dunes formed from the wind-blown dust that the buttes collect, to rocky crags, which are home to various raptors. The SEA includes the County's portion of the watershed basin for dry lakes, which are the destination for the watercourses. There are three dry lakes and their adjacent plains (protected as part of Edwards Air Force Base) included in the SEA: Rosamond Dry Lake with the adjacent Piute Ponds, Buckhorn Lake, and Rogers Lake. These lakes and ponds are often flooded during the rainy winter-spring seasons, and are the principal resting areas in the region on the Pacific Flyway. The northeastern portion of the SEA encompasses some agricultural cropland (portions of which are fallow) and dispersed rural residential uses; however, the underlying hydrology of the washes remains intact throughout the entire SEA.

Three main watercourse segments originate in the San Gabriel Mountains and flow through the Antelope Valley to dry lakes near the northern County boundary: 1) Little Rock Wash; 2) Big Rock Wash; and 3) Desert-Montane. Desert-Montane centers on Mescal Creek and includes adjacent drainages. The flows of all three drainages are subsurface for much of the year and may be on the surface during rain and snowmelt.

The Little Rock Wash segment (the westernmost segment), goes north from Little Rock-Palmdale Dam as its southern barrier. Upstream from the reservoir is critical habitat for the endangered arroyo toad (*Anaxyrus californicus* FE, SSC). The toad could occur from time to time in the downstream area of the SEA. Heading north to Mount Emma Road, the boundaries follow the flood zone of the Little Rock Wash and also incorporate some of the vegetated slopes that drain to the wash. North from Mount Emma Road, the boundaries generally follow Federal Emergency Management Agency (FEMA) boundaries. On the west side, south of Edwards Air Force Base and north of Avenue F, the SEA boundary follows the

Economic Opportunity Area boundary.

All of Edwards Air Force Base that is in the County is included in the SEA because the restricted entry and use protect the dry lakes and their neighboring areas. Many desert plants and wildlife species once found broadly across the Antelope Valley are now found only or primarily within Edwards Air Force Base. The ponds and dry lakes have distributed habitat of marshy alkali grassland, alkali flats, and cattail and bulrush marsh augmented by wastewater treatment facilities that have additional ponds. Some of the nesting rare and uncommon birds include white-faced ibis (*Plegadis chihi*), tricolored blackbird (*Agelaius tricolor*), redhead (*Aythya americana*), gadwall (*Anas strepera*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), least bittern (*Ixobrychus exilis*), and federally-threatened western snowy plover (*Charadrius alexandrinus nivosus*).

The Big Rock Wash area has western and eastern segments in the SEA. The western arm of the Big Rock Wash segment begins near the northern boundary of the Angeles National Forest, heads north out of the Forest along Pallett Creek. The SEA includes parts of Cruthers and Holmes creeks near their junctions with Pallett Creek. SEA boundaries follow the braided stream channel toward the confluence with Big Rock Wash. From the aqueduct at Big Rock Wash to Edwards Air Force Base, the western boundary line follows recently active braids of Big Rock Wash, encompassing Alpine Butte, and joining to the Little Rock Wash segment within Edwards Air Force Base. On the eastern arm of the Big Rock Wash segment, the SEA boundaries head north from the Angeles National Forest headwaters of Dorr Canyon (a Big Rock Wash tributary) and the headwater area of Big Rock Wash near State Route-2. The boundaries travel through the Angeles National Forest and follow the wash area of the streams toward their confluence with Pallett Creek. The Angeles National Forest floodplain of the widened area of South Fork of Big Rock Wash is included in the SEA.

South Fork of Big Rock Wash is part of the federally-designated critical habitat of the mountain yellow-legged frog (*Rana muscosa*, FE, SE). This frog is known in the County from only a few high-mountain streams in the San Gabriel Mountains. A fungal pathogen is principally responsible for its decline; however, climate change, air pollution and non-native predators are also likely contributing factors.

Another broad area of the San Andreas Fault Zone near the Valyermo Ranch follows the FEMA boundaries and includes a nesting area for gray vireos near Bobs Gap. Between the Angeles National Forest and the aqueduct, the SEA boundaries follow FEMA boundaries. The eastern boundary generally follows the FEMA boundary and recently active braids along the main course of Big Rock Wash to the vicinity of Avenue Q East, at which point it projects east to encompass Lovejoy Buttes. At Avenue O, the eastern boundary rejoins the main active portion of Big Rock Wash, continuing northeastward to skirt development in Lake Los Angeles. In the vicinity of Avenue M, the boundary projects eastward from about 156th Street East to 180th Street East) to encompass Rocky, Piute, and Saddleback Buttes, and connect with the Desert-Montane transect segment.

The Desert-Montane Transect segment begins in the Angeles National Forest along the ridge of Table Mountain at the San Bernardino-Los Angeles County line. Table Mountain is known for its diverse flora, which includes desert and mountain elements, and some unusual limestone-obligate species. The SEA southern boundary along the ridgeline meets the western boundary as it skirts the camp developments along the southern base of Table Mountain. The boundary turns north along the western ridge of the Mescal Creek drainage, crossing the California Aqueduct with the State Route-138. From the aqueduct to Avenue R, the western boundary buffers the westernmost portion of the drainage by 200 feet, protecting the braided area of the watercourse. This part of the SEA includes Black Butte and the Three Sisters Buttes, and many smaller unnamed buttes, as well as Mescal and Theodore Payne County wildlife

sanctuaries. The east side of the transect is the San Bernardino-Los Angeles County line. At about Avenue U East, the eastern boundary veers off the San Bernardino-Los Angeles County line to the north-northwest, buffering the Puzzle Creek watercourse by about 200 feet, protecting the braiding of the easternmost drainages. Near Avenue R, the boundary trends north, and goes north-northwest near Avenue P to include Moody Butte, lesser unnamed rises, and Blue Rock Butte.

The Desert-Montane segment largely avoids drainages that flow into and out of the Lake Los Angeles community, but the transect includes diffuse watercourses on the south side of Saddleback Butte, Saddleback Butte and the surrounding Saddleback Butte State Park, the Antelope Valley Indian Museum State Park at the base of Piute Butte, and Piute Butte. At about Avenue H and 170th Street East, the boundary turns to the northeast following natural vegetation to the County boundary near Avenue C. Here the boundary turns north along the line to where San Bernardino, Kern and Los Angeles counties meet. This northeastern part of the SEA has WEMO conservation areas for the threatened desert tortoise and state-threatened Mojave ground squirrel. The northeastern area has some BLM land and the County Phacelia Wildlife Sanctuary, which is also County Wildflower Preserve A. The SEA includes large parts of County Wildflower Preserve F.

On Edwards Air Force Base, north to south between Avenues B and E East, and west to east between 140th Street East and the San Bernardino-Los Angeles County line, there is federally-designated critical habitat for the state and federally-threatened desert tortoise (*Gopherus agassizii*). At 190th Street, the critical habitat widens to extend north beyond the County and the SEA into Kern County. At 200th Street, the critical habitat widens to the south to extend to Avenue H and then goes east across the San Bernardino-Los Angeles County line. The desert tortoise critical habitat area on Edwards Air Force Base is included in the SEA, and much of the SEA area north of Avenue H in the eastern drainages of the SEA is designated critical habitat for the tortoise.

The SEA traverses the Antelope Valley from the foothills of the San Gabriel Mountains, to the low elevations of the dry lake basins, and its expanse and considerable topographical relief is reflected in its relatively high floral and faunal diversity. The SEA includes playa lake, alkali marsh, alluvial fan scrub, a mosaic of xeric desert scrubs, Joshua tree woodland, desert riparian woodlands, juniper scrub, pinyon pine, chaparral and mixed conifer, oak, and riparian communities of higher elevations. Transitional zones (ecotones) between these communities often contain unusual species compositions, such as pinyon pine, juniper and Joshua trees together, or Joshua trees adjacent to cottonwood forest.

Edwards Air Force Base has the only good stands of mesquite (*Prosopis glandulosa*) remaining in the County. It has areas of Mojave spineflower (*Chorizanthe spinosa*), creosote bush scrub, alkali sink, and the transition vegetation between the two. Rosamond Lake has the best example of the shadscale scrub and alkali sink biotic communities in the County. Shadscale scrub needs heavy soil with underlying hardpan between 3000-6000 feet elevation, which is unusual in the County, and more common in the north Mojave Desert and Owens Valley. In addition, the playa has the southernmost extension of the Great Basin kangaroo rat (*Dipodomys microps*), which is an isolated geographic population of scientific interest.

The southernmost portions of the three “legs” of the SEA lie within the Angeles National Forest, and include the upper tributary watersheds and streams for Little Rock Wash, Big Rock Wash, and Mescal Creek. These areas support multi-species oak and conifer woodlands that are common to the middle-elevation zones on the north face of the San Gabriel Mountains. The creeks are higher energy systems at those elevations, as they collect water from the surrounding terrain, and are typically lined with woodlands of alder, willow, sycamore and cottonwood, with varying densities and with various

compositions of species.

As the creeks drop north of the pressure ridges of the San Andreas Fault Zone, they lose gradient and widen, and most of the flow becomes sub-surface, except during high energy storms or in the spring (depending upon rainfall totals in the watersheds). The vegetation becomes sparser and less evenly distributed along the channel margins. Crossing the lowlands of the Antelope Valley, the channels support a variety of desert scrub vegetation within the alluvial plains. Where the alluvial plains are wide and shallow, cottonwood-willow woodland and sycamore woodland vegetation communities often occur within the overall floodplain on stable terraces; around oxbow flow zones in the Antelope Valley; or where the groundwater table is replaced or augmented by agricultural runoff. The surrounding upland habitats are primarily desert scrubs, including creosote and chenopod scrubs, sand sheets (chiefly around the buttes), and Joshua tree woodland. Intact Joshua tree woodland, with native understories present, supports a relatively high diversity of annual wildflowers, reptiles and mammals. The Joshua trees also provide nest sites for many resident and migratory bird species.

Lovejoy, Alpine, Piute, Black and Saddleback buttes, along with other, smaller unnamed buttes, form most of the topographical relief within the SEA. These areas offer different ecological conditions that are associated with rock shelter, perching sites, nesting sites, denning areas, wind protection and sand sheet accumulation areas. Local and migratory bat species roost and reproduce in the caves and crevices of the butte formations. The higher buttes provide local nesting sites for owls and other birds of prey.

Alpine Butte is the least disturbed butte in the County, with excellent stands of Joshua tree woodland and creosote bush scrub, and impressive wildflower displays when rainfall creates appropriate conditions. Lovejoy Butte has Joshua tree woodland and creosote bush scrub, with a central wind-blown sand community for a good mixture of rock and sand habitats. In addition, the close proximity of Lovejoy Butte to Big Rock Wash increases the diversity of habitats in the area. Nevertheless, it also suffers from impact from the Lake Los Angeles community, which borders the butte on three sides. The clustering of buttes in the SEA may be important to the abundant, diverse wildlife that inhabits the various vegetation communities around and in the buttes. Saddleback Butte and Piute Butte together are protected as a state park, but Saddleback Butte is also subject to development for campsites and hiking trails. Piute Butte has a prehistoric site that may protect it from much future recreational development. All of the buttes harbor diverse wildlife and flora. Most of them are critical habitat for the state and federally-threatened desert tortoise. Some buttes within the desert tortoise's critical habitat are not included in the SEA.

The acitive and fallow open agricultural lands support a diversity of wildlife species, which essentially regard the fields and ditches as irrigated desert. Birds of prey frequently hunt over the open agricultural areas, including fallow fields; wide-ranging predators also find excellent hunting conditions in and around agricultural areas. A spectrum of local and migratory bat species feed over the irrigated fields in the spring and summer, when insect numbers are the highest, and at least one sensitive bat species, the pallid bat, forages in open scrub or ruderal desert habitats.

The northern portion of the SEA contains several unique habitat types, including mesquite bosque (threatened locally by lowering water tables and harvest for firewood), clay pan pools, vernal pools, alkali grasslands, alkali and freshwater marshes, and permanent ponds. Hundreds of bird species have been recorded from the pond and marsh habitats around the dry lakes and ponds, and numerous species nest on the playa margins or in the associated riparian habitats. The open creosote scrub and other xeric habitats on the slopes surrounding the lake playas serve as important wintering areas for many raptor species, as well as large numbers of songbirds.

Wildlife Movement

The SEA extends from the Angeles National Forest to the playa lakes within Edwards Air Force Base, encompassing most of the two largest drainages exiting the northern slope of the San Gabriel Mountain range. The geographical features of the SEA serve as a major habitat linkage and movement corridor for all wildlife species within its vicinity and in an intergenerational sense, many of the plant species. Ecologically generalist species (mountain lion, bobcat, coyote, gray fox, etc.) have the ability to move across such vast areas and through changing habitat types. For such species, the SEA may serve as an important system for long-term and genetic exchange among populations. For smaller or less-mobile species or taxa, which are narrowly restricted in their habitat needs, the SEA can serve as a broad linkage zone, in which individual movement can take place during seasonal population dispersal or over generations. This provides essential genetic exchange within and between metapopulations. The two drainages, combined with the upland terrestrial Desert-Montane transect portion of the SEA, ensure linkage and direct movement areas for all of the wildlife species present within the County portion of the Antelope Valley.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE ANTELOPE VALLEY SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	Critical habitat for the only known Antelope Valley population of the federally-endangered arroyo toad is adjacent to Little Rock Reservoir, upstream in Little Rock Creek, and some may still be found downstream of the dam in the SEA. The SEA encompasses much of the County ranges of the federally-threatened California desert tortoise, including much of the County critical habitat for the tortoise. The state-threatened Mohave ground squirrel occurs throughout much of the SEA. The SEA includes some of the critical habitat of mountain yellow-legged frog in the South Fork of Big Rock Creek. It includes habitat designated in the Western Mojave Plan (WEMO) for the alkali mariposa lily, which is a rare lily of the desert floor.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The mesquite bosque, sand sheet, rocky butte, desert riparian woodland, and alluvial fan sage scrub habitats are unique and regionally restricted biotic communities encompassed by the SEA. Desert species not, or rarely, found elsewhere in the County, such as verdin, black-throated sparrow, Mojave rattlesnake, desert banded gecko, Leech's prionid borer, and mesquite borer, occur within these habitats. Additionally, the

Criterion		Status	Justification
			ponds and other riparian and wetland systems in the northern portion of the SEA support numerous water birds and raptors not found elsewhere in the County.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The desert alluvial fan sage scrub, Joshua tree woodland, desert riparian woodland, mesquite bosque, alkali meadow/marsh, desert freshwater marsh, playa lake and seasonal pool habitats are located within, are unique to, or best represented within, the SEA.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or in the County.	Met	The freshwater habitats within and around Rosamond, Buckhorn and Rogers dry lake basins have large concentrations of migratory and resident waterfowl and birds of prey, providing them with essential seasonal and permanent resources. The rocky desert buttes are unique roosting, sheltering, perching and nesting sites for birds of prey and bats. This SEA is centered on migratory routes for both plants and animals along principal desert washes and buttes that connect the mountains to freshwater playas.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The mesquite bosque that is located within the SEA is clearly at an extreme of its geographical range, along with its associated biota, such as the mesquite borer. Edge populations usually represent an unusual genetic variation in a population or community, and therefore meet the criterion of scientific interest as well as the criterion of a population at the extreme physical/geographical limit of its range.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The SEA encompasses some of the most biotically intact acreages of Joshua tree woodland, desert riparian woodland, and desert alluvial fan sage scrub remaining in the County. Mesquite was formerly widely distributed in the Antelope Valley, but due to harvesting and drawdown of groundwater, is now limited to a few protected areas, such as the Edwards Air Force Base.

In conclusion, the area described is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, or migrating grounds, which are limited in availability in the County; E) populations of scientific interest at the edge of their range including the desert tortoise, the mesquite bosque, and the Mojave ground squirrel; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in

the County.

Joshua Tree Woodlands SEA

Boundary and Resources Description

The Joshua Tree Woodlands SEA is located in the western portion of the Antelope Valley west and northwest of the Antelope Valley California Poppy Reserve in an unincorporated area of the County. This SEA encompasses many of the remaining old-growth stands of Joshua trees (*Yucca brevifolia*) on the west side of the Antelope Valley. Joshua tree woodland is a complex biological community of the gradual slopes of higher elevation desert are as that once covered much of this part of the Antelope Valley around the Antelope Wash. Joshua trees only occur within the Mojave Desert, and Los Angeles County populations are at the the western limit of the species' range.

Because Joshua trees live in areas that are easily developed for residences and agriculture, this habitat has become very fragmented in the County. The SEA consists of eight separate units, seven of which are in close proximity to each other between the Kern-Los Angeles County line to the north, and the California Aqueduct and Fairmont Butte to the south. The eighth unit is in an arroyo on the north side of the principal western ridgeline of Liebre Mountain, which is near the furthest western extent of Joshua tree woodland in Southern California. This woodland is located partially within the Angeles National Forest, and east and adjacent to the Interstate-5. The eighth unit is bordered on three sides by the San Andreas SEA.

All of the SEA except Unit 8 is within an area designated as the Antelope Valley Globally Important Bird Area (IBA) by Audubon California.This part of the Antelope Valley is very important as a resource area that supports spring and fall migration of birds, from the small passerines to the larger raptors, such as the state-threatened Swainson's hawk (*Buteo swainsoni*) and turkey vultures (*Cathartes aura*). The Joshua tree woodland is a very important resource to these migrations by supplying perches and food for these animals on their journeys. The SEA is near the San Andreas SEA, the Antelope Valley California Poppy Reserve, the Arthur B. Ripley Desert Woodland State Park, and the County George F. Bones Desert Pines Wildlife Reserve State Natural Reserve; however, many of these areas are not contiguous with one another nor with the SEA. Unit 2 of the SEA includes much of the Arthur B. Ripley Desert Woodland State Park. Unit 8 of the SEA is contiguous with the San Andreas SEA.

Fragmentation is a concern because the Joshua trees depend on a small moth for reproduction. Only two species of moth can successfully pollinate Joshua trees, and in the SEA, there is only the yucca moth (*Tegeticula synthetica*). The moth may have limited dispersal abilities, and the Joshua trees cannot reproduce from seeds without pollination from this particular moth. Cross pollination is regarded as essential to a species' genetic diversity, which is essential to adaptation to environmental change.

The Joshua trees in the seven units have the growth form of the lower elevation woodlands of the flatter areas, and somewhat spaced from one another and less clumped. The Joshua trees in the eighth unit have a growth form that is more common in the hilly areas, where the individuals sprout from connected rhizomes and are clumped.Many times, these clumps are clones, with individuals all sharing the same genetic identity.

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Neenach School, Fairmont Butte, Black Mountain, and Lebec.

The SEA is composed of eight units. The overall boundaries are as follows: The western boundary for

units 1-7 terminates at 220th Street West (the border between Ranges 15W and 16W). The eastern boundary is 145th Street West. The northern boundary is on Avenue A at the Kern-Los Angeles Countyline. The southern boundary straddles the California Aqueduct, touches the Los Angeles Aqueduct, and is approximately on Avenue F. The southernmost area is located close to the foothills of the western San Gabriel Mountains.

Unit 1: The northernmost unit is bounded by Avenue A on the Kern-Los Angeles County line on the north between 200th Street West and approximately on 218th Street West. It extends irregularly to the south along a desert wash contour, about a 0.7 mile at its greatest extent. The current southern boundary is determined by agricultural clearing. This unit has a Joshua tree woodland with many shrub components of the biological community intact, including a floor covered by the wildflower slender goldfields (*Lasthenia gracilis*) in the spring.

Unit 2: Another unit is located between Avenue C to the north and Avenue F to the south (straddling part of State Route-138 on Avenue D and part of Lancaster Road on Avenue E), and east to west from about 200th Street to about 220th Street West. Vegetation clearance in various parcel units accounts for this unit's irregular shape. Agricultural clearing on both sides of the Antelope Wash has separated this unit from Unit 1 to the north. The intervening area is a broad wash plain with rich alluvial soils. The former agricultural fields may now become fields of photovoltaic panels to generate renewable energy. This unit has a southern square mile that straddles the California Aqueduct and touches the Los Angeles Aqueduct at the base of the San Gabriel Mountains. In the northern area, this unit has old-growth Joshua tree woodlands on a rocky ridge that grades into stands of Joshua trees and woodland that includes California junipers (*Juniperus californica*) in flatter areas toward the south. The southern and eastern parts of this unit overlap with much of the Arthur B. Ripley Desert Woodland State Park. The California Aqueduct is open in this area and is an important resource for bird migration along the desert slopes of the western San Gabriel Mountains, particularly waterfowl. The Los Angeles Aqueduct is generally in concrete pipe for most of its extent, and in this area, is covered by a berm and road. A colony of burrowing owls (*Athene cunicularia*), which is a state species of special concern, was discovered during surveys for an adjacent photovoltaic panel development, and probably other colonies or individuals of the owl live within this unit.

Unit 3: Another unit is located between Avenue D to the north and Avenue E to the south, and between 190th Street and 195th Street West. It is on the broad outwash alluvial area of Kings Canyon and adjacent drainages. This outwash area is somewhat blocked by the aqueducts, but both aqueducts are provided with underpass channels for outflow of the canyons onto the desert floor. The SEA includes a central cleared area that is regenerating the Joshua tree woodland and a residence with less than 40 acres cleared. The area next to Avenue D that has been cleared of Joshua trees is not included.

Unit 4: The square mile between Avenue C and Avenue D, and between 180th Street and 190th Street West has a good stand of Joshua tree and juniper woodland. This is also in the Kings Canyon alluvial wash area. There is a known area of Joshua tree regeneration to the east that is not included in the SEA.

Unit 5: The quarter square mile between Avenue C-5 and Avenue E, and between 180th Street and 185th Street West, is also on the Kings Canyon alluvial wash area and has a good stand of Joshua tree and juniper woodland.

Units 6: An area of a little over one-eighth square mile is located at the corners of both units 4 and 5. It is between Avenues D and E and between 180th Street and what would be 174th Street West. This is also in the Kings Canyon alluvial wash area and has a good stand of Joshua tree and juniper woodland.

Unit 7: A large irregular unit is located roughly between Avenue B, Avenue C5, 145th Street and 180th Street West.It has an extensive area of Joshua tree-juniper woodland that grades into stands of Joshua trees towards the east.There is a known area of Joshua tree regeneration in former agricultural fields between 160thStreet West and 170thStreet West that is not included in the SEA. The alluvial wash in the SEA is a combined area of outflow from Kings Canyon, unnamed canyons, and Broad Canyon.

Unit 8: The eighth unit is in an arroyo on the north side of the principal western ridgeline of Liebre Mountain, which is near the furthest western extent of Joshua tree woodland in Southern California. This woodland is located partially within the Angeles National Forest. It is east and adjacent to the Interstate-5. The eighth unit is bordered on three sides by the San Andreas SEA.This woodland has the clonal growth that is typical of Joshua trees in hilly areas.

The SEA is located primarily on the western Antelope Valley floor between the Tehachapi Mountains and the western San Gabriel Mountains. The topography of the SEA is extremely flat with the land sloping less than 200 feet in approximately five miles. The location and orientation of the SEA represents a matrix of remnant stands of Joshua tree woodland among a patchwork of disturbed areas. Nearly all of the land within the SEA is undisturbed and vegetated. Most of the land surrounding the SEA is disturbed by agricultural use, and also has some scattered rural residences. The SEA is entirely within the unincorporated area of the County.

Wildlife Movement

Wildlife movement within the SEA is possibly limited to local movement, but large-scale movement across the Antelope Valley floor is probably much facilitated by the Joshua tree habitat as island-like stepping stones. Typically in burned-over areas, animal paths tend to orient toward the Joshua tree habitat. Birds, and possibly bats, and other aerial organisms that use the habitat linkage along the desert side of the San Gabriel Mountains probably use the woodland in the SEA for resting and feeding. Animals foraging within the SEA are unlikely to occur in concentrated numbers due to the heterogeneity of the topography and habitat of the SEA. However, local movement to and from the different SEA areas, as well as to and from the San Gabriel Mountains and the Tehachapi Mountains may be restricted due to the disturbed nature of the Antelope Valley floor.Wildlife movement is likely to converge in areas where movement is still possible, which produces concentrated movement areas or “bottlenecks.”

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE JOSHUA TREE WOODLANDS SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not Met	Although there are several listed species that occur within the SEA, this criterion is not met due to the lack of known core population areas.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either	Met	The SEA contains large patches of undisturbed Joshua tree woodland habitat, which has

	unique or are restricted in distribution.		become increasingly rare in the region.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution	Met	As stated above, Joshua tree woodlands have become rare in the region, and are even more rare in the County.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The habitat within the SEA has been studied for how it may serve as a concentrated breeding, feeding, resting, or migrating ground for any species.Some cross-desert migratory routes depend, in part, on the cover and habitat of the Joshua tree woodland. The units 1-7 of the SEA on the Antelope Valley floor are in a globally IBA, known as a bird migration route. The Joshua tree woodland is an important component of resources that supports this migration.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	Due to the scarcity of Joshua tree woodland, specimens of the quality found in the SEA are important to science and have become living laboratories. The SEA contains the most westerly extent of this habitat type.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The Joshua tree woodland contained within the SEA is an excellent example of this community type.

In conclusion, the area is an SEA because it contains: B-C) Joshua tree woodland, a rare community both regionally and within the County; D) habitat important to breeding, feeding, and migration; E) the geographic limit of Joshua tree woodland; and F) an excellent undisturbed example of Joshua tree woodland.

San Andreas SEA

Boundary and Resources Description

The San Andreas SEA is located in the western portion of the Antelope Valley in an unincorporated area of the County. The SEA is the second largest SEA and includes many diverse habitats. This is in large part due to the northwestern area being a meeting place for several diverse biomes and wildlife corridors. There are five ecoregions that meet in this area and have biological species that extend along the SEA and San Andreas Fault in the County. These ecoregions include California Coastal Mountains; California Central Valley; Tehachapi Mountains, which extend to the southern Sierra Nevada; San Gabriel Mountains, which extend to other ranges in the Transverse Ranges; and the Antelope Valley, which is the western limit of the Mojave Desert. Wildlife corridors extend along the courses of the mountain ranges, as well as along the San Andreas Fault and Garlock Fault, which provide a great variety of

habitats and frequent emergent water that is important for wildlife, plant movement and connectivity. The location and orientation of the SEA coincides with a segment of the San Andreas Fault Zone. The SEA includes a small portion of the western south-facing Tehachapi foothills, which are known for wildflower field displays in years of good rainfall. The SEA extends east and south across grasslands at the western tip of the Antelope Valley, and includes Quail Lake, a sag pond enhanced to receive water from the West Branch of the California Aqueduct. From Quail Lake, the SEA extends up the northern foothills of Liebre Mountain, Sawmill Mountain, and includes Portal Ridge; large portions of Leona Valley; Ritter Ridge, Fairmont and Antelope buttes; and portions of Anaverde Valley. It also includes a disjunct area that encompasses water bodies along the fault, Lake Palmdale, and Una Lake, with a terminus at Barrel Springs.

The Antelope Valley and adjacent desert slopes of the SEA are recognized by Audubon California as the Antelope Valley (Lancaster) Globally Important Bird Area (IBA). Near Lake Palmdale in the disjunct eastern section of the SEA is part of the Antelope Valley (Lancaster) IBA and near Barrel Springs is part of the Santa Clara River IBA.

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Frazier Mountain, Lebec, La Liebre Ranch, Neenach School, Fairmont Butte, Little Buttes, Black Mountain, Liebre Mountain, Burnt Peak, Lake Hughes, Del Sur, Lancaster West, Sleepy Valley, Ritter Ridge, and Palmdale.

The northwestern tip of the SEA encompasses south-facing foothills at the western end of the Tehachapi Mountains, in the northwest corner of the County, on the eastern side of Tejon Pass.

From the Tehachapi Foothills, the southern boundary goes south-southeast along Interstate-5, including much of Peace Valley in the Gorman area, which is the broad faulted area that includes Gorman Creek. The SEA boundary crosses the Western Branch of the California Aqueduct, which is south of the junction of Interstate-5 and State Route-138. The boundary continues south along Interstate-5 until the point where the Liebre Mountain ridgeline dips to the highway, and the SEA boundary turns eastward and follows the ridgeline along the northern side of Liebre Mountain.

Along this section of Interstate-5 are several large underpasses for stream courses that are extremely important for wildlife connectivity across Interstate-5. The Angeles National Forest boundary is just east of the highway, and south of the aqueduct. Just north of the Liebre Mountain ridgeline, the San Andreas SEA borders the north, east, and south sides of the eighth unit of the Joshua Tree Woodlands SEA. This woodland is in an unnamed arroyo, and contains a population of the clonal growth form that Joshua trees (*Yucca brevifolia*) exhibit in colder and more fire-prone areas, sometimes referred to as *Yucca brevifolia* var. *jaegeriana*. The woodland is located near the westernmost limit of the range of the species, with a small number of stands and individuals known west of the Interstate-5. The SEA includes the northern slope area of the Angeles National Forest with its diversity of chaparral, grasslands, and oak and conifer forests.

After turning east from Interstate-5 and climbing uphill on the northern slope of Liebre Mountain, the SEA boundary crosses the ridgeline to the south to incorporate natural pristine areas of headwaters for all the branches of Liebre Gulch, which are part of the headwaters for Piru Creek, the largest tributary of the Santa Clara River in Ventura County. The SEA boundary returns to the north face of Liebre Gulch in the vicinity of Sandberg. The boundary tracks the Sawmill Mountain-Maxwell Road, along the broad ridgeline of the mountains and generally trends in a southeasterly direction. This ridgeline is the headwaters of Castaic Creek, which is the largest tributary of the Santa Clara River in Los Angeles

County. Castaic Creek is above the Castaic Reservoir, which extends into Cienega Canyon and Fish Creek, which is federally-designated critical habitat for the endangered arroyo toad (*Anaxyrus californicus*). In addition, maintenance of clean water in the source areas is critical for the species.

The boundary turns northeast where it meets Lake Hughes Road. This is an extremely important area of connectivity as the canyon along the Lake Hughes Road (Elizabeth Lake Canyon) drains to Castaic Creek and the Santa Clara River, whereas the Amargosa Creek that goes east and west from the Lake Hughes Road in the fault valley drains to the Antelope Valley in both directions. The junction is topographically broad and well-vegetated though residential, which is excellent for wildlife connectivity in spite of a few houses.

The SEA boundary goes north at the junction with Lake Hughes Road and then skirts the Lake Hughes community's extension into Pine Canyon along the San Andreas Fault. In Pine Canyon, the boundary turns north and returns to its southeasterly direction, skirting the Lake Hughes development along the southern edge of Portal Ridge. Portal Ridge is entirely included in the SEA. A side extension of the southern boundary includes Lake Hughes, which is important for migrating waterfowl, with its sheltered position in the Fault valley. The boundary extends along the southern edge of Lake Hughes, Munz Lake, and Elizabeth Lake, and then trends southeast to go along the Leona Divide, including a large portion of Leona Valley.

The entire area along the San Andreas Fault is rich in wetlands and bogs, but Leona Valley has these in abundance, even in many yards. All of the wetlands in the San Andreas Fault valley and Portal Ridge are home to the greatest concentration of the tricolored blackbird in Southern California, many of which are year-round residents. This bird species has experienced great population declines in recent years and is proposed for listing at both state and federal levels. In the community of Leona Valley, the southern SEA boundary goes along Lost Valley Creek and then along Leona Road to exclude some of the denser residential area in this section. The included area in Leona Valley has many of the bogs that line the Fault and the less populated farm areas along Portal Ridge north of Leona Road.

North of the Bouquet Canyon watershed, the southern SEA boundary dips south around an expansive area of drainages and bogs used by the tricolored blackbird on the old Ritter Ranch. From Ritter Canyon to the east, the boundary follows the old Ritter Ranch high road along the Sierra Pelona, crosses from 40th Street to the California Aqueduct along vegetation in the Anaverde Valley (where the boundary transitions from the Amargosa Creek drainage to the Anaverde Creek drainage), and then follows the aqueduct to the area where Anaverde Creek exits from the Fault valley. At the Lancaster Landfill boundary, the SEA boundary goes north and becomes the north SEA boundary at Verde Point.

The northern boundary of the SEA begins at Tejon Pass next to Interstate-5 and follows the Kern-Los Angeles County line eastward to its intersection with the western branch of the California Aqueduct in the western Tehachapi Foothills. This area along the Kern-Los Angeles County line is coincident with the designated critical habitat for the federally-endangered California condor (*Gymnogyps californicus*), which is a bird that nearly went extinct and was saved by prodigious efforts in captive breeding. The boundary then generally follows the Tehachapi foothills southward to Quail Lake. Here the northern SEA boundary crosses Highway 138 to include the northern foothills of the liebre Mountains and fallow agricultural fields, which are important for raptor foraging. These fields are often oriented along the Los Angeles Aqueduct, which is a little south of the California Aqueduct in this area, or along the California Aqueduct itself.

The boundary eventually tracks along the northeast edge of Fairmont Reservoir (another breeding site

for the tricolored blackbird), and turns northeast to include a patchwork of farmed areas between the Fairmont and Antelope buttes, which are known to have tricolored blackbird feeding grounds. The boundary makes an inclusive path to encompass the Broad Canyon Wash, the Fairmont and Antelope buttes, and the Antelope Valley California Poppy Reserve State Natural Reserve. These desert buttes are concentrated wintering grounds for birds of prey, and provide roosting sites that are surrounded by cultivated fields that support a plentiful food supply of rodents, rabbits, and hares. They are the most westerly buttes in the Mojave Desert, and with their proximity to the San Gabriel Mountains, have unique ecological relationships of scientific interest. Near the southern area of the buttes, the boundary follows agricultural fields along 130th Street West and then 135th Street West south to Munz Ranch Road (Willow Springs Road on some maps). Along 135th Street West, the boundary crosses Myrick Canyon where it spreads out onto the plain of the desert floor. The upstream areas of Myrick Canyon are included in the SEA.

The boundary tracks along the northwest side of Munz Ranch Road and then crosses to include Willow Springs Canyon, where Willow Springs Canyon is in its most undisturbed state. Where Willow Springs Canyon crosses the California Aqueduct, the northern SEA boundary turns east along the California Aqueduct as it passes along the northern base of Portal Ridge. Following the southern edge of the California Aqueduct, the boundary continues in a southeasterly direction to the east side of Ritter Ridge to Leona Siphon. A development along Joshua Tree Ranch Road near the summit of Ritter Ridge is excluded from the SEA. The SEA northern boundary turns east for roughly one quarter mile along the southern edge of a tributary to Amargosa Creek. Where the Amargosa Creek terminates Ritter Ridge, the SEA boundary crosses the creek and ascends along the ridgeline of an unnamed ridge to where it meets the southern boundary at Verde Point.

East across the State Route-14 is a disjunct part of the SEA that incorporates Lake Palmdale and Una Lake and extends along the Fault to 37th Street East, including the ridgelines north and south of Barrel Springs Road, which includes the sag ponds or Barrel Springs. The Palmdale Ditch is included in this part of the SEA. Many migrant birds using the desert water features can be observed at these artificial lakes and the natural springs of this area during the spring and fall migration.

The gap between the two portions of the SEA includes the Antelope Valley Landfill, disturbed lots, and State Route-14.

The majority of land within the SEA lies within unincorporated area of the County. Other jurisdictions include the Angeles National Forest, the City of Palmdale, and the City of Lancaster.

Wildlife Movement

The SEA includes several important linkages for wildlife movement. The foothills in the western-most part of the SEA are an important linkage between the San Gabriel Mountains, the Tehachapi Mountains, and the Coastal Ranges. This linkage to the Tehachapi Mountains is important because they connect to the southern-most extent of the Sierra Nevada Mountains. The Tehachapi Mountains represent the only mountain linkage from the Transverse Ranges and the Coast Ranges to the Sierra Nevada Range. This feature may be an important topographic reference for migrating birds, as well as providing high elevation foraging grounds along the migratory route. The several ranges that meet at the western end of the SEA, provide a valuable link for gene flow between divergent subspecies, varieties, and populations of many species. The SEA includes numerous drainages that extend onto the Antelope Valley floor towards resources, such as the Fairmont and Antelope buttes. These washes provide an important linkage for animals traveling between the Valley floor, the buttes and the western part of the

San Gabriel Mountains. In addition, Anaverde Creek, Amargosa Creek, and Pine Canyon facilitate east-west wildlife movement through the mountains, Portal Ridge, and Ritter Ridge. Tributary drainages from the Santa Clara River, such as Elizabeth Lake Canyon and San Francisquito Canyon, connect coastal drainages and the coastal ecoregion to the Fault and interior watersheds. The frequency of valuable riparian communities along this travel route, which are located within an otherwise arid climate, further contributes to the SEA's importance for wildlife and habitat linkages in the region.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE SAN ANDREAS SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not met Met in Future?	Although there are several listed species that occur within the SEA, this criterion is not met due to the lack of known core population areas. The far northwestern border with Kern Countyis the edge of critical habitat for the California condor. The tricolored blackbird may soon be listed and has its largest population in Southern Californiawithin the SEA.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA encompasses a series of marshes and sinks concentrated along the San Andreas Fault Zone, which are both unique and restricted in distribution. The Fairmont and Antelope buttes represent a unique habitat due to their location, as the most westerly buttes of the Mojave Desert and their close proximity to several geographic regions. As the confluence of a number of major geographical areas, the Mojave Desert, the San Gabriel Mountains of the Transverse Ranges, the Coastal Ranges, and the Tehachapi Mountains produces a unique and regionally rare flora that represents a transition between desert, foothill, and several montane environments.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The confluence of five major geographical areas–the Mojave Desert, the San Gabriel Mountains, the Coastal Ranges, the Tehachapi Mountains, and the Central Valley–has produced the most unique and diverse flora found in the County, and represents a transition between desert, foothill, and montane environments. The SEA also includes the southern limit of the foothill woodland community, blue oak, gray or foothill pine,

Criterion		Status	Justification
			and California buckeye, rare relic stands of Great Basin sagebrush scrub, and rare wildflower fields.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The Fairmont and Antelope buttes provide vital habitat to many wide ranging species, which forage in outlying habitat, but use the buttes for nesting, roosting, denning, and refuge. The buttes also serve as concentrated wintering grounds for birds of prey, which are rare in the County, and which forage on grassland and agricultural fields in the vicinity. Lakes and other wetland areas along the Fault and throughout the SEA provide breeding habitat for amphibians and feeding habitat for migrating birds that traverse the slopes adjacent to the Mojave Desert. The Fault is one of the principle wildlife corridors and connective areas for in the County. Major drainages (Santa Clara River, San Francisquito Canyon, and Lake Elizabeth Canyon) run from the coast through the San Gabriel Mountains and end at the Fault, which also has extensive riparian habitat that facilitates migration. The Fault provides the final westernmostlinkage to the Mojave Desert (Antelope Valley). The tricolored blackbird is a year-round resident of the SEA.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The transition of several habitat types including: creosote bush scrub, Joshua tree/California juniper mixed woodland, and desert chaparral, makes the SEA valuable for educational and scientific reasons. The close proximity of the Fairmont and Antelope buttes to the San Gabriel Mountains renders them unique in their species composition and ecological relationships and, therefore, of interest to scientists. The concentrated diversity of vegetation types, particularly in the western half of the SEA, creates an outstanding opportunity for educational use. This area also harbors the southern limit of the foothill woodland community, blue oak, gray or foothill pine, and California buckeye, as well as rare relic stands of great basin sagebrush scrub.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the	Met	The slopes of Ritter Ridge support one of the most pristine mixed stands of Joshua tree and California juniper in Los Angeles County. The location of theSEA

Criterion		Status	Justification
	original natural biotic communities in the County.		at the confluence of five major geographical areas, the Mojave Desert, the Central Valley, the San Gabriel Mountains of the Transverse Ranges, the Coastal Ranges, and the Tehachapi Mountains has produced a community-rich area with desert, foothill, and montane environments. The SEA encompasses large, mostly undisturbed examples of all of these communities.

In conclusion, the area is an SEA because it contains: B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, and migrating grounds, which are limited in availability in the County; E) biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

San Dimas Canyon and San Antonio Wash SEA

Boundary and Resources Description

The San Dimas Canyon and San Antonio Wash SEA is located along the cismontane foothills of the eastern San Gabriel Mountains. Generally, the SEA is centered on the mouths of four major canyons, which flow from the mountains and interconnecting terrain. From east to west, these canyons include San Antonio Canyon above the City of Claremont as one component; and Live Oak, Marshall, and San Dimas canyons above the cities of La Verne and San Dimas as a second component. The SEA incorporates areas with diverse natural habitat ranging from high elevations to the foothill alluvial areas of two of the major drainages of the San Gabriel Mountains. San Dimas Canyon is a tributary of the San Gabriel River. San Antonio Wash is a tributary of the Santa Ana River.

The SEA is found within the Mount Baldy and Ontario U.S. Geological Survey (USGS) 7.5' California Quadrangles.

Over most of its boundaries, particularly to the north, east, and west of both the San Dimas Canyon and San Antonio Wash components, the SEA is bordered by open space within the Angeles National Forest. Generally to the south, however, the borders are mostly defined by the edge of urban development within the San Gabriel Valley. The San Dimas Canyon component covers approximately 5,500 acres and includes portions of Live Oak, Marshall, and San Dimas canyons.The smaller component, San Antonio Canyon, covers approximately 1,200 acres of the San Antonio Canyon alluvial outwash.In total, this SEA encompasses 6,727 acres.

In general, the topography of the SEA is severe, consisting of steep-walled canyons and narrow ridgelines.Elevations range from a high of approximately 3,000 feet above mean sea level (MSL) along the ridges of San Dimas Canyon, to a low of approximately 451 feet above MSL in San Antonio Wash.Several major drainages and numerous tributaries exit the San Gabriel Mountains through this

SEA.

The wide range of elevation, topography, slope aspect, and geology represent a wide array of physical habitats within this SEA.Consequently, a number of plant communities exist, including grasslands, riparian, shrublands, woodlands, and forests.Within these major community types, there are many sub-communities, which vary according to plant species dominance.This area contains the last remaining relatively well-developed lower montane riparian habitat in the eastern County. Dammed drainages have created significant reservoirs or flood control basins in the SEA. The SEA is within several jurisdictions including: the Angeles National Forest, the unincorporated area of the County, the City of Claremont, the City of Glendora, the City of La Verne, and the City of San Dimas.

The more westerly component of this SEA generally includes portions of the lower watersheds of San Dimas, Marshall, and Live Oak canyons, which is part of the San Dimas Canyon component. The San Dimas Canyon watershed is part of the Experimental Forest section of the Angeles National Forest.Experiments were conducted and data was collected here during the latter half of the 20th century to determine the relationships among rainfall, topography, vegetation, and runoff. Much of the work and results influenced flood control in the Los Angeles Basin and even other areas of the U.S. The area was carefully protected through very limited and monitored access.The terrain chiefly includes undisturbed natural habitats of rocky canyon walls and canyon forest, riparian areas of many vegetation types, coniferous and oak forest, chaparral, and grassland.A few slopes were altered with vegetation removal in order to experiment on the effect of vegetation, and some of these are still grassland.

This SEA area on the border of the granitic San Gabriel Mountains has unusual rock strata, such as the Glendora Volcanics.Much of the grassland is natural and has unusual vegetation, such as wildflowers that prefer clay substrates.Not too distant from this area are critical habitat areas for the endangered thread-leaved brodiaea (*Brodiaea filifolia*). Some of these brodiaea and other rare wildflowers could occur in appropriate habitat of the SEA in undiscovered populations.

Beginning at Johnstone Peak in the west, the western boundary follows the ridgeline separating Big Dalton Canyon and San Dimas Canyon. Just before this ridgeline is intersected by Big Dalton Canyon Road, the SEA boundary turns east. From the area of Big Dalton Canyon Road, the northern boundary follows and crosses over a series of ridgelines to include the upper portions of several tributary canyons.It continues in this fashion in a southeasterly direction eventually meeting and following the Sunset Ridge Fire Road (Sunset Peak Motorway), which separates Wolfskill and Marshall canyons.The tributaries San Dimas Canyon include Lodi, West Fork of San Dimas, and San Dimas from near the junction with Wolfskill Canyon. The lower section of Wolfskill Canyon with and below the Wolfskill Falls is included in the SEA. The upper section of Wolfskill is not included in the SEA, but much of Marshall Canyon watershed is included, along with watersheds of Live Oak and Webb canyons in the City of Claremont.

A large lobe of the SEA extends from the Sunset Ridge Fire Road on the dividing ridgeline, to include lush canyon forests and chaparral of the slopes above the City of La Verne and City of Claremont. Most of this lobe is in municipal or private ownership. The Angeles National Forest boundary is about a 0.1 mile south of the Sunset Ridge Fire Road. The eastern boundary leaves the fire road and travels south along a ridgeline, including Live Oak Canyon in the SEA, but separating out the more developed watersheds of Palmer, Cobal, Burbank, and Gail canyons in the City of Claremont.A finger of the SEA includes the lush riparian oak forest of Webb Canyon to the edge of adevelopment.The lobe of the SEA excludes an area around the residences and equestrian areas that surround Live Oak Reservoir.Live Oak Canyon Reservoir and its riparian oak woodland is included as far south as Base Line Road.The ridges and dissected

canyons that border Live Oak Reservoir are included as far south as Base Line Road.However, the flat area of the ridge around Live Oak Reservoir and development in the periphery are excluded.The northwestern edge of the lobe includes the riparian area and slopes of Marshall Creek, but excludes developed areas, such as the Marshall Canyon Regional Park and Golf Course.The lobe boundary returns north into the Angeles National Forest at the Sunset Ridge Fire Road along the edge of Marshall Creek and the western ridge of Marshall Canyon.

From Sunset Ridge Fire Road, the southern boundary of the SEA is within the Angeles National Forest and follows the ridgeline that includes the watershed of San Dimas Canyon.The San Dimas Reservoir, with good habitat for waterfowl, is included in the SEA.The SEA extends a finger out of the Angeles National Forest along San Dimas Canyon road to include the riparian habitat along the watercourse, which is a rare example of the lowland riparian community.From the Angeles National Forest boundary and rocky cliffs above the west side of San Dimas Canyon, the SEA boundary follows the ridge of Lodi Canyon (tributary of San Dimas Canyon) to Johnstone Peak.

The eastern, disjunct segment of the SEA (San Antonio Wash) follows the San Bernardino-Los Angeles County line as its eastern boundary from about a 0.5 mile upstream of the San Antonio Dam through the San Antonio debris basin, past the San Antonio Dam, to the natural extent of alluvial fan vegetation south of the Interstate-210. This is at an area about a 0.1 mile north of Base Line Road.Downstream of the San Antonio Dam has the best example of arroyo or wash vegetation that remains in the County, and it extends onto the adjacent alluvial fan.The vegetation is a dry form of coastal sage scrub, with included desert plants that are adapted to coarse substrate.The vegetation is much more dense and stable than the alluvial fan in the arroyos behind Santa Fe Dam (San Gabriel Canyon SEA) and Hansen Dam (Tujunga Valley-Hansen Dam SEA).From its southern point, the SEA turns north to include the natural alluvial fan vegetation and border on the existing residential development on the alluvial fan.At the intersection of the San Antonio Wash with Mount Baldy Road, the SEA boundary follows the southeast side of Mount Baldy Road to the watershed of Chicken Canyon, which is a tributary of San Antonio Wash.The boundary crosses the road and includes the undeveloped part of Chicken Canyon. The boundary follows the minor ridgeline up to Potato Mountain, and goes along the south ridge of Evey Canyon back to cross Mount Baldy Road and return to the San Bernardino-Los Angeles County line in the San Antonio Debris Basin.Evey Canyon is outside the SEA, but is a preserve of the Claremont Colleges, and has excellent riparian canyon habitat. The SEA designation acknowledges the need to protext the Evey Canyon watershed. Small tributary watersheds of San Antonio Canyon with chaparral vegetation are included with the Chicken Canyon area.

Wildlife Movement

Wildlife movement within the SEA takes on two major forms.First, due to the extreme intervening topography, it is logical to expect considerable movement of wildlife up and down the many sizeable drainages, which course through this SEA and connect the forest interior with foothill areas.The larger the watershed of the drainages, the greater the volume of movement.Consequently, this type of movement occurs on a seasonal and more frequent basis, particularly for large mobile mammals, such as American black bear, mountain lion, coyote (*Canis latrans*), bobcat (*Lynx rufus*) and mule deer (*Odocoileus hemionus*), whose full range of habitat needs are typically met over broad areas.

The second major type of movement occurs across the flanks of the foothills and lower mountains, in an east-west direction.Particularly for riparian-favoring migratory birds, a corridor linking lower elevational riparian habitats in the SEA is expected to be of high use and importance.In addition to providing essential habitat for resident riparian birds, this SEA contains some of the best developed riparian

habitat for birds, which are seasonal visitors to the cismontane region of the County.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

Criteria Analysis of the San Dimas Canyon and San Antonio Wash SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not Met	Although the SEA contains rare plant populations, it does not contain a core population of a listed species and therefore does not meet this criterion. The lower slopes in and around San Dimas Canyon support one of the largest populations of the coastal cactus wren in the County, which is a subspecies that is very threatened throughout its range, although not officially recognized by listing.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA contains habitat of the rare rock monardella.In addition, several plant communities within this SEA are CDFW highest priority communities due to their restricted distribution in the Southern California region, including: walnut woodland, oak riparian woodland, southern willow scrub, coastal sage scrub, and alluvial fan scrub.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution	Met	All of the plant communities and habitats mentioned as being restricted in distribution on a regional basis, are also restricted in distribution within the County.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The major canyons within this SEA support well-developed and diverse riparian woodlands, as well as a source of perennial water. These represent important stopover and overwintering areas for a wide variety of migratory birds, as well as essential habitat for resident species of fauna and flora. These canyons also support seasonal and more frequent movement for wide-ranging mammals, which must move over large areas to fulfill their habitat requirements. The federally-threatened California gnatcatcher has been sighted (2010) in the Glendora foothills, and

			probably maintains a small population along the lowest slopes of the San Gabriel Mountains.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Not Met	The SEA does not contain biotic resources that are clearly an extreme in physical/geographical limitations, or represent unusual variation in a population or community, and therefore does not meet this criterion.However, the extreme localization of several species of plants in the SEA may indicate geographical processes that are not well understood at this time that merit scientific inquiry.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	Virtually all of the native biotic communities within this SEA are relatively undisturbed over most of their extent. Because urbanization throughout much of the County's foothill regions has removed large expanses of these communities, those in the SEA are particularly important to the County's natural heritage.

In conclusion, the area is an SEA because it contains: B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, or migrating grounds, which are limited in availability in the County; and F) areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.

San Gabriel Canyon SEA

Boundary and Resources Description

The San Gabriel Canyon Significant Ecological Area (SEA) is located along the cismontane foothills of the eastern section of these mountains.Generally, the SEA is centered on the mouths of three major canyons, which flow from the mountains and interconnecting terrain. From west to east these include, Santa Anita, Monrovia and Sawpit, and San Gabriel canyons, which are located above the cities of Sierra Madre, Arcadia, Monrovia, Duarte, Bradbury, Irwindale, and Azusa.A substantial part of the eastern and southern part of the SEA along the San Gabriel River is in the California Audubon-designated State Important Bird Area (IBA) of the Los Angeles Flood Control Basin IBA. The San Gabriel River has largely been dammed and channelized, but with infrequent clearing of the detention basins and wash areas, substantial parts of the San Gabriel River have reverted to riparian habitat or the even more rare alluvial fan habitat, and this attracts many resident birds, as well as numerous spring and winter migrants.

The SEA is found within the, Mount Wilson, Azusa, San Dimas, and Glendora U.S. Geological Survey (USGS) 7.5' California Quadrangles.

Over most of its boundaries (north, east, and west), the SEA is bordered by open space within the Angeles National Forest. However, generally to the south, the borders are defined by the edge of urban development within the San Gabriel Valley. The SEA begins in the west at the peak of Mount Wilson within the Angeles National Forest.Traveling east, the northerly boundary follows a major east-west

trending ridgeline to Pine Mountain. This ridgeline defines the separation between the watershed of the San Gabriel River West Fork to the north, and the Santa Anita, Sawpit, and lower San Gabriel canyons to the south. These front-range canyons are tributaries of the San Gabriel River.

At Pine Mountain, the boundary turns south to follow the ridgeline that is the western border of the San Gabriel River, and turns east onto a secondary ridge, and descends towards the San Gabriel River near the Morris Reservoir Dam. This easterly boundary crosses the San Gabriel Canyon at Morris Dam and climbs the adjacent ridgeline to Glendora Ridge and the Glendora Ridge Motorway. The southerly boundary follows the motorway to the west, to the point near the mouth of the San Gabriel Canyon where the motorway leaves the ridgeline. The SEA boundary turns north towards the San Gabriel River, and descends to the opening of the San Gabriel Canyon into the Los Angeles Basin. This is between the Glendora Ridge and the mountains near Fish Canyon.The boundary turns along the southeast side of the San Gabriel River floodplain and follows the east side of the San Gabriel River flood control channel.A development near the mouth of Roberts Canyon that is just north of the river mouth has been excluded from the SEA.

In the mouth of the San Gabriel Canyon is a population of the San Gabriel Mountains live-forever (*Dudleya densiflora*), which is unusual in that it has multiple dense flower clusters, whereas other live-forevers have one or several flower stalks with spaced blooms. This live-forever is extremely limited in rangeand occurs only on the slopes of granitic rubble and canyon walls in the nearby south face of the San Gabriel Mountains. Another population is on private land about one mile upstream of the canyon mouth, on the north-side slope of the Glendora Ridge.Another live-forever population is upstream in nearby Fish Canyon, which is a little downstream of the Fish Canyon Falls. Collections have been made from Mystic Canyon to the east, and Van Tassel Canyon to the west.

The mouth of San Gabriel Canyon and nearby canyons are the principle area for the San Gabriel bedstraw (*Galium grande*), which is another local endemic. The only known populations of the bedstraw and the San Gabriel Mountains live-forever on the planet occur in the County in this small area of the San Gabriel Mountains.

The Los Angeles Flood Control Basin IBA covers all of the SEA in the San Gabriel River and downstream at the Santa Fe Dam Recreation Area. Furthermore, the IBA extends upstream beyond the SEA to the confluence area of the West, North, and East forks of the San Gabriel River in the Angeles National Forest, and it extends downstream beyond Santa Fe Dam to the Whittier Narrows Dam.

A finger of the SEA extends along the San Gabriel River, south of its confluence area with Fish and Van Tassel canyons to pass under the Interstate-210. The finger boundary enlarges around the Santa FeFlood Control Basin and Recreation Area to include one of the last remaining natural alluvial fan habitats in the County. The Santa Fe Flood Control Basin is one of the most unusual vegetation habitats in the County, and has special sensitive species.

The main SEA boundary continues just west of the Van Tassel Canyon confluence along the north side of the Encanto Equestrian Center, along the northern extent of development in the City of Duarte. A lobe of the SEA encloses the natural habitat of the steep watershed areas of Spinks and Maddox canyons, extending to the edge of development in the City of Bradbury. The ridge bordering the southeast side of Bliss Canyon is the western edge of the lobe, and the boundary crosses Bliss Canyon at its upper end near the Van Tassel Truck Trail. At this point the boundary of the SEA has reentered the Angeles National Forest.After crossing Bliss Canyon, the boundary follows the southern ridgeline of Spanish Canyon westward to cross out of the Angeles National Forest, tracking around the northern arm of the

City of Monrovia. The Sawpit Debris Basin is included in the SEA as is the undeveloped part of Monrovia Canyon Park. To the west of Monrovia Canyon, a lobe of the SEA extends along the undeveloped ridges of the San Gabriel Mountains bordered by the urban edges of the City of Monrovia and City of Arcadia.These communities extend into the mountains where the cities have municipal water rights. The southern boundary skirts the edge of development in Santa Anita Canyon, but includes the Santa Anita Debris Basin, Arcadia Natural Park, Big Santa Anita Dam and Reservoir, and the Santa Anita Canyon stream course above the Dam, which has numerous lease-hold cabins north of the 1600 feet elevation contour. The boundary reenters the Angeles National Forest just north of Arcadia Natural Park.

The southern ridge of Sawpit Canyon, from its dam to about a 0.5 mile upstream has a population of the endangered San Gabriel bedstraw (*Galium grande)*, which is an endemic species of highly restricted distribution.It occurs only on the south slopes of the western section of the San Gabriel Mountains.

Within the SEA, just to the south of Arcadia Natural Park is a Santa Anita Canyon tributary, Clamshell Canyon. On the south banks and ridge of Clamshell Canyon is critical habitat for the federally-endangered Braunton's milk-vetch (*Astragalus brauntonii*), which is a locoweed that prefers interbedded sandstone and carbonate substrate, probably deposited near the coastline of former oceans. Very limited areas of this substrate occur at the boundary of the San Gabriel Mountains in this area. Most of the rocks of the San Gabriel Mountains are igneous granites and metamorphic rocks.

Santa Anita Canyon has some stands of Pacific madrone (*Arbutus menziesii*), which is a plant known elsewhere from the Pacific coast north of Santa Barbara to British Columbia. The Santa Anita stands are isolated occurrences, which is one of the few places madrone is found between Santa Barbara and Baja California.

Near the confluence with Winter Creek in the vicinity of Chantry Flats, the southern boundary of the SEA turns west and climbs the southern ridgeline of Winter Creek, including Winter Creek watershed in the SEA and excluding San Olene Canyon on the south. The boundary follows the ridgeline, marking the southern limits of the Winter Creek watershed to Mount Harvard, and then travels along the Harvard ridgeline to Mount Wilson.

The SEA is comprised of three major canyons: San Gabriel, Sawpit, and Santa Anita. In general, the topography of the SEA is severe, consisting of steep-walled canyons and narrow ridgelines. Elevations range from a high of approximately 5,710 feet above mean sea level (MSL) at Mount Wilson, to a low of approximately 660 feet above MSL in San Gabriel Canyon. Numerous drainages and tributaries of the main canyons are included in the SEA and exit the San Gabriel Mountains into the Los Angeles Basin through this SEA.

The wide range of elevation, topography, slope aspect, and geology represent a wide array of physical habitats within this SEA.Consequently, a number of plant communities exist, including grasslands, riparian, shrublands, woodlands, and forests. Within these major community types, there are many sub-communities, which vary according to plant species dominance. Of particular note, this SEA contains the last remaining relatively well-developed lower montane riparian habitats in the eastern County and dammed drainages that have created significant reservoirs or flood control basins in Sawpit and Santa Anita canyons. Enclaves of sensitive plant species and vegetation habitats are found here.Other jurisdictions within the SEA include the unincorporatedarea of the County, the City of Arcadia, City of Monrovia, City of Bradbury, City of Irwindale, City of Duarte,City of Azusa, and the City of Glendora.

Wildlife Movement

Wildlife movement within the SEA takes on two major forms.First, due to the extreme intervening topography, it is logical to expect considerable movement of wildlife up and down the sizeable drainages, which course through this SEA to connect the forest interior with foothill areas.Consequently, this type of movement occurs on a seasonal and more frequent basis, particularly for large mobile mammals whose full range of habitat needs are typically met over broad areas, including American black bear, mountain lion, coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), gray fox (*Urocyon cinereoargenteus*) and other medium-sized mammals.

The second major type of movement occurs across the flanks of the foothills and lower mountains, in an east-west direction. Particularly for riparian-favoring migratory birds, a corridor linking lower elevation riparian habitats in the SEA is of high use and importance. In addition to providing essential habitat for resident riparian birds, this SEA contains some of the best developed riparian habitat for birds, which are seasonal visitors to the cismontane region of the County.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE SAN GABRIEL CANYON SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	The SEA contains a core habitat area for the endangered plant Braunton's milkvetch. The upper San Gabriel River is a core habitat of several native fishes, one of the last areas where three of five original natives occur together: federally-threatened Santa Ana sucker, and the arroyo chub and Santa Ana speckled dace, which is of state concern. All three live in the San Gabriel River in the SEA area. A local population of the speckled dace is known from the mouth of Fish Canyon. The very rare San Gabriel bedstraw and San Gabriel Mountains live-forever only occur in this area of the world.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA contains habitat of extremely rare plants: San Gabriel bedstraw and the San Gabriel Mountains dudleya. In addition, several plant communities within this SEA are CDFW highest priority communities due to their restricted distribution in the Southern California region. These communities include walnut woodland, oak riparian woodland, southern willow scrub, coastal sage scrub, and alluvial fan scrub. The federally-endangered California gnatcatcher has been recently sighted in the Glendora foothills, and probably maintains a small population along the lowest slopes of the San Gabriel

Criterion		Status	Justification
			Mountains.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	All of the plant communities and habitats mentioned as being restricted in distribution on a regional basis, are also restricted in distribution within the County.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The three major canyons within this SEA support well-developed and diverse riparian woodlands, as well as year-round water sources. These represent important stopover and overwintering areas for a wide variety of migratory birds, as well as essential habitat for resident species. These canyons also support seasonal and more frequent movement for wide-ranging mammals, which must move over large areas to fulfill their habitat requirements.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The SEA contains biotic resources that are of scientific interest for their very restricted distributions: Braunton's milkvetch San Gabriel bedstraw, San Gabriel Mountains live-forever, and a local isolated population of Pacific madrone. The population of Santa Ana speckled dace in Fish Canyon may be the remaining extreme western extent of its population.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	Virtually all of the native biotic communities within this SEA are relatively undisturbed over most of their extent. Because urbanization throughout much of the County's foothill regions has removed large expanses of these communities, those in the SEA are particularly important to the County's natural heritage.

In conclusion, the area is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, and migrating grounds, which are limited in availability in the County; E) populations of scientific interest because of very restricted distributions and isolated populations; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

Santa Clara River SEA

Boundary and Resources Description

The Santa Clara River SEA extends along the entire County reach of the Santa Clara River, primarily within unincorporated areas of the County. The SEA encompasses a wide variety of topographic features and habitat types, as well as major tributaries—all of which contribute to this diversity. It is a major biotic corridor for the County (and Ventura County). The orientation and extent of the SEA depends upon the surface and subsurface hydrology of the Santa Clara River, from its headwaters, tributaries, and watershed basin, to the point at which it exits the County's jurisdiction. Nearly all of the SEA is designated by Audobon California as a Globally Important Bird Area (IBA). The Santa Clara River IBA extends beyond the SEA in both upstream and downstream directions (across Soledad Pass to the Barrel Springs area in the Antelope Valley and through Ventura County to the mouth of the River at the Pacific Ocean).

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles:Pacifico Mountain, Acton, Agua Dulce, Sunland, San Fernando, Mint Canyon, Oat Mountain, Newhall, and Val Verde.

The SEA covers a wide variety of topographic features and habitat types, including parts of the watershed tributaries. The biological and ecological functionality of the SEA is integrally linked to the Santa Clara River basin for its entire length. The bio-geographic limits of the SEA would extend downstream through Ventura-Los Angeles County line to its mouth at the Pacific Ocean, and encompass significant tributary drainages of Ventura County (Piru Creek, Sespe Creek, Santa Paula Creek, Wheeler Creek, etc.).

The eastern portion of the SEA follows natural contours at the headwaters of the watershed to incorporate much of upper watershed of Soledad Canyon (which becomes the Santa Clara River), the Kentucky Springs and the Aliso Canyon basins, and the downstream unnamed tributaries of the Santa Clara River to Arrastre Creek.This includes the watershed southern headwater areas within the Angeles National Forest.The headwaters of both Kentucky Springs and Aliso Canyon are in the Angeles National Forest, in semi-arid chaparral and desert scrub habitat; however, the drainages themselves support vegetation of desert and interior riparian habitat, which ranges from Great Basin sagebrush in Kentucky Springs Wash to dense, mature, willow-cottonwood-sycamore woodlands along permanent streams in Aliso Canyon. The surrounding uplands in the basins support pinyon-juniper woodlands, chamise, mountain mahogany, and manzanita-dominated chaparral, buckwheat scrub, and ruderal lands.The alluvial plain formed along the southern margin of the Santa Clara River basin below these canyons supports intact, high diversity xeric alluvial fan sage scrub. Alluvial terraces within both drainages have been extensively cultivated for orchard crops and dryland agriculture, and in more recent years, rural and urban-type residential developments have encroached on the watersheds. The Kentucky Springs basin has a large population of Parish's Great Basin sagebrush (*Artemisia tridentata* ssp. *parishii*), which is considered rare and sensitive in the County. A population of the federally-threatened red-legged frog (*Rana draytonii* FT, SC) is known to inhabit and breed in the Aliso Canyon watershed. Blum Ranch and another area on Aliso Canyon Road are disturbed, with farming development, but important to continuity of the SEA. The Santa Clara River IBA extends in a branch upstream to include Blum Ranch.

The boundary follows the Santa Clara River channel downstream through the Acton basin, paralleling Soledad Canyon Road on the north side, following the toe of the slope of the San Gabriel Mountains to the south. Boundaries continue along the channel margins to the southwest from Acton to Arrastre

Creek, where the southern boundary follows watershed contours to take in four upper tributary channels (Arrastre, Moody, and Bootleggers). Downstream from Acton, there are developed areas as along the Santa Clara River. From a little upstream of the Arrastre Creek confluence to a little downstream in the vicinity of the railroad stop of Lang (about 13 miles of river), the floodplain of the Santa Clara River is designated critical habitat for the federally-endangered arroyo toad (*Anaxyrus californicus*). Some of the confluence area of Mill Canyon is also critical habitat for the arroyo toad. Part of the area of critical habitat for the toad was also proposed as critical habitat for the state and federally-endangered unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), which is a small three-inch fish that essentially only occurs in the County. It once was widespread throughout the Los Angeles Basin and beyond, but is now restricted to the upper Santa Clara River. The proposal for critical habitat was never approved, and this is now referred to as "essential habitat" for the fish.The type area for the fish is the Arrastre Creek, where it was first collected and described with a museum specimen.

The habitat along the Santa Clara River supports the largest community of riparian-obligate birds between Santa Ynez River in Santa Barbara County and the Prado Basin in Riverside County. In the Soledad Canyon stretch are breeding summer tanager (*Piranga rubra*) and other desert species, along with some instances of least Bell's vireos (*Vireo bellii pusillus*), coastal cactus wrens (*Campylorhynchus brunneicapillus sandiegensis*), and southwestern willow flycatchers (*Empidonax traillii extimus*) from the coastal influence areas.The area is notable for having a combination of species that are characteristic of the desert and characteristic of coastal-influence.

Just west of the confluence with Arrastre Creek the northern boundary loops up to the slopes of Parker Mountain and the eastern watershed of Hughes Canyon around the basal contours of significant rock outcroppings above the river basin, and on the south side, around the Mill Canyon tributary basin. The rocky buttes on the north side of the river, while only a minor part of the watershed of the river, provide important nesting, roosting, and sheltering habitat values for bats, birds of prey, and other sensitive species foraging along the river corridor. The boundaries stay at the river margins west to the watersheds of two northern tributaries, Nellus and Bobcat canyons. These drainages were identified by the South Coast Wildlands Project as important to connectivity across the Santa Clara River between the western and eastern highland areas of the San Gabriel Mountains.

At the Agua Dulce Canyon drainage, the northern boundary loops around the watershed, including the Vasquez Rocks County Natural Area. Agua Dulce Canyon has a permanent stream and supports high quality riparian habitat from the confluence with the river to the intersection with State Route-14. The Santa Clara River IBA extends upstream to include about one mile of the Agua Dulce Canyon.

The Agua Dulce underpass of State Route-14 is an important crossing of the highway barrier for wildlife. From that point, north riparian areas exist where the creeks (Agua Dulce and Escondido) pass through Vasquez Rocks County Natural Area. The Agua Dulce Canyon extension was included in the SEA for its value as a wildlife corridor to provide connectivity across the Santa Clara River between the western and eastern highland areas of the San Gabriel Mountains.The extension includes the watershed of Bee Canyon, which is a downstream tributary of the Santa Clara River. Bee Canyon has an important population of the federally-endangered slender-horned spineflower (*Dodecahema leptoceras*) in its broad, floodplain area. In the Bee Canyon slopes of coastal sage chaparral, the federally-threatened coastal California gnatcatcher (*Polioptila californica californica*) is sometimes resident. The Bee Canyon area has some underpasses of the State Route-14 that could be used by smaller wildlife if maintained unclogged. The extension includes upper watersheds of Spring and Tick canyons to enhance the connective area. Beyond upper areas of Tick Canyon, the SEA boundaries cross Mint Canyon into the

Angeles National Forest and the watershed of Rowher Canyon. The SEA continues to the upper reaches of Rowher Canyon onto the main ridgeline of the Sierra Pelona.At the Mint Canyon crossing, just southwest of the community of Sleepy Valley, a lobe of the SEA extends along Mint Canyon to capture riparian woodlands of coast live oak, with a number of heritage trees (diameters greater than 36 inches).Residences are scattered and the natural communities of chaparral are intact on the canyon slopes.

The southern boundary of the SEA opposite the confluence with Agua Dulce Canyon includes the flood plain. The SEA dips southward into the lower portion of Bear Canyon (tributary of Santa Clara River) and includes undeveloped alluvial terrace slopes of the river downstream of Bear Canyon. The flood plain is a narrowed part of the SEA in the vicinity of Lang, which is a railroad stop on the transcontinental railroad line that runs the length of the Soledad Canyon. Downstream from Lang, the SEA expands to the southern slopes between Lang and Oak Spring Canyon, adjacent to the river channel. Downstream of Oak Canyon, the SEA narrows to the flood plain, passes Sand Canyon, and reaches the west ridge of Sand Canyon. A broad finger of the SEA goes south along the ridgeline of the Sand Canyon watershed, where the finger expands when it reaches the watershed of Placerita Canyon.

The alluvial fans of Oak Springs Canyon and Sand Canyon are important recharge grounds for the river aquifer. Surface flows from both canyons enter the Santa Clara River basin through natural, unconfined channels. Recognizing the importance of the Sand Canyon drainage, the SEA boundaries are drawn to encompass the entire upper Sand Canyon watershed, which is largely natural with scattered residences, as well as the Sand Canyon tributary, Bear Canyon.Most of the upper Sand Canyon and its Bear Canyon tributary are within the Angeles National Forest, and Sand Canyon originates on the peak of Magic Mountain.These canyons form a natural movement zone for wildlife traversing among the western end of the San Gabriel Mountains, the eastern end of the Santa Susana Mountains, and the Santa Clara River basin. Together, they encompass a spectrum of significant and unique habitat, vegetation and wildlife resources. The major habitat linkage zones and watersheds between the river basin and the Angeles National Forest, and the protected areas of the County (Placerita Canyon Natural Area), have also been included within the SEA boundary. Near the peak of Magic Mountain, the boundary contours to the southwest, and then proceeds west along the Santa Clara Divide to its intersection with the junction of Interstate-5 and State Route-14. Natural areas of the Sand Canyon watershed, along with the major topography of ridgelines, earthquake escarpments, grasslands, and canyon habitat features and watersheds of Bear, Placerita, Whitney, and Elsmere canyons are the important features of the wildlife linkage. Existing rural residential developments are excluded from the SEA, but the remaining natural highland areas of the western banks of the Sand Canyon watershed are included. These are integral parts of the river basin recharge system and functional ecosystem.

Parts of this area have coastal sage scrub and are critical habitat for the threatened coastal California gnatcatcher. The watershed of Placerita Canyon southeast of the State Route-14 is generally critical habitat for the federally-threatened coastal California gnatcatcher. An area of development surrounding the Placerita Creek near State Route-14 is excluded from the critical habitat. The critical habitat area for the gnatcatcher extends along the east side of State Route-14 beyond Placerita Creek and envelops watersheds into the Angeles National Forest along Whitney Canyon, Elsmere Canyon, and southward over the main ridge of the San Gabriel Mountains, into Grapevine Canyon in its upper natural watershed. Upper areas of these canyons with oaks and big-cone Douglas fir are habitat for the California spotted owl (*Strix occidentalis*)

The eastern half of the Los Piñetos undercrossing of State Route-14 on old oil development roads is included, and focuses on a major wildlife conduit connecting the Santa Susana Mountains to the San

Gabriel Mountains, and to the Santa Clara River. The adjacent part of the Santa Susana Mountainsand Simi Hills SEA includes the west half of the Los Piñetos undercrossing of State Route-14, connecting through the natural oak woodlands and drainages adjacent to the San Fernando Pass. This area, once called "San Francisco" or "Newhall Wedge," is north and west of the junction of Interstate-5 and State Route-14 with The Old Road running through it. The Newhall Wedge area is nearly all critical habitat for the coastal California gnatcatcher. This critical habitat of the Newhall Wedge is adjacent to the gnatcatcher critical habitat across State Route-14 in the SEA, but is in the Santa Susana Mountains and Simi Hills SEA.

The SEA boundary borders State Route-14 from the north ridge of Grapevine Canyon and heads northeast from the Los Piñetos undercrossing, on the natural side of existing development east of State Route-14. The area around development along Running Horse Road off Placerita Canyonhas been excluded from the SEA. The movie-shoot ranch at the junction of State Route-14 and Placerita Canyon has much area with development or staging excluded, but there is a connected finger of the SEA in Placerita Canyon that leads to the Placerita Canyon watercourse underpass. Much of the watercourse underpass is used by wildlife to transition between the natural areas of Placerita Canyon and the oil field area on the west side of State Route-14. The SEA narrows to the western hills of Sand Canyon beyond the movie-shoot ranch, to avoid developed areas, and continues back to the river margin at Humphreys railway stop, about a 0.4 mile west of its previous point of departure from the river channel.The boundary was drawn to avoid existing major development, but connect the uplands to the river basin.The narrow aperture for the linkage at the Santa Clara River reflects the remnant nature of the last unobstructed terrestrial passageway between the upland areas and the river.

West of Sand Canyon, the river has been intermittently armored to allow for development within flood hazard zones. From Sand Canyon westward through the residential neighborhoods of Santa Clarita, the SEA boundary continues on the margins of the flood plain to the confluence with San Francisquito Canyon. The segment of the Santa Clara River passing through the City of Santa Clarita is a dry channel, except during seasonal runoff flows. Some irregular extensions go north into tributaries that have remnant riparian habitat and probable outflows from irrigation runoff that flows into neighborhood storm drains. Regardless of the intermittent nature of water, the river bed elevated areas among braided channels support relatively intact stands of alluvial sage scrub, riparian woodland, and southern riparian scrub. The dry zones are essential to the continued genetic isolation and integrity of the unarmored three-spine stickleback population in the upper reaches of the Santa Clara River.

The boundary extends northward upstream into the reaches of San Francisquito Creek (formerly a separate SEA, but now included with the SEA), following the approved development setback limits, north into the Angeles National Forest (Santa Clara/Mojave Rivers District).The SEA continues nearly the length of the San Francisquito Creek to beyond the junction with South Portal Creek in the vicinity of the community of Green Valley. The Santa Clara River IBA extends in a branch upstream in close proximity to the crossing of Copper Hill Drive.

As the channel enters the Angeles National Forest, flows become less seasonal, and riparian resources expand and diversify. San Francisquito Creek supports dense and mature southern riparian scrub and riparian woodland formations, along with small areas of freshwater marsh, which provide essential wintering areas and resident habitat for waterfowl, wading birds, marshland birds, and a variety of other vertebrate species. The headwaters of San Francisquito Creek are on a low ridge that bounds the San Andreas Fault Zone, and this is an important connective element of the SEA, in that it completes the path from the Pacific Ocean through the mountains to the Mojave Desert. The sub-watershed and flood plain of the San Francisquito Creek perennial flow in the Angeles National Forest jurisdiction is

designated critical habitat for the federally-threatened red-legged frog, which extends from about the Angeles National Forest southern boundary to about one mile south of the junction with Bee Canyon.Much of the San Francisquito Creek is considered essential habitat (one of three areas) for the endangered unarmored threespine stickleback, although the fish has not been found in the San Francisquito Canyon in recent years.

The boundaries west of the confluence with San Francisquito Creek follow the river margins under the Interstate-5 to the Castaic Creek confluence, at which point the northern setback line has been drawn around the lower portion of Castaic Creek, which embraces the riparian habitat areas around and above the confluence. Castaic Creek is the tributary with the largest watershed for the Santa Clara River in the County. The SEA boundaries go upstream about four miles along the watercourse of Castaic Creek to the crossing of Lake Hughes Road, which is just downstream of Castaic Lagoon. The Santa Clara River IBA extends in a branch upstream into Castaic Creek for approximately one mile.

Relatively extensive areas of willow-cottonwood forest and southern riparian scrub occur west of San Francisquito Creek and within the junction zone of Castaic Creek and the Santa Clara River. These river forests support numerous sensitive species and provide multi-layered riparian habitat for a wide diversity of wildlife species, particularly birds of prey and riparian-obligate song birds, such as the federally-endangered least Bell's vireo (*Vireo bellii pusillus*) and the southwestern willow flycatcher (*Empidonax traillii extimus*).

Federally-designated critical habitat for the endangered arroyo toad extends from the east side of Interstate-5, from the junction of the Santa Clara River with San Francisquito Creek, under the Interstate-5, about 5.8 miles to the confluence, with an unnamed drainage just upstream of the confluence of the river with San Martinez Chiquito. The critical habitat area for the toad also includes the flood plain of Castaic Creek as far upstream as the Interstate-5 undercrossing (about 2.5 miles), and for about one mile upstream into the natural area of Hasley Canyon, a tributary of Castaic. Coincident with the critical habitat for the toad is critical habitat for the endangered least Bell's vireo (FE, SE). Critical habitat for the vireo extends along the floodplain from the Rye Canyon undercrossing of the river (west side of Interstate-5), over the Ventura-Los Angeles County line, to about a mile short of the confluence of the Santa Clara River with Piru Creek in Ventura County (about 9 miles). The river area from near Interstate-5 towards the Ventura-Los Angeles County line is "essential habitat" for the threespine stickleback.A disjunct SEA area is on a ridge south of the river bend at Castaic Junction (interchange of Interstate-5 and State Route-126). This area supports a population of the federal candidate and state-endangered San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*, FC, SE), which is a diminuitive, once-common flower of slopes within the San Fernando Valley and adjacent passes and mountain ranges. The plant became so rare that it was believed to be extinct until it was rediscovered during required surveys for development.

Beyond the confluence with Castaic Creek, the boundaries of the SEA follow the margins of the Santa Clara River channel to the Ventura-Los Angeles County line. The Santa Clara River IBA has a lobelike expansion opposite the confluence with San Martin Chiquito, extending south to cover diverse topography from river cliffs to confluence flood plains in the area around Potrero Canyon.

The Santa Clara River channel and its alluvial terraces and tributary creeks together form the single most important and natural wildlife movement zone through the County. Mobile species can enter the river basin anywhere along its length (outside of developed areas) and proceed in either direction without having to pass through narrow culverts or blind channels, with continuous vegetative cover and only short stretches of dry substrates. The overall drainage course provides a continuum of aquatic and

terrestrial movement opportunities, shelter, forage, and resident habitat from the mouth of the river at Ventura County and the Pacific Ocean, to the Antelope Valley. The drainage course connects to both districts of the Angeles National Forest, and links together three large public resource preserves (Vasquez Rocks and Placerita County Natural Areas and the Angeles National Forest).

Wildlife Movement

Historically (and prehistorically) the riparian corridor along the Santa Clara River has served as the primary east-west linkage between the Pacific coastline, coast ranges, interior ranges, high desert and southern Sierra (via the Tehachapi Range). Animals moving through the Santa Clara drainage had unobstructed passage along the river and within the riparian systems between the coastal lowlands of Ventura County and the Mojave Desert. The tributary routes extend south into the Santa Susana Mountains, south and north into the San Gabriel Mountains, northward via Castaic, Bouquet and San Francisquito tributaries (over the coastal ranges and San Gabriel Mountains of the Transverse Ranges and into the San Joaquin Valley), west into the central coast ranges, or east through the Tehachapi Mountains, and into the southern Sierra Nevada. The present configuration of the tributary drainages has impinged upon connectivity from the Santa Clarita Valley to the north, but the Santa Clara River remains relatively intact and open. The SEA embraces the river corridor and the linkage zones that are considered essential to ensuring connectivity and resource values within the historic movement zones for all of the wildlife species present within the County portion of the Santa Clara River, including mountain lion, coyote, bobcat, and several medium-sized mammals, as well as birds, reptiles, amphibians, and fishes.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE SANTA CLARA RIVER SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	The only existing natural population of the federally-endangered unarmored three-spine stickleback is within the Santa Clara River and its tributaries, and all of its essential habitat is in this SEA. The federally-threatened Santa Ana sucker occurs in the river, as does the state species of concern, the arroyo chub. The population of state and federally-endangered slender-horned spineflower in Bee Canyon is one of fewer than seven known occurrences for this species, one of only two known occurrences in the County, and one of its largest populations. San Francisquito Creek has a breeding area for the endangered red-legged frog. The San Fernando Valley spineflower (at Newhall Ranch in Interstate-5 vicinity) is found in only a few nearby places. Some of the critical

Criterion		Status	Justification
			habitat for the threatened California coastal gnatcatcher is included in this SEA. Western spadefoot, which is a species of concern, is extremely rare and local in the County away from this SEA. One of the largest, if not largest populations of least Bell's vireo in the County occurs along the river in the vicinity of the crossing of Interstate-5 near Newhall Ranch. Many RPR-listed rare plants occur within the SEA. Critical habitat occurs in the SEA for the listed arroyo toad, the red-legged frog, the coastal California gnatcatcher, and the least Bell's vireo.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The low-elevation bigcone Douglas fir-canyon oak forests above Placerita Canyon, the vernal pool in the Placerita Canyon-Sand Canyon divide, the native grassland on the Golden Valley Ranch (upper Placerita Canyon), and the alluvial fans with sage scrub in lower San Francisquito Canyon, Kentucky Springs and Acton are unique and regionally restricted biotic communities. Additionally, the riparian forests and woodlands along the Santa Clara River are among the most extensive, diverse and intact vegetative stands of this type in Southern California.Rare aquatic species, such as the unarmored three-spined stickleback, Santa Ana sucker, red-legged frog, least Bell's vireo, summer tanager, spineflower, and many others represented within the SEA are found nowhere else in the region.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The cottonwood-willow forests and woodlands, alluvial fan sage scrub, and coast live oak riparian forest are best represented in the County within the SEA. The lower elevation examples of bigcone Douglas fir-canyon oak forest communities where they mix with low-elevation biota are restricted to the edges of mountain habitat communities, which are regionally rare and also designated in this SEA.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally	Met	The Santa Clara River is simultaneously an oasis running through a dry landscape and an extension of coastal conditions into the dry interior. For this reason, it supports unique populations of aquatic and amphibious species, as well as aridlands species extending towards the coast and coastal species' extension inland. It is a principle migratory route for the County plants and animals and a center of diversity for the County. The Santa Clara River and its

Criterion		Status	Justification
	or in the County.		tributaries provide breeding opportunities for numerous species otherwise not known to breed within the County, including California red-legged frog, summer tanager, southwestern willow flycatcher, and the unarmored three-spined stickleback . The extensive riparian areas shelter dozens of migrant songbird species during winter, including high concentrations of white-crowned and golden-crowned sparrows, fox sparrow, yellow-rumped warbler, dark-eyed junco, and sharp-shinned hawk. The SEA embraces the river corridor and the linkage zones that are considered essential to ensuring connectivity and resource values for many of the wildlife species that are present within the County portion of the Santa Clara River.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The Santa Clara River represents a unique example of a drainage that stretches from the desert to the coast through the mountains. Its resources are, by definition, present at their geographic extremes. Plants such as western juniper, snake cholla, basin sagebrush, and birds, such as summer tanager are at the southwestern edges of their ranges along the river. Coastal taxa extend to the headwaters in the Acton area. High elevation species, such as bigcone Douglas fir, spotted owl, and Steller's jay occur at fairly low elevations at the edges of Santa Clara River valley, on north facing slopes that remain cool all summer.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The SEA encompasses some of the highest quality, least disturbed and biotically intact acreage of bigcone Douglas-fir-canyon oak forest, riparian forest and woodland, coastal sage scrub, and alluvial fan sage scrub that remains in the County, and one of the three known vernal pools along the river.Vernal pools are rare everywhere in California.

In conclusion, the area is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, or migrating grounds, which are limited in availability in the County; E) numerous examples of species at their habitat extremes as the coastal and desert influences meet; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

VI. Watersheds

Antelope Valley Watershed

The southern half of the Lahontan hydrologic region is located in the Antelope Valley. Unlike the coastal watersheds in Los AngelesCounty, it is a closed basin onthe edge of the Mojave Desert, having no outlet to the ocean or major river system. Numerous streams drain the north-facing San Gabriel Mountains, carrying rainfall and snow melt from the Angeles National Forest into the Antelope Valley. Significant stream systems in the Antelope Valley are Amaroosa Creek, Big Rock Creek, and Little Rock Creek.

During most years, the rainfall in the Antelope Valley is scant, averaging less than eight inches per year. Every few years, major storms cause flooding, sending sheets of water flow across the eastern portion of the Antelope Valley to the dry lakebeds of Rosamond and Rodgers lakes in Kern County. Uninhibited by development, the sheet flow filters into the groundwater basin or evaporates on the lakebeds, leaving the surface smooth and flat. This natural runoff process is important for two reasons: 1) it benefits the local communities with groundwater recharge; and 2) it seasonally resurfaces the dry lake beds, which are used for aircraft landings at Edwards Air Force Base.

The Lahontan Regional Water Quality Control Board monitors the Antelope Valley watershed through its Basin Plan for the region. The Basin Plan calls for land use controls to help reduce pollutants in stormwater runoff. In particular, the Basin Plan advocates for limiting impervious surfaces, restoring natural vegetation and protecting the headwaters of stream channels and riparian areas.

Los Angeles River Watershed

The Los Angeles River watershed covers approximately 870 square miles, a small part of which extends into Ventura County. It includes the San Fernando Valley and is the largest watershed in the Los Angeles Basin. The river extends 51 stream miles, from the confluence of Bell Creek and Arroyo Calabasas, to the Pacific Ocean. The first 32 miles of the river flow through the cities of Los Angeles, Burbank, and Glendale, and then, subsequently, through Vernon, Commerce, Maywood, Bell, Bell Gardens, Lynwood, Compton, South Gate, Paramount, Cudahy, and Long Beach. Numerous tributaries feed the Los Angeles River, as it flows through the San Fernando Valley and the coastal plain to the Long Beach Harbor. These tributaries include Tujunga Wash, Verdugo Wash, Arroyo Seco, Rio Hondo, and Compton Creek. Several important biotic communities exist in the northern tributaries that feed the river, including freshwater marsh areas in Tujunga Canyon and the Hansen Flood Control Basin. The natural habitat in these tributaries provides a semi-protected corridor for wildlife between the Angeles National Forest, Santa Monica Mountains National Area, and the Los Angeles River.

By 1960, the Los Angeles River was lined with concrete along most of its length by the U.S. Army Corps of Engineers in order to prevent the loss of lives and property from flood damage. As a result, the Los Angeles River's sole purpose for years was efficient water conveyance—carrying stormwater from the land to the ocean as quickly as possible. Efforts continue under the auspices of the Los Angeles County Flood Control District to capture as much stormwater as possible and redirect it to regional groundwater recharge areas to replenish groundwater basins, saving thousands of acre-feet of water every year.

The volume of pollutants that enters the Los Angeles River is extremely high due to accumulated urban stormwater runoff from the hundreds of square miles of impervious land uses that flank the Los AngelesRiver. To address these problems, the County, the Flood Control District, local jurisdictions, a variety of stakeholders, and the Los Angeles Regional Water Quality Control Board are implementing

programs to reduce the number and concentration of pollutants that enter the Los Angeles River.

Over the past two decades, interest the Los Angeles River's recreational and ecological functions has reemerged, culminating in a riverwide planning effort in the 1990s, which resulted in the adoption of the *Los Angeles River Master Plan* by the Board of Supervisors in 1996. The Plan was created through a cooperative effort by the County and many river stakeholder groups for the enhancement of aesthetic, recreational, flood protection and environmental functions of the Los Angeles River. The Plan seeks to do so by expanding bikeway, walking and equestrian trails to and along the Los Angeles River, enhancing existing trails and habitat with landscaping, and promoting economic development opportunities. Since the adoption of the Plan, an advisory committee has overseen many new projects, including bike trails, pocket parks, equestrian trail enhancements, art and signage. So much public interest in the river has been generated that many more improvements are anticipated in the future. The County's Bicycle Master Plan also prioritizes the Los Angeles River bike path.

The County is also working with various organizations and agencies that are involved in watershed-related planning activities, such as the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the Council for Watershed Health, and the Flood Control District. The attention being paid to the watershed has resulted in a better understanding of its functions and generated an unprecedented network of residents, private organizations and government entities dedicated to watershed management. The County has also partnered with the City of Los Angeles on implementation of its 2007 Los Angeles River Revitalization Master Plan.Subsequently, the County Board of Supervisors and Los Angeles City Council adopted the Los Angeles River Memorandum of Understanding, which established the Los Angeles River Cooperation Committee to prioritize cooperative implementation of Los Angeles River projects. In addition, the County is a partner in the U.S. Army Corps of Engineers' Los Angeles River Ecosystem Restoration Feasibility Study (started in 2006 for which the City of Los Angeles is serving as primary local sponsor). The County is also a partner with the U.S. Bureau of Reclamation on the Los Angeles Basin Study to prioritize stormwater capture and infiltration that will result in watershed-wide conservation.

San Gabriel River Watershed

The San Gabriel River watershed encompasses part of the Angeles National Forest, the San Gabriel Valley, and large urban areas in southeast portion of Los AngelesCounty. It is bounded by the Los Angeles River on much of its western flank, and extends to San Bernardino and Orange counties. Totaling more than 640 square miles, the watershed has extensive areas of un-channeled tributaries, which support riparian and woodland habitats. Its northern reaches in the Angeles National Forest are dramatically different from the developed 167 square miles in the Los Angeles Basin. The U.S. Congress has preserved two wilderness areas within this watershed: the San Gabriel Wilderness Area, 36,215 acresalong the west fork of the San Gabriel River, and Sheep Mountain Wilderness Area, 31,680 acres along the east fork of the San Gabriel River.

The main watercourse in this watershed is the San Gabriel River. The San Gabriel River extends 59 stream miles from the Angeles National Forest to the Pacific Ocean, draining 350 square miles of land. It also recharges groundwater tables in several basins. The major tributaries that feed the San Gabriel River include Coyote Creek, Walnut Creek, Puente Creek and San Jose Creek. The upper section of the San Gabriel River and its tributaries are still considered relatively pristine. However, intensive recreational use and erosion due to wildfires in this area may threaten water quality and wildlife that depend on the river. The middle section of the river has been extensively modified throughout the San Gabriel Valley to diminish flood damage and encourage groundwater recharge. The lower section,

similar to the Los Angeles River, is lined with concrete from Firestone Boulevard to the bay. In contrast to the upper and middle sections of the river, dry weatherflow in the lower section stems primarily from urban runoff and treated effluent from municipal wastewater treatment facilities.

A clear link exists between the health of this watershed and the quality of life for millions of Los Angeles County residents. The upper reaches of the San Gabriel River support wildlife, deliver drinking water and provide a myriad of recreational opportunities. To protect and enhance the multiple benefits of this resource a riverwide planning effort entitled *San Gabriel River Master Plan* was adopted in 2006. This effort, spearheaded by the County, brings together a dynamic group of stakeholders, including the 13 cities along the San Gabriel River, residents, environmental groups and many business and community leaders.

The County is working with stakeholders, such as the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the Santa Monica Mountains Conservancy, and the Flood Control District. Together, stakeholders developed a watershed and open space plan in 2001 entitled *Common Ground: From the Mountains to the Sea* that provides general guidelines for improvement of the San Gabriel and Lower Los Angeles Rivers watersheds through community development, public awareness, preservation of open space and creation of recreational opportunities—particularly along the rivers.

Santa Clara River Watershed

The Santa Clara River watershed is an extensive hydrologic system that encompasses the western portion of the Angeles National Forest in Los Angeles County and the eastern portion of Los Padres National Forest in Ventura County. The Santa Clara River—an essential component of this watershed—recharges local groundwater, provides riparian habitat and supplies water to downstream agricultural lands in Ventura County. It is the largest relatively unaltered river system in Southern California, and the single most important natural wildlife corridor in Los Angeles County. The Santa Clara River and its tributaries provide drainage for approximately 654 square miles of the upper watershed within Los Angeles County. The Santa Clara River's major tributaries include Soledad Canyon, Castaic Creek, San Francisquito Canyon Creek, Bouquet Canyon Creek, Sand Canyon Creek, Mint Canyon Creek and Santa Clara River South Fork. Several endangered species are found in this watershed, including thearroyo toad and the unarmored three-spine stickleback. Another important stretch of the Santa Clara River supports a variety of riparian-obligate songbirds and birds of prey between Castaic Junction and Blue Cut near the Ventura County line, where the groundwater basin thins and narrows, forcing groundwater toward the surface.

A link exists between the health of this watershed, particularly its tributaries, and development in the area. Urban expansion in the 1990s and early 2000s impacted the watershed on several levels, including a reduction in local water supplies and disappearing open space. Furthermore, the land use activities in this area have created many square miles of impervious surfaces, which have created more urban runoff and reduced the amount of water that would naturally percolate into groundwater basins. By employing watershed management techniques, the County aims to curb this trend.

VI. Agricultural Resources

Agricultural Resource Areas Methodology

Map 4.3 in the Conservation and Open Space Element shows the Agricultural Resource Areas (ARAs), where the County promotes the preservation of agricultural activities. The ARA boundaries were derived

from farmland identified by the State Department of Conservation, including Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland. In addition, the ARAs include lands that received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures.

To reflect changes in land uses and address environmental concerns, the following were excluded from the ARAs:

- Significant Ecological Areas (SEA) and Ecological Transition Areas (ETA);
- Approved specific plan areas;
- Approved large-scale renewable energy facilities;
- Lands outside of the Antelope Valley, where farming is concentrated; and
- Lands that are designated Public and Semi-Public (P).

Data from the U.S. Census of Agriculture

Table E.1: Change in Number and Acreage of Farms in Los Angeles County, 1987-2007

	1987	**1992**	**1997**	**2002**	**2007**
Farms (number)	2,035	1,446	1,226	1,543	1,734
Change from previous year	-	-589	-220	317	191
Percent change from previous year	-	-28.94%	-15.21%	25.86%	12.38%
Land in farms (acres)	280,156	183,569	130,838	111,458	108,463
Change from previous year	-	-96,587	-52,731	-19,380	-2,995
Percent change from previous year	-	-34.48%	-28.73%	-14.81%	-2.69%

Source: U.S. Census of Agriculture, 1987-2007.