

Chapter 4

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CONSERVATION AND OPEN SPACE ELEMENT

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 to 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 (see Map 4.2: Renewable Energy Production Site Priority Map). As technologies and resources change, the Goals and Policies of this Element will be used to assist in the transition to reliance on renewable forms of energy, which will reduce greenhouse gas emissions.

Vision and Strategy

In order to serve the Area Plan'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 environmental 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 with existing 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 served by public water infrastructure through appropriate land use designations with very low densities.
- **Policy COS 1.3:** Limit the amount of potential development in groundwater recharge areas through appropriate land use designations with very low densities.

- **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 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:** Support agricultural practices that require little water, such as dry farming.
- **Policy COS 2.5:** Discourage water intensive recreational uses, such as golf courses, unless recycled water is used to sustain these uses.
- **Policy COS 2.6:** Discourage the use of potable water for washing outdoor surfaces.
- **Policy COS 2.7:** Support experiments in alternate forms of water provision and re-use, such as "air to water technology" and gray water systems.
- **Policy COS 2.8:** Limit use of groundwater sources to their safe yield limits.
- **Policy COS 2.9:** 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 function of ecosystems.
- **Policy COS 3.5:** Protect underground water supplies by enforcing controls on sources of pollutants.

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 center areas and rural town areas, minimizing the potential for habitat loss and negative impacts on Significant Ecological Areas.
- **Policy COS 4.2:** 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 densities.
- **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 to provide adequate buffers from preserves, sanctuaries, habitat areas, wildlife corridors, State Parks, and National Forest lands.
- **Policy COS 4.5:** Encourage connections between natural open space areas to allow for wildlife movement.
- **Policy COS 4.6:** 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 4.7:** 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 4.8:** Ensure water bodies are well-maintained to protect habitat areas and provide water to local species.
- **Policy COS 4.9:** Restrict development that would reduce the size of water bodies, minimizing the potential for loss of habitat and water supply.
- **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.

Scenic Resources

Goal COS 5

The Antelope Valley's scenic resources, including 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 by designating them as Scenic Resource Areas.
- **Policy COS 5.2:** 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.

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 through appropriate land use designations with very low densities, minimizing the potential for future land use conflicts.
- **Policy COS 6.2:** Limit 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 farmers 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 incentive programs for farmers, such as Williamson Act contracts and conservation easements.
- **Policy COS 6.8:** Support innovative agricultural business practices, such as agricultural tourism and cooperative processing, 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 agricultural practices that require little water, such as dry farming.
- **Policy COS 7.3:** Support the use of alternative and renewable energy systems in conjunction with agricultural activities.
- **Policy COS 7.4:** Encourage sustainable agricultural and water quality best management practices such as runoff detention basins, use of vegetation filter strips, and organic farming.
- **Policy COS 7.5:** 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.

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, require 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 in existing landfills to generate energy and reduce greenhouse gas emissions from waste disposal.
- **Policy COS 10.5:** Encourage the development of emerging energy technologies, such as “solar roads.”

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, such as solar facilities and wind facilities, in the Antelope Valley.

- **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, such as solar facilities and wind facilities, in the Antelope Valley.
- **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 and wind facilities, to priority locations on the Renewable Energy Production Priority Map (Zones 1 through 3) where environmental, noise, and visual impacts will be minimized.
- **Policy COS 13.2:** In the High Priority Zone (Zone 1) of the Renewable Energy Production Priority Map, require basic conditions and mitigation measures for utility-scale renewable energy production facilities during the application review process because of the limited potential impacts they may have on known sensitive biotic communities.
- **Policy COS 13.3:** In the Medium Priority Zone (Zone 2) of the Renewable Energy Production Priority Map, require moderate conditions and mitigation measures for utility-scale

renewable energy production facilities during the application review process because of the potential impacts they may have on the swainson's hawk, Mojave ground squirrel, and desert tortoise species habitats, which are known sensitive biotic communities.

- **Policy COS 13.4:** In the Low Priority Zone (Zone 3) of the Renewable Energy Production Priority Map, require stringent conditions and mitigation measures for utility-scale renewable energy production facilities during the application review process because of the potential impacts they may have on Significant Ecological Areas, which are known sensitive biotic communities.
- **Policy COS 13.5:** Allow utility-scale renewable energy production facilities outside priority locations on the Renewable Energy Production Priority Map (Zones 1 through 3), provided that a contiguous site has been assembled near new transmission lines on previously disturbed lands that are not designated as Prime Farmland by the State of California, and require stringent conditions and mitigation measures for such facilities during the application review process because of potential impacts.
- **Policy COS 13.6:** Restrict development of utility-scale wind energy production facilities within the Edwards Air Force Base Impact Area, as identified on the Renewable Energy Production Priority Map, to limit interference with military operations.
- **Policy COS 13.7:** Require all utility-scale renewable energy production facilities to implement a decommissioning plan 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 13.8:** Promote the use of recycled water in utility-scale renewable energy production facilities to limit impacts on the available fresh water supply.
- **Policy COS 13.9:** 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 13.10:** Ensure that all utility-scale renewable energy production facilities, such as solar facilities and wind 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 13.11:** Limit the aesthetic impacts of utility-scale renewable energy production facilities to preserve rural character.
- **Policy COS 13.12:** 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 13.13:** Review and update the Renewable Energy Production Priority Map when any boundaries within the data layers are revised.

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 placed 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 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.
- **Policy COS 14.8:** When new transmission lines are developed, review and update the Renewable Energy Production Priority Map to reduce the need for long distance tie-ins from utility-scale renewable energy production facilities to electric utility substations.

Dark Night Skies

Goal 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 COS 15.4:** Coordinate with the International Dark Sky Association to develop appropriate standards for public and private outdoor lighting 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:** Require new development to minimize removal of native vegetation. Discourage the clear-scrapping of land and ensure that a large percentage of land is left in its natural state.
- **Policy COS 16.2:** Require that native vegetation be used in all 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:** Require green building techniques for the construction and operation of all public and private buildings.
- **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 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;
 - Lands 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:** Require new development in Hillside Management Areas and Significant Ecological Areas to comply with applicable Zoning Code requirements for open space preservation.
- **Policy COS 19.2:** 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 19.3:** 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 protected through deed restrictions.
- **Policy COS 19.4:** 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.

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