4.2 AGRICULTURAL RESOURCES

This section describes the existing agricultural resources located on and immediately surrounding the East Area 1 Specific Plan area (project site), potential environmental impacts, recommended mitigation measures to help reduce or avoid identified impacts, and the level of significance of adverse impacts after mitigation. Information presented in this section is primarily derived from the City of Santa Paula *General Plan* (April 13, 1998), County of Ventura *General Plan* (November 15, 2005) and *Non-Coastal Zoning Ordinance* (2005), proposed *East Area 1 Specific Plan* (September 2007) and Appendix C (*Agricultural Resources Study for the Proposed East Area 1 Specific Plan Project Santa Paula, California*) of this EIR.

4.2.1 EXISTING CONDITIONS

4.2.1.1 Agricultural Uses

The project site is located in an active agricultural area, approximately 501 acres in size, and has historically been used for agricultural purposes. Currently, the project site contains primarily citrus and avocado orchards, with a small portion used for row crops. The project site also contains some farm structures, including some residences for farm workers and a packinghouse building.[1] Of the 501 acres included in the proposed East Area 1 Specific Plan area, approximately 134 acres located on the northern edge of the site would be designated as open space and agricultural preserve. This part of the project site contains native vegetation (approximately 79 acres) while the remainder of the area (approximately 55 acres) is planted with avocado trees.[2] Beyond the project site boundary to the north, open space and undeveloped land in limited agricultural production extend to the foothills of Sulphur Mountain and along Haun Creek. To the east of the project site are the Haun Creek drainage and agricultural lands, which currently produce avocados and lemons. The western portion of the project site is bordered by Santa Paula Creek and residential and limited agricultural (citrus) land uses. Land uses to the south are comprised of residential, light industrial, and remnant agriculture (citrus).

The project site is currently farmed by two organizations, Limoneira Company and Newsom Ranch (Newsom Family Trust). Approximately 405 acres of the 501-acre project site are currently used for agricultural production. The Limoneira Company grows avocados and lemons on approximately 336 acres and limited row crops on an additional nine acres. The Newsom Ranch grows avocados and lemons on approximately 60 acres.

According to the Ventura County Annual Crop and Livestock Report for 2005, the estimated gross value for Ventura County agriculture for 2005 was $1,225,109,000. This is an overall decrease of $164,343,000 from 2004. In terms of dollars, the largest decrease in 2004 was in fruit and crop nuts with a decrease of $87,262,000. These crops include avocados, grapefruit, lemons, navel and Valencia oranges, raspberries, strawberries, tangerines and tangelos, and other miscellaneous fruits and nuts. The primary crops grown on the project site are lemons and avocados. In 2005, County-wide avocado and lemon production generated an estimated $54.8 million dollars and $179.2 million dollars, respectively. The total acres harvested in 2005 for avocados and lemons decreased by 1,673 acres from 2004. The production in tons per acre decreased by 1.74 tons per acre for avocados and increased slightly by 3.63 tons per acre for lemons. The average net revenue per acre for the period from 2003 to 2005 for the project site crops under production was $992 per acre. The average annual net production revenue for the property from 2003 to 2007 was $417,253.

[1] Note: The packinghouse is currently used for other non-farm related activities.
[2] Impact Sciences, Inc. 2007. *Biological Resources Study for the East Area 1 Specific Plan Area, Santa Paula, California.* Camarillo. Report peer reviewed by P&D Consultants, June 2007.

Crop production in the project site is limited by various constraints on agriculture. The extremely rocky content of the soils on the project site allow only a few types of commercial fruit trees (such as avocados and lemons) to be successfully cultivated. Among other things, holes must be dug for each tree to avoid large rocks and boulders which limits the depth of each hole and individual tree spacing. Other types of crops, such as row crops, cannot be planted on the majority of the project site since the soil is too rocky to till or plow. Consequently, existing row crops planted on a small portion of the southeast corner of the project site are planted on imported soil. The only tree fruits that are commercially successful are avocados and lemons. However, avocado trees are becoming increasingly difficult to commercially grow due to the presence of the fungus *Phytopthora cinnamomi* (more commonly referred to as "root rot") in the baseline soil which cannot be eliminated. As a result, avocado production on the project site will continue to decline as a result of the root rot's continual progression down the hillside into the flatter lands. While the fungus *Phytophthora cinnamomi* has been studied for more than 60 years, no definitive elimination measures have been found.[3] The fungus is very difficult, if not impossible, to control and completely eradicate.

A number of strategies to control the fungus have been used and include:

- Clean nursery strategies: The best control for avocado root rot is to prevent introduction of the fungus into the orchard, from the purchasing of already infected plants from nurseries. Nurseries are aware of the infectious root rot and nurseries certified by the local government or local growers are ones that have taken steps in controlling the spread of the disease.

- Selecting low hazard sites: Sites that are typically associated with root rot include the following: soil with poor drainage, high clay content, high water tables, hard pans, clay pans; or where water pools after irrigation or rainfall.

- Planting on mounds in more hazardous sites: Planting on mounds on sites that are already infected with root rot would break up the soil, thereby providing young trees a well-drained soil to become established in before they encounter the more hazardous surrounding soil.

- Prevention strategies: Groves should be fenced to protect them from human and animal traffic. All soil or water should be prevented from movement into diseased groves into healthy ones. Boxes of copper sulfate may be placed at the property entrance and all workers and visitors would be prompted to dust their shoes with the copper sulfate before entering. Diversion furrows should be dug to divert rainwater, which passes through the diseased grove, away from the healthy grove, and also to isolate healthy groves from diseased ones.

- Using resistant rootstocks: Breeding and selection program around the world have identified rootstocks with a high degree of tolerance to root rot. To use rootstocks that are resistant to the disease, they must be clonally propagated so that they all contain the same genetic identity. This process has the greatest possibility of successfully controlling avocado root rot in the long run.

- Avoiding over- or under-irrigation: It is difficult to manage irrigation of avocado to benefit the avocado and not *Phytophthora cinnamomi* because avocado roots are very shallow and sensitive to drying. Over-watering an area that is already infested by the disease would only exacerbate the situation because avocado trees already damaged from the disease have fewer roots and less water intake. Over-watering would cause the disease to spread to other areas of the site that are not already infected.

[3] University of California Cooperative Extension. 2000. *Growing Avocados in Ventura County; A Reference Handbook,* p7.

- Applying Fungicides: Two fungicides have been very successful at reducing avocado root rot: Metalaxyl and fosetyl-AI (Aliette^{R}). Application of either of these two fungicides would thus help reduce avocado root rot.

- Treating with gypsum and the adding of organic mulches: The use of both of these methods adds needed nutrition to the soil for the consumption of the avocado trees. The trees would be vigorous and healthy and less susceptible to root rot.

The *Phytophthora cinnamomi* fungus is mobile and will migrate down slopes during periods of rainfall and over-watering. As infected sediment is transported, the fungus is transported with it. As noted above, methods to control the fungus include: planting on mounds in more hazardous sites; preventing the movement of soils and water from diseased groves to healthy areas; and preventing over-irrigation. As portions of the project site are on a slope and the fungus has developed in upslope areas, it is nearly impossible to prevent the migration of the fungus onto the project site from the upslope areas.

However, it should be noted that the presence of root rot does not prevent the growing of all crops. Root rot is confined to certain crops, including avocados. The ability to grow other stock on-site is a result of the present soil conditions. As discussed in the Agricultural Resources Study (See Appendix C of this EIR), the majority of the soils on the project site have low Storie Index[4] soil grades (four or greater) and are in Capability Class IV or greater. These soils types are not suitable for general agriculture and have severe limitations for agricultural production.

Due to the extremely rocky content of the soils on the project site, only a few types of commercial fruit trees (such as avocados and lemons) have been successfully cultivated on the project site. The rocky soil restricts planting and cultivation to limited working of the land, as holes must be dug for each tree to avoid large rocks and boulders. This limits the depth of each hole and individual tree-spacing. Other types of crops, such as row crops, cannot be planted on the majority of the project site, as the soil is too rocky to till or plow.

The average life of trees on the project site is more than 20 years old, with many over 30 years old. As trees begin to reach 40 years of age, their production life nears an end. Even if the soil conditions on the project site were such that replacement trees could be planted, the cost of such planting would be substantial.

Of tree crops that can be planted, only lemons and avocados are suitable to the climate. Other citrus tree crops, such as oranges, do not produce competitive-sized fruit. As a result of local climate conditions, these crops will experience extreme blossoming which in turn results in too many blossoms and too small fruit. Trees that produce nuts require substantial chilling hours (time below freezing); on average commercial nut trees require 700 to 750 hours of chilling hours. This is true of other deciduous tree crops as well.

Market conditions prevent conversion of the avocado orchards to lemons. At present, avocado production in the United States is significantly on the decline as other countries (notably Mexico) have seen dramatic increases in avocado production and have substantial acreages of young orchards.[5] As a result of increased imports, avocado prices to the grower have ranged from $0.25 to $0.30 per pound. Based on these prices, crops with root rot that have reduced production capabilities only produce on average about 9,000 pounds per acre. Growers' costs have outweighed revenues resulting in a decrease in

[4] Note: Storie Index is a numerical value indicating the relative suitability of a soil group for general agricultural practices.
[5] United States Department of Agriculture (USDA), Economic Research Service, Agricultural Outlook/USDA Lifts Ban on Mexican Avocados, June 1997

production and less planting of new orchards. Table 4.2-1 below illustrates the recent economic viability for avocado in southern California.

TABLE 4.2-1
AVOCADO ECONOMIC SUMMARY

PRODUCTION COSTS	
Annual Costs (labor, irrigation, pest control, harvest etc.)	$2,700 per acre
Growers Revenue	
Price per pound	$0.25 to $0.30
Average production from crops infected with root rot	9,000 lbs/year
Annual Revenue	$2,250 to $2,700
Grower Annual Return (profit)	-$450 to $0

Source: Limoneira Company, 2007.

As shown above, the annual return to the grower under recent market conditions shows an economic loss (or break even at best).

However, it should be noted that these costs do not include capital and replanting expenditures. To replant trees, most growers are moving from 90 to 100 trees per acre (as the project site is planted) to 400 trees per acre. Replanting costs per acre include:

Trees	$9,000
Irrigation	$1,500
Labor and other	$ 500
Total	$11,000

Additionally, replanting requires at least four years before any production and eight years before reaching peak production.

The water table at the project site is at a depth of approximately 20 to 40 feet.[6,7] The main sources of water for irrigation are three on-site water wells.[8] Two wells are located on the Teague-McKevitt Ranch: Well No. 4 was drilled in 1968 near the existing barn on the project site (3N/21W-2R2) and Well No. 6 was drilled in 1988 north of the farm structures (3N/21W-1N2). These wells supply water for both domestic consumption and irrigation uses. At the time each of these wells were drilled, they were capable of being pumped at 1,200 gallons per minute (gpm) and 2,500 gpm, respectively. A third well is located on the Newsom Ranch property (3N/21W-11AO1) and is referred to as the Newsom/Ellis well. The drilling of this well was completed on February 18, 1969, and is an Agricultural Irrigation Well.[9] As discussed with staff of the County of Ventura, Water Resources Division, there has not been any well tests performed that Ventura County has records on. Wells that serve residential structures are mandated by the County to conduct a performance test on the well to ensure enough water would be sourced to the residential structures. Pumping capabilities for irrigation wells are not recorded by the County of Ventura.

[6] Leighton and Associates, Inc. 2007. *Preliminary Geotechnical Investigation Report, Proposed Mixed Use Development, Limoneira – East Area 1, Santa Paula, California, Unincorporated Ventura County, California,* p.14.
[7] *Phase I Environmental Site Assessment and Limited Phase II Assessment, Limoneira and Newsome Ranches, Ventura County, California*, January 18, 2007.
[8] *Ibid.*.
[9] Water Well Drillers Report No. 35150, Resources Agency of California, Department of Water Resources, March 5, 1969.

4.2.2 REGULATORY SETTING

The preservation of agricultural activities and soils is an explicit goal of the United States Department of Agriculture (USDA) and the California Department of Conservation (CDC). Agricultural activities are broadly defined and include activities such as ranching with space/area for agricultural activities to take place being the focus of preservation policies. Agricultural soils are limited non-renewable resources that are usually confined to a particular location. However, not all agricultural activities occur on soils classified as appropriate for agriculture and not all soils rated as excellent farming soils are used for crop production. Generally, policies implemented to preserve agriculture are aimed at either protection of the space or protection of the soil.

4.2.2.1 Farmland Designation

The CDC's Farmland Mapping and Monitoring Program (FMMP) produce maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. These maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The CDC utilizes the following categories to designate farmland:

- Prime Farmland has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date;

- Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date;

- Unique Farmland consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date;

- Farmland of Local Importance is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. Ventura County defines Farmland of Local Importance as soils that are listed as Prime or Statewide that are not irrigated, and soils growing dryland crops such as beans, grain, dryland walnuts, or dryland apricots;

- Grazing Land is land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit is 40 acres;

- Urban and Built-up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures; and

- Other Land is land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

The current State Important Farmland Map for Ventura County identifies 154 acres of the project site as Prime Farmland and 282 acres as Unique Farmland. The remainder of the project site is designated as Urban (four acres) and Other Lands (61 acres). Figure 4.2-1 shows the location of Important Farmland contained on-site.

4.2.2.2 Land Conservation Act and Land Security Act

The Williamson Act, also known as the California Land Conservation Act (LCA), was initially adopted by the State of California in 1965 with the basic intent of encouraging the preservation of the State's agricultural lands in light of increasing trends toward urbanization. The Act established a land contract procedure whereby the County Board of Supervisors could stabilize (i.e., not increase) taxes on certain qualifying lands in return for an owner's guarantee to keep the lands in agricultural preserve status for a ten-year period.

The criteria used for determining "prime agricultural lands" are defined by the Williamson Act as follows:

- All land that qualifies for rating as Class I or Class II in the Natural Resource Conservation Service Land Use Capabilities Classifications;

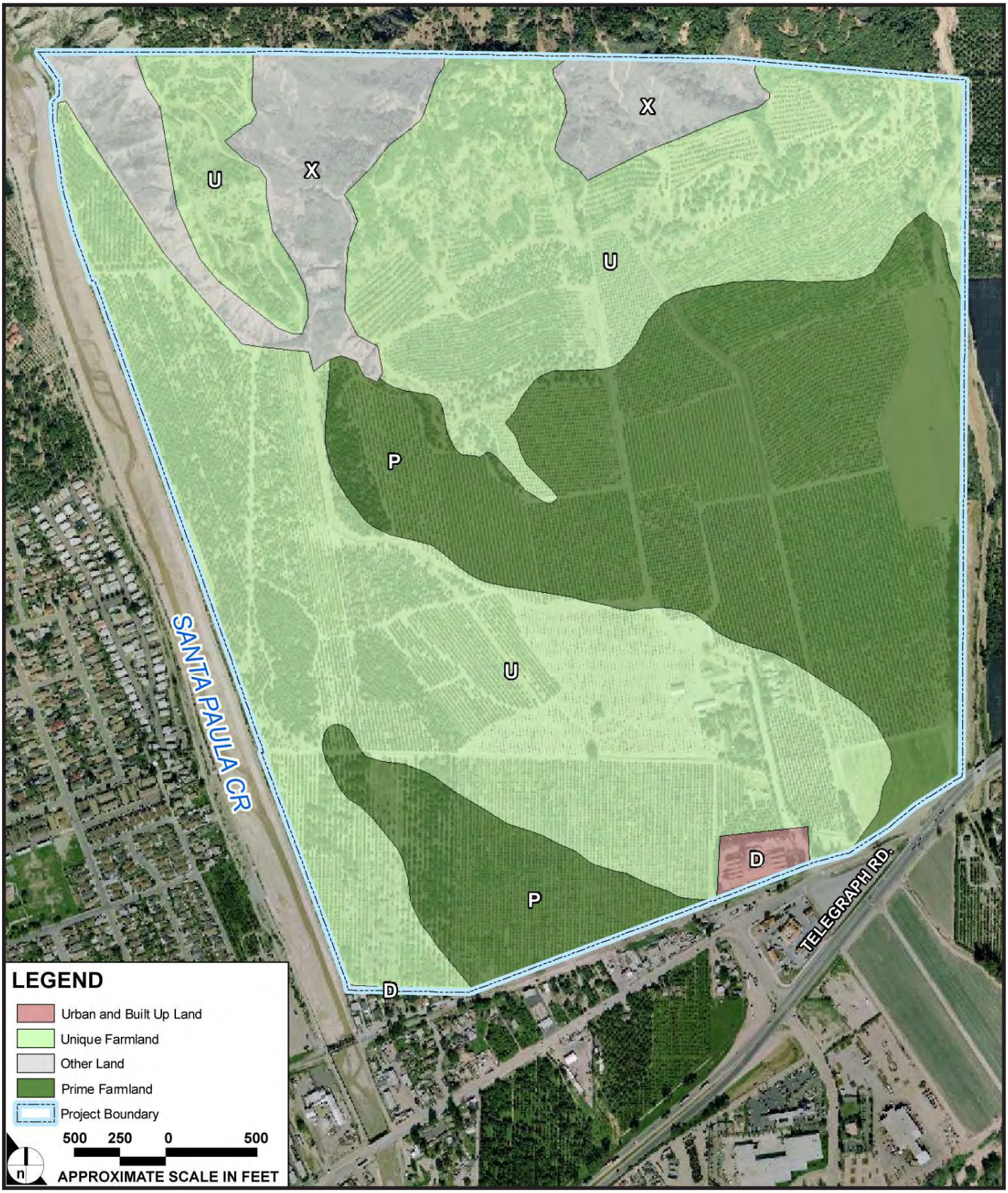
- Land that qualifies for rating 80 through 100 in the Storie Index Rating (a numerical value indicating the relative suitability of a soil group for general agricultural practices);

- Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre, as defined by the United States Department of Agriculture;

- Land planted with fruit- or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and will normally return during the commercial bearing period from the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre per year; and

- Land that has returned from the production of unprocessed agricultural plant products a gross value of not less than two hundred dollars ($200) per acre per year for three of the previous five years.

The cancellation of an LCA contract is subject to certain provisions and restriction or a material breach of the contract may result. Only the landowner can petition to cancel a contract. To approve a tentative contract cancellation, a county or city must make specific findings that are supported by substantial evidence. The existence of an opportunity for another use of the property is not sufficient reason for cancellation. In addition, the uneconomic character of an existing agricultural use cannot, by itself, be a sufficient reason to cancel a contract. The landowner must pay a cancellation fee equal to 12.5 percent of the cancellation valuation of the property, if cancellation is approved.



Source: Impact Sciences, Inc. (2006) & P&D Consultants, Inc. (2007)

Figure 4.2-1
East Area 1 Important Farmland Map

The state legislature determined that it is the State's policy to avoid, whenever practicable, the location of any federal, state, or local public improvements, and the acquisition of land for such public improvements, in agricultural preserves (Gov't Code § 51290(a)). Furthermore, the legislature established a state policy that in situations where it is necessary to locate such an improvement within an agricultural preserve, the improvement shall, whenever practicable, be located upon land not subject to a Williamson Act Contract (Gov't Code § 51290(b)). Nevertheless, the Williamson Act does allow for public improvements on contracted land, in certain circumstances, by establishing procedures for the termination of Williamson Act Contracts in situations where a local government agency either condemns the property or acquires the property in lieu of condemnation.

The CDC, under the Farm Land Security Act passed in 1998, allows individual counties to establish an additional program for farmlands to enter into contract with the state to receive a benefit similar to Williamson Act contracts. The Farmland Security Act is a 20-year self-renewing contract that allows property owners with qualifying parcels to receive an additional 35 percent in tax savings above that which is received under the Williamson Act contract.

Both the Williamson Act and the Farm Land Security Act contracts require that lands be within an established agricultural preserve. An agricultural preserve defines the boundary of an area within which each city or county will enter into contracts with landowners. The boundary is designated by a resolution of the local board of supervisors (board) or city council (council) having jurisdiction. An agricultural preserve must consist of no less than 100 acres. However, in order to meet this requirement, two or more parcels may be combined if they are contiguous or in common ownership. Smaller agricultural preserves may be established if a board or council determines that the characteristics of the agricultural enterprise in the area call for smaller agricultural units, and if the establishment of the preserve is consistent with the General Plan. Agricultural lands that are not in a preserve face the greatest threat for conservation, as they are assessed higher property taxes due to their proximity to urbanization.

None of the parcels in the project site fall under either the Williamson Act or the Farmland Security Act contracts.

4.2.2.3 Greenbelt Agreements

In Ventura County, greenbelt agreements are contracts between two or more jurisdictions concerning urban form, the preservation of farmland and open space, the future extension of urban services and facilities, and annexations. These greenbelts are intended to operate as community separators or buffers into which participating cities agree not to extend municipal services into the greenbelts or annex greenbelt lands for development of urban uses.

The City of Santa Paula is a signatory to two greenbelt agreements that affect lands contiguous to the City on the east and west ends:

San Buenaventura–Santa Paula Greenbelt: This agreement was approved in 1967 and covers roughly 8,350 acres from approximately the Adams Barranca eastward to the Franklin Barranca. The exact boundaries of the agreement are not defined. A map prepared by the Ventura County Resource Management Agency shows the western greenbelt line extending from the Santa Clara River northward to the canyon lands above Foothill Road. It is understood that the agreement was to cover the flat prime agricultural lands south of Foothill Road and not the northern canyon lands, as they contain no prime agricultural lands.

Fillmore–Santa Paula Greenbelt: This agreement was approved in 1980 and covers approximately 34,200 acres. It is the second largest greenbelt in Ventura County. Santa Paula Creek is the western boundary, the Los Padres National Forest is the northern boundary, Sespe Creek is the eastern boundary, and the South Mountain ridgeline and Oak Ridge are the southern boundary.

The site for the proposed project is currently located within the Santa Paula-Fillmore Greenbelt Agreement area. The City of Santa Paula General Plan states, "The City intends to amend the agreement to remove 567 acres that are part of expansion areas East Area 1 and East Area 2."[10]

4.2.2.4 County of Ventura

The project site is currently located in the unincorporated portion of Ventura County. The County General Plan identified 1,500 acres of agricultural land in the Santa Paula Growth Area and 6,617 acres of agricultural land in the Santa Paula non-growth area in 1990.[11] To preserve the agricultural base of the County, the General Plan discourages the conversion of farmland to other uses.

The County, as detailed in the General Plan, has adopted various programs designed to support and preserve agriculture. Agricultural preservation has been integrated into the County's overall land use planning strategy and is a reciprocal beneficiary of many interagency regional land use planning and resource conservation programs. The principal interagency programs include the "Guidelines for Orderly Development," several existing Greenbelt Agreements between cities and the County, and the various regional water programs.

The Ventura County Board of Supervisors also adopted a *"Right to Farm Ordinance"* intended to protect the farming community from developments that would inhibit their ability to continue agricultural production.[12] Such things as agricultural wind machines, odors, dust, and noise, are the subjects of nuisance complaints by adjoining property owners. The *"Right to Farm Ordinance"* is intended to make a new purchaser of property aware that existing agricultural operations inherently have noise, odor, and other potentially annoying activities that are associated with accepted agricultural operations. The "*Right to Farm Ordinance"* is contained in the Ventura County Coastal and Non-Coastal Zoning Ordinances (NCZO) (§§ 8183-4.1 and 8114-2.1.1, respectively).

The County's Save Open Space and Agricultural Resources (SOAR) initiative was approved by the County Board of Supervisors on November 3, 1998. The County SOAR Ordinance requires countywide voter approval of any change to the Ventura County General Plan involving the "Agricultural," "Open Space" or "Rural" land use map designations, or any change to a General Plan goal or policy related to those land use designations (§ 1(I)).[13]

[10] City of Santa Paula. 1998. *City of Santa Paula General Plan, Land Use Element*. LU-25.
[11] Ventura County. 2001. "Figure 3.2.2: Residential Holding Capacity Table." *Ventura County General Plan, Land Use Appendix*. 9.
[12] Ventura County. 2003. "Division 8, Chapter 1 of the Ventura County Ordinance Code." *Ventura County Non-Coastal Zoning Ordinance.*
[13] County of Ventura. 1998. *County of Ventura Save Open-Space and Agricultural Resources (SOAR) Measure 'B' Ordinance.* http://157.145.215.100/rma/planning/pdf/ordinances/soar_measure_b_ord.pdf (accessed October 10, 2007).

The County Agricultural Commissioner is responsible for enforcing local ordinances, state laws and regulations and federal laws and regulations governing the agricultural industry. The Ventura County Agricultural Commissioner administers the following programs as an appointee of the Board of Supervisors:

- Pest Detection
- Pesticide Use Enforcement
- Pest Exclusion
- Land Use Planning
- Fruit, Nut and Vegetable Standardization
- Apiary Inspection
- Nursery Inspection
- Seed Inspection
- Crop Statistics

In addition, the Commission is mandated to promote and protect the production, sale and distribution of food, feed and horticultural crops, while assuring that a clean environment is conserved, workers' health and safety is protected, and a safe, economical and abundant food supply is preserved.[14] To this end, the Commission has also developed a number of policies to reduce land use conflicts between urban and agricultural areas and which include its *County of Ventura Agricultural/Urban Buffer Policy* (as revised on July 19, 2006).[15] Briefly, this policy includes the following provisions for new development:

New dwellings, non-agricultural work sites and ongoing outdoor public activities potentially conflict with agricultural operations. A buffer/setback and fencing are therefore needed on these sites when they are developed adjacent to the qualifying agricultural land. A 300-foot setback to new structures and sensitive uses is required on the non-agricultural property unless a vegetative screen is installed. With a vegetative screen the buffer/setback is a minimum of 150-feet.

Fencing requirements:

A reinforced 8-foot chain link fence with top bar is required on applicable urban developments to deter pilferage and vandalism of crops. Placement is nearest the agricultural side. If the agricultural field has a fence, the requirement may be satisfied.

Minimum standards for vegetative screen (shelter belt):

- *Two staggered rows of trees and shrubs characterized by evergreen foliage that extends from the base of the plant to the crown*
- *Trees and shrubs should be vigorous, drought tolerant and at least 6 feet in height at the time of installation*
- *Plants should have 50% to 75% porosity (i.e., approximately 50% to 75% of the plant is air space)*
- *Plant height should vary in order to capture drift within 4 feet of ground applications*

[14] County of Ventura. 2005. "Agricultural Commissioner." http://portal.countyofventura.org/portal/page?_pageid=494,1&_dad=portal&_schema=PORTAL (accessed October 7, 2007).

[15] Note: The proposed project is not subject to provisions of the *County of Ventura Agricultural/Urban Buffer Policy* (as revised July 19, 2006) since it would be governed by the Specific Plan and not the County of Ventura and the project site will be located within the City's Sphere of Influence. However, the inclusion of buffers (see analysis below in Section 4.2.5 (Potential Impacts) of this DEIR) has been incorporated within the design of the project in order to provide an additional separation between agricultural and urban uses.

- *A mature height of 15 feet or more is required for trees*
- *To ensure adequate coverage, 2 staggered rows should be located 5 feet apart and consist of minimum 5 gallon plants at least 6 feet tall planted 10 feet on center*
- *Recommended plants include: Toyon (Heteromeles arbutifolia), Sugarbush (Rhus ovata), Laurel sumac (Malosma laurina) and Italian cypress (Cupressus sempervirens) A long-term plan shall be in place for maintaining the vegetative shelter belt*

The following uses are acceptable within 300 feet of agriculture:

- *Parking lots and garages*
- *Landscaping/hardscape*
- *Storage sheds or open storage*
- *Greenhouse structures with venting away from the non-agricultural area*
- *Wooden or chain link fencing*
- *Some types of livestock such as range cattle or sheep (other livestock only as approved by APAC)*
- *Roads and drainage facilities*
- *Farmworker dwellings where notification between farmer and occupants can easily occur prior to spraying*
- *Low human-intensity uses as approved by APAC*

The following uses are acceptable within 150 feet of agriculture with a vegetative screen (shelter belt):

- *All uses acceptable within 300 feet*
- *Front yard setbacks*
- *Hiking, bike or bridle paths*
- *Single-use facilities for government, institutional or educational use where agreements and notification between parties can easily occur prior to spraying*
- *Farm and produce stands where notification between farmers and occupants can easily occur prior to spraying*
- *Agricultural Tourism in accordance with a Conditional Use Permit (CUP)*

4.2.2.5 City of Santa Paula

The City's General Plan identifies the project site as the East Area 1 Expansion Area.[16] The General Plan includes implementation measures to guide the development of East Area 1. Several of these measures, (General Plan Implementation Measures Nos. 40, 68, and 69) are intended to promote compatibility between the urban uses that would be established on the project site under the General Plan and the agricultural uses east and north of the project site.[17] The implementation measures of the City's General Plan Conservation and Open Space Element are also provided to address agricultural lands and resources within the City's Planning Area.[18]

[16] City of Santa Paula. 2003. *City of Santa Paula General Plan, Land Use Element*. LU-22.
[17] *Ibid..*, LU-64 and LU-67.
[18] City of Santa Paula. 2003. *City of Santa Paula General Plan, Open Conservation and Open Space Element*. CO-55 and CO-56.

4.2.2.6 Ventura County Local Agency Formation Commission (LAFCO)

The Ventura Local Agency Formation Commission (LAFCO) is responsible for establishing jurisdictional boundaries of public agencies in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code §§ 56000, *et seq.*). One of LAFCO's duties is to encourage the orderly formation and expansion of local government agencies.

On February 21, 2007, the Ventura County LAFCO adopted a new policy addressing the types of information local agencies need to submit with an application for any action that could be expected to lead to the conversion of agricultural lands. This policy added additional requirements related to the assessment of impacts to agricultural lands and measures to reduce resulting impacts. Appendix C of this EIR contains the specific requirements which must be adhered to under Policy 2.1.2.1 of the LAFCO Commissioners Handbook.

4.2.3 THRESHOLDS OF SIGNIFICANCE[19]

4.2.3.1 California Environmental Quality Act (CEQA) Guidelines

The State CEQA Guidelines are clear in their statement that the development on or removal of state-classified Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is an unavoidable significant impact. In addition to CEQA significance criteria, the State Department of Conservation has developed a model, the California Agricultural Land Evaluation Assessment (CALESA) Model[20], for assessing impacts to agriculture.

The County of Ventura has its own significance criteria, which are more stringent than the State criteria in that they identify development on, or the removal of, Farmland of Local Importance in addition to the Farmland identified by the CEQA Guidelines. Additionally, the City of Santa Paula identified numerous criteria for assessing impacts to agriculture in its General Plan Update Environmental Impact Report (GPEIR).

Appendix G of the CEQA Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to agricultural lands. A project may create a significant environmental impact if it:

II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

   a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
   b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?
   c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

[19] Note: Thresholds of Significance for the evaluation of impacts were derived from a variety of sources including Appendix G of the California Environmental Quality Act (CEQA) (2007), California Department of Conservation, Land Evaluation and Site Assessment (LESA) model (1997), City of Santa Paula General Plan (1998), Ventura LAFCO's Commissioner's Handbook (2007) and Ventura County's Initial Study Assessment Guidelines (2006).
[20] California Department of Conservation. 1997. *Land Evaluation and Site Assessment Model, Instruction Manual*.

4.2.3.2 LESA Model Thresholds

The Natural Resources Conservation Service (NRCS) rates the agricultural suitability of soils in terms of both the Land Use Compatibility Classification System and the Storie Index. The Classification System shows the suitability of soils for most types of field crops according to their limitations, risk of damage when used, and the way they respond to treatment. The Storie Index expresses the suitability of soils for general intensive farming, based on characteristics of the soil. Based on the Storie Index, soils can be classified from Grade 1, considered excellent and very well suited to general intensive farming, to Grade 6, soils and miscellaneous areas not suited to farming.

The LESA Model is designed to assist in making determinations of the potential significance of a project's conversion of agricultural lands. Scoring thresholds are based upon both the total LESA score and the component Land Evaluation (LE) and Site Assessment (SA) subscores. In this manner, the scoring thresholds are dependent upon the attainment of a minimum score for the LE and SA subscores so that a single threshold is not the result of heavily skewed subscores (i.e., a site with a very high LE score but a very low SA score, or vice-versa). The California Agricultural LESA Model scoring thresholds are shown in Table 4.2-2, LESA Model Scoring Thresholds. According to the LESA model threshold of significance, if the total score for a site is 60 points or greater, the loss of agricultural land is considered a significant environmental impact, if the LE and SA subscores are each not less than 20 points.[21]

TABLE 4.2-2
LESA MODEL SCORING THRESHOLDS

TOTAL LESA SCORE	SCORING DECISION
0 to 39 points	Not considered significant.
40 to 59 points	Considered significant only if LE and SA subscores are each greater than or equal to 20 points.
60 to 79 points	Considered significant unless either LE or SA subscore is less than 20 points.
80 to 100 points	Considered Significant.

Source: California Department of Conservation, Office of Land Conservation. 1997. *California Agricultural Land Evaluation and Site Assessment Model*. 31.

4.2.3.3 City of Santa Paula Thresholds

The City of Santa Paula identified several factors to be considered in assessing impacts to agriculture in its 1998 GPEIR.

Would the project:

- Result in the conversion of state-defined prime soils and soils of statewide importance to urban uses?
- Remove lands from agricultural cultivation?
- Result in the modification or cancellation of a greenbelt agreement?
- Create compatibility problems to existing agricultural operations?

[21] Use of a conservative score per conversation with Jeannie Blakeslee from the California Department of Conservation March 15, 2007.

4.2.3.4 Ventura LAFCO Thresholds

The Ventura LAFCO policy requires specific types of information local agencies need to submit with an application for any action that could be expected to lead to the conversion of agricultural lands. This policy added the following to Policy 2.1.2.1 in the Ventura LAFCO Commissioner's Handbook:

Unless specifically waived by the LAFCO Executive Officer, for any proposal which could reasonably be expected to lead to the conversion of agricultural lands (as defined by Government Code §§ 56016) to non-agricultural uses, information regarding the effect of the proposal on maintaining the physical and economic integrity of agricultural lands shall be submitted in conjunction with the application. Specifically, the information should address the following:

(i) The location of, and acreage totals for, prime and non-prime agricultural land involved in the area and adjacent areas. This analysis shall be based on the definition of "prime" agricultural land pursuant to Government Code §§ 56064.
(ii) The effects on agricultural lands within the proposal area.
(iii) The effects on adjacent agricultural lands.
(iv) The effects on the economic integrity of the agricultural industry in Ventura County.

The applicable portions of this policy to the proposed project include identification of the location of, and acreage totals for, prime and non-prime agricultural land involved in the area and adjacent areas. This analysis is based on the definition of prime agricultural land as defined by Government Code § 56064.

Government Code §§ 56064 provides a definition of prime agricultural land that must be included in evaluating impacts. The Government Code states:

"Prime agricultural land" means an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of the following qualifications:

a. Land that qualifies, if irrigated, for rating as class I or class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible.
b. Land that qualifies for rating 80 through 100 Storie Index Rating.
c. Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July, 1967, developed pursuant to Public Law 46, December 1935.
d. Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre.
e. Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years."

The portions of the above definition that apply to the project site include paragraphs (a), (b), and (d). The site has been in continuous production and does not support livestock. Accordingly, the remaining paragraphs do not apply.

4.2.3.5 County of Ventura Thresholds

The County of Ventura has identified several factors in the County's thresholds that must to be considered in determining the significance of the impact of a project on agricultural resources.[22] The County's Initial Study Assessment Guidelines contains the following questions on factors considered by the County:

Soils

- Any project that would result in the direct and/or indirect loss of soils designated as Prime, Statewide Importance, or Unique, or Local Importance will have an impact. Any project that would result in the direct and/or indirect loss of agricultural soils meeting or exceeding the following criteria will be considered as having a significant impact:

General Plan Land Use Designation	Important Farmland Inventory Classification	Acres Lost
Agriculture	Prime/Statewide: Unique: Local:	5 ac. 10 ac. 15 ac.
Open Space/Rural	Prime/Statewide: Unique: Local:	10 ac. 15 ac. 20 ac.
All Others:	Prime/Statewide: Unique: Local:	20 ac. 30 ac. 40 ac.

- Any project that would result in the direct and/or indirect loss of agricultural soils is considered having a contribution to a significant cumulative impact. However, the cumulative loss of agricultural soils was discussed in the Final EIR for the Comprehensive Amendment to the County General Plan (1988). The conclusions of that EIR were that there will be a significant loss of agricultural soils and, although the General Plan contains policies and programs that serve to partially mitigate the cumulative impact, the impact cannot be reduced to a level that is less than significant.

Water

Ground Water Quality - A use that will decrease the quality of ground water available for agriculture to a level greater than 1200 milligrams (mg)/1 total dissolved salts (TDS) is considered to have a significant project and cumulative impact.

Ground Water Quantity - A use that will cause a net decrease in the availability of water for agriculture is considered to have a significant project and cumulative impact. This includes uses that may increase the net utilization of ground water in an overdrafted basis or in a basin in hydrologic continuity with a basin in overdraft.

Surface Water Quality - A use that will decrease the quality of surface water available for agriculture to a level greater than 1200 mg/1 TDS is considered to have a significant project and cumulative impact.

Imported Water Quantity - A use that will cause a net decrease in the availability of imported water supplies currently used by agriculture is considered to have a significant project and cumulative impact.

[22] Ventura County. 2006. *Ventura County Initial Study Assessment Guidelines*. Pgs. 37-43.

Air Quality/Micro Climates

Any proposed non-agricultural land use/development located on or within one-half mile of property currently in, or suitable for, agricultural production may have an impact. Properties suitable for agricultural production include lands designated Prime, Statewide Importance, Unique and Local Importance by the Important Farmlands Inventory (IFI).

Dust - All projects will cause some increase in dust. Any use that will cause a 10% or greater increase in dust on agricultural parcels is considered to have a significant impact.

Solar Access - Any use that will cause a 10% or greater decrease in solar energy for an agricultural parcel is considered to have a significant impact.

Tree Row - Any use that will cause the removal of any tree row is considered to have a potentially significant impact, necessitating more detailed review on a case-by-case basis.

Other - Any use that will cause a substantial adverse change in an agricultural area's air quality and/or microclimate. Other than dust, decreased solar access or tree row removal is considered to have a significant impact.

Pests/Disease

Any proposed non-agricultural land use/development located on or within one-half mile of property currently in, or suitable for, agricultural production may have an impact. Properties suitable for agricultural production includes land designated Prime, Statewide Importance, Unique and Local Importance by the Important Farmlands Inventory (IFI).

Any non-agricultural land use/development that could cause a substantial increase in or introduction of pests and/or disease in an agricultural area will have a significant impact.

Land Use Compatibility

Any proposed non-agricultural land use/development located within one half mile of property currently in, or suitable for, agricultural production may have a potential impact. Properties suitable for agricultural production include lands designated Prime, Statewide Importance, Unique and Local Importance by the Important Farmlands Inventory (IFI).

Any non-agricultural land use/development that, by its nature, design or operation may pose substantial land use incompatibilities with nearby property currently in, or suitable for, agricultural production will have a significant impact. Although this determination must be made on a case-by-case basis, dwellings, schools, hospitals, care facilities, detention facilities, churches, libraries and outdoor recreational uses are considered potentially significant in the following situations:

1. within 300 feet of irrigated agriculture;
2. within 200 feet of dry farming;
3. within 100 feet of grazing lands; and/or
4. does not provide perimeter fencing sufficient to keep human and livestock/pets from crossing property lines.

Cumulative development exceeding the above criteria will normally be considered as having a substantial effect on agricultural production and cultural practices in the project area (e.g., movement of farm equipment, spraying of farm chemicals).

4.2.4 METHODOLOGY RELATED TO AGRICULTURAL RESOURCES

The evaluation of impacts to agricultural resources was based upon assessment criteria contained within Appendix G of the CEQA Guidelines (2007), California Department of Conservation's LESA model[23], City of Santa Paula General Plan (1998), Ventura County General Plan (2000)[24] and Non-Coastal Zoning Ordinance (2005), Ventura County Initial Study Assessment Guidelines (2006), and the Ventura LAFCO Commissioner's Handbook (2002). Appendix C of this EIR contains a discussion of the specific methodology utilized in evaluating and assessing project-related impacts.

4.2.5 POTENTIAL IMPACTS

4.2.5.1 California Agricultural Land Evaluation and Assessment Model (LESA)

The NRCS rates the agricultural suitability of soils in terms of both the Land Use Compatibility Classification System and the Storie Index. The Classification System shows the suitability of soils for most types of field crops according to their limitations, risk of damage when used, and the way they respond to treatment. The Storie Index expresses the suitability of soils for general intensive farming, based on characteristics of the soil. Based on the Storie Index, soils can be classified from Grade 1, considered excellent and very well suited to general intensive farming, to Grade 6, soils and miscellaneous areas not suited to farming.

A single LESA score is generated for a given site after all the individual land evaluation (LE) and site assessment (SA) factors have been scored and weighted. The LESA model is weighted so that 50 percent of the total LESA score of a given project is derived from the LE factors and 50 percent from the SA factors. Individual factor weights are listed below, with the sum of the factor weights required to equal 100 percent. The results of the LESA model for the East Area 1 Specific Plan area is shown in Table 4.2-3. The East Area 1 LESA Score Sheet is provided in Appendix C of this EIR. With a final LESA Score of 67.5 and given that each of the LE and SA subscores is greater than 20 points, the loss of farmland that would occur as result of the proposed project is considered adverse and significant.[25]

[23] California Department of Conservation. 1997. *Land Evaluation and Site Assessment Model, Instruction Manual*.
[24] Ventura County. 2000. *Ventura County General Plan, Resources Appendix*.
http://157.145.215.100/rma/planning/pdf/plans/PN12RsrApdx091900.pdf (accessed September 19, 2007).
[25] Note: As indicated previously, according to the LESA model threshold of significance, if the total score for a site is 60 points or greater, the loss of agricultural land is considered a significant environmental impact, if the LE and SA subscores are each not less than 20 points.

TABLE 4.2-3
EAST AREA 1 LESA SCORE

	FACTOR SCORES	FACTOR WEIGHT	WEIGHTED FACTOR SCORES
LE Factors			
Land Capability Classification	57.2	0.25	14.3
Storie Index	50.6	0.25	12.7
LE Subtotal		0.5	27.0
SA Factors			
Project Size	100	0.15	15
Water Resource Availability	100	0.15	15
Surrounding Agricultural Land	60	0.15	9
Protected Resource Land	10	0.05	.5
SA Subtotal		0.5	40.5
FINAL LESA SCORE			**67.5**

Source: Impact Sciences. 2007.

4.2.5.2 City of Santa Paula

Conversion of Important Farmland

The City of Santa Paula follows the CDC's FMMP in identifying the conversion of state-defined prime soils and soils of statewide importance as an impact to agricultural resources. The State Important Farmland Map for Ventura County identifies a total of 154 acres of Prime Farmland and 282 acres of Unique Farmland on the site (total of 436 acres). Implementation of the proposed project would result in the conversion of farmland to urbanized uses totaling approximately 352 acres (i.e., Prime Farmland (approximately 152 acres) and Unique Farmland (approximately 200 acres)). Table 4.2-4 provides details on the conversion of farmland that would occur as a result of the proposed project. The loss of 352 acres of Prime and Unique Farmland would be a significant impact.

TABLE 4.2-4
EAST AREA 1 ACRES OF FARMLAND CONVERTED

LAND USE AND FARMLAND DESIGNATION	TOTAL PROJECT	PRESERVED AGRICULTURE	FARMLAND CONVERTED	OTHER LAND CONVERTED
Prime Farmland	154 [1]	2	152 [1]	--
Unique Farmland	282	82	200	--
Urban	4	0	0	4
Other	61[1]	50	0	11
TOTALS	**501**	**134**	**352**	**15**

Source: Impact Sciences. 2007.
[1] Acreage adjusted to reflect approximately 11 acres of the site that were washed out and refilled along Haun Creek.

Removal of Lands from Agricultural Cultivation

Currently, approximately 405 acres of the 501-acre site are under cultivation and production on the project site. This includes approximately 173 acres of avocados, 223 acres of lemons and nine acres of other miscellaneous row crops. Approximately 350 acres of the 405 acres under production would be taken out of production as a result of the proposed project. This includes approximately 118 acres of avocados, 223 acres of lemons and nine acres of miscellaneous row crops. The remaining 55 acres

currently in production along the northern portion of the site would be designated in the project site as Open Space-Agricultural Preserve. The loss of 350 acres of land currently under cultivation would be an unavoidable significant impact.

Result in Modification or Cancellation of a Greenbelt

The project site is located in the Santa Paula-Fillmore Greenbelt which would require an amendment in order to approve the Project. If the City amends its Sphere of Influence to include lands east of the City, the Santa Paula-Fillmore Greenbelt Agreement will be affected. The City intends to amend the agreement to remove 567 acres that are part of expansion areas East Area 1 and East Area 2.[26] Amending the agreement would result in an unavoidable significant impact.

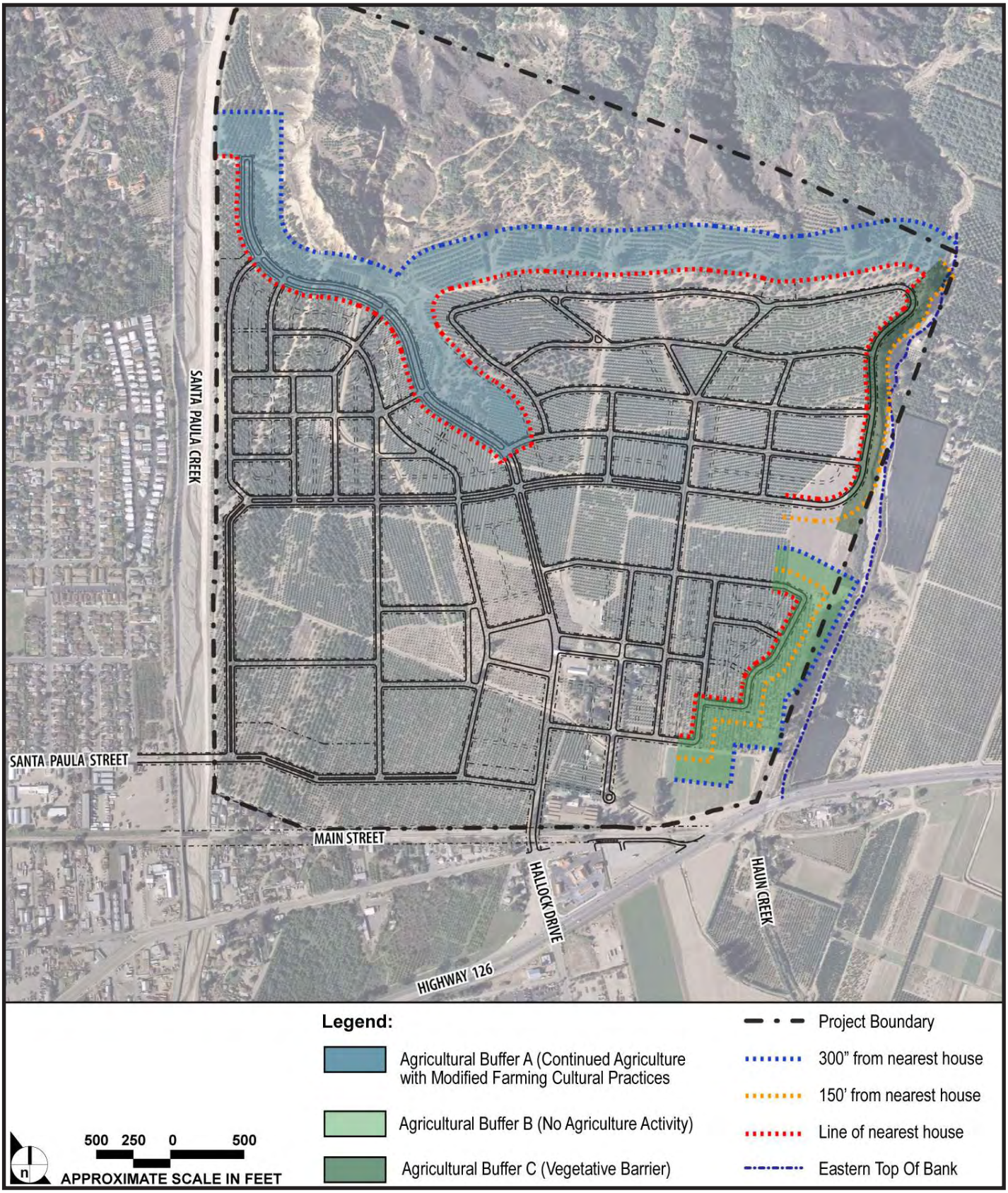
Compatibility with Existing Agricultural Operations

The proposed project is designed to provide dedicated open space adjacent to current open space and agricultural areas. This design is intended to help balance the requirements of a new urbanized area with the need to protect wildlife habitat and provide a buffer to neighboring agricultural operations. Specifically the East Area 1 Specific Plan has incorporated a number of design features intended to address the interface between active agriculture and development. Along the eastern side of the property, near the Haun Creek drainage, the proposed project includes open space that would be utilized as greenways and passive recreation. Development would be limited to trails and walkways. These areas would range from a minimum of 150 feet to over 300 feet in width from the existing agricultural uses to the east and the lot lines of new residences proposed in the Specific Plan area. In addition, open space (existing natural lands comprising approximately 79 acres) would be preserved in order to reduce impacts to agricultural and open space areas to the north.

Agricultural Buffers

As noted previously, the proximity of urban and agricultural uses can create compatibility issues (e.g., pesticide usage, including overspray, introduction of exotic pests and disease). To address these issues, the proposed project provides buffers to increase compatibility of new residential neighborhoods in the City of Santa Paula with neighboring agricultural land. These buffers are also intended to implement the *County of Ventura Agricultural/Urban Buffer Policy* (as revised July 19, 2006) developed by the County of Ventura Agricultural Commissioner.[27] As shown on Figure 4.2-2, the proposed project provides for a permanent buffer of open space between the proposed residential uses and existing agricultural operations[28] to the north and east of the site.[29]

[26] City of Santa Paula General Plan, Land Use Element, City of Santa Paula, 1998. pg. LU-26.
[27] Note: As indicated previously, the *County of Ventura Agricultural/Urban Buffer Policy* (as revised July 19, 2006) is not applicable to the proposed project. However, in order to provide additional separation between agricultural and urban land uses, buffers have been incorporated into the overall design of the Specific Plan.
[28] Note: As indicated previously, approximately 55 acres of existing avocado orchards would be dedicated as an Agricultural Preserve.
[29] Note: The *County of Ventura Agricultural/Urban Buffer Policy* (as revised July 19, 2006) includes buffers of 300 feet for new urban development. Santa Paula Creek is located to the west over 300 feet from the project site and existing agricultural operations. In addition, agricultural uses are located over 500 feet to the south of the project site. As such, sufficient existing buffers are in place and would not require screening or other protective measures.



Source: Impact Sciences, Inc. (2006) & P&D Consultants, Inc. (2007)

Figure 4.2-2
East Area 1 Agricultural Buffers

As described in the Agricultural Commissioner's *County of Ventura Agricultural/Urban Buffer Policy* (as revised on July 19, 2006), the following buffer/setback are proposed:

- A 300-foot setback to new structures and sensitive uses would be implemented on the non-agricultural property (i.e., proposed project) unless a vegetative screen is installed. With a vegetative screen the buffer/setback would be a minimum of 150-feet.
- The fencing requirements would include: A reinforced 8-foot chain link fence with top bar on applicable urban developments to deter pilferage and vandalism to crops. Placement is nearest the agricultural side. If the agricultural field has a fence, the requirement may be satisfied.
- The following are minimum standards for vegetative screen:
  - Two staggered rows of trees and shrubs characterized by evergreen foliage that extends from the base of the plant to the crown.
  - Trees and shrubs should be vigorous, drought tolerant and at least 6 feet in height at the time of installation.
  - Plants should have 50 to 75 percent porosity.
  - Plant height should vary in order to capture drift within 4 feet of ground applications.
  - A mature height of 15 feet or more is required for trees.

Although implementation of the buffers would help increase compatibility between urban and agricultural uses, it would not completely reduce impacts. In particular, studies evaluating the relationship between urban and agricultural uses note that the close proximity of these uses can results in conflicts/incompatibility issues. For urban residents in these newly developed areas, nuisances and health risks such as pesticide exposure, dust, noise and odor are the most common issues. For farmers, urban encroachment adversely affects the efficiency of remaining farming operations due to increased air pollution, livestock predation by pets, crop diseases resulting from inadequate care off-farm ornamental plants, restrictions on pesticide use and burning, and requirements to set aside on-farm buffer zones. At the same time, production costs increase due to rising land values, water scarcity, theft and vandalism of farm equipment, crop pilferage, road congestion, and personal injury liability resulting from trespassing on farms.[30]

The proximity of urban and agricultural resources could result in spray drift[31] during the application of pesticides within the Agricultural Preserve and from associated off-site farming activities (i.e., Haun Creek area). Studies prepared by the Spray Drift Task Force (SDTF)[32] indicate that pesticide spray applications (e.g., airblast, aerial and ground) utilized in agriculture have the potential to result in spray drift. However, the findings of these studies indicate that the type of spray application and other factors can affect the actual amount of drift which occurs.

Citrus and avocado farming typically utilize the airblast method in pesticide/chemical application. Based upon the results of the SDTF studies for this technique it was determined that 96 percent of the applied active ingredient stays on the crop (i.e., oranges) (no data for avocado was available) within the target spray area and some four percent results in drift. At 100 feet downwind however, the percentage of drift

[30] Source: California Department of Conservation, Office of Land Conservation. 1991. *The Impacts of Farmland Conversion in California*.

[31] Note: The United States Environmental Protection Agency (EPA) defines pesticide spray drift as the physical movement of a pesticide through air at the time of application or soon thereafter, to any site other than that intended for application (often referred to as off-target). EPA does not include in its definition the movement of pesticides to off-target sites caused by erosion, migration, volatility, or contaminated soil particles that are windblown after application, unless specifically addressed on a pesticide product label with respect to drift control requirements.

[32] Source: Spray Drift Task Force, A Summary of Airblast, Aerial and Ground Application Studies, published by Stewart Agricultural Research Services, Inc., 1997.

approached zero for this crop.[33] The study also noted that; (1) drift cannot be completely eliminated with current technology; and (2) when drift cannot be reduced to low enough levels by altering spray equipment set-up and application techniques, buffer zones can be imposed to protect sensitive areas downwind of applications.[34]

As noted on Figure 4.2-2 and discussed above, the following buffers are proposed:

Agricultural Buffer A – This proposed buffer would extend from Haun Creek west to Santa Paula Creek forming a continuous 300 foot-wide band separating the Santa Paula Creek and Foothill Neighborhoods from the Agricultural Preserve. Within the agricultural preserve, typical farming practices (including airblast pesticide/chemical application) could occur. Within Agricultural Buffer A, modified farming cultural practice (e.g., no spraying or dusting) would occur and all fruit would be hand picked.

Agricultural Buffer B - This proposed buffer would extend along the eastern edge of the Foothill Neighborhood (in the vicinity of Haun Creek) forming a continuous 150 foot-wide band separating Haun Creek from the residences located within the Foothill Neighborhood. No agricultural activities would occur within this buffer and no vegetative screen would be implemented.

Agricultural Buffer C – This proposed buffer would extend along the eastern edge of the Haun Creek Neighborhood (in the vicinity of Haun Creek) forming a continuous 150 foot-wide band separating Haun Creek from the residences located within the Haun Creek Neighborhood. No agricultural activities would occur within this buffer area and a vegetative screen would be implemented based upon standards established by the Agricultural Commissioner's *County of Ventura Agricultural/Urban Buffer Policy* (as revised on July 19, 2006) and previously noted.

Given that studies performed by the SDTF indicate that application of the active ingredients utilizing the airblast technique (for oranges) results in a 96 percent adherence rate to the plant and at 100 feet beyond the target application area, the percent of drift approaches zero, the potential for spray drift impacts are greatly reduced. When this information is considered in the context of the distance between the nearest residences (e.g., 150 feet or greater) and on- and off-site agricultural uses and taken in conjunction with the proposed buffers/vegetative screen, the potential impacts to residences from spray drift would be less than significant.

The potential for public exposure to dust, noise and odors from on-site and adjacent farming activities cannot be completely eliminated or reduced to less than significant levels. Similarly, the potential also exists for incidents of vandalism, pilferage, trespassing and complaints against standard legal agricultural practices to adjacent agricultural uses. Therefore, implementation of the proposed project would result in significant impacts related to compatibility with existing agricultural operations.

4.2.5.3 Ventura LAFCO

Location of, and Acreage Total, for Prime and Non-Prime Farmland

In total, the project site contains 369 acres that either have returned over $400 on an annual basis and/or contain Class I /II soils and/or soils with a Storie Index rating of 80 to 100 meeting the definition of prime agricultural land as defined in Government Code §§56064. Of this total, approximately 314 acres would be converted to non-agricultural uses under the proposed project (see Table 4.2-5). The loss of 314 acres

[33] Ibid., pgs. 2&3.
[34] Ibid., pg. 10.

of farmland meeting the definition of prime agricultural land in the California Government Code §§ 56064 would be an unavoidable significant impact.

TABLE 4.2-5
LAFCO EVALUATION CRITERIA SUMMARY

EVALUATION CRITERIA	TOTAL ACRES	IMPACTED ACRES
Location of and Total Acreage of Prime/Non-Prime Farmland		
USDA NRCS Class I and II	156.4	153.9
Storie Index Rating between 80 -100[a]	96.9	96.9
Annual Commercial Return > $400/acre	338.8	284.0
USDA Class I and II	126.4	123.9
Annual Commercial Return < $400/acre	76.0	71.0
USDA Class I and II	30.0	30.0
TOTAL ACRES > $400/ACRE RETURN AND OTHER USDA CLASS I AND II	**368.8**	**314.0**

Source: Impact Sciences. 2007.
Note: a – Soils with a Storie Index rating between 80 – 100 are a subset of USDA NRCS Class I and II soils.

Effects on Agricultural Lands within the Proposed Area

The State Important Farmland Map for Ventura County identifies 154 acres of Prime Farmland and 282 acres of Unique Farmland on the project site (a total of 436 acres). Implementation of the proposed project would result in the conversion to non-agricultural uses of approximately 352 acres of Important Farmlands, made up of 152 acres[35] of Prime Farmland and 200 acres of Unique Farmland. The loss of Prime and Unique Farmland would be an unavoidable significant impact.

Effects on Adjacent Agricultural Lands

As stated previously, the proposed project would include an agricultural preserve on the northern portion of the project site that will include approximately 55 acres of avocado. This area would be adjacent to new development consisting of single-family residential housing. Agricultural production in the preserve has historically included avocado orchards. The avocado orchards will continue to be farmed in this preserve. Along the eastern side of the property, near the Haun Creek drainage, the proposed project includes open space that would be used as greenways and for passive recreation. Development would be limited to trails and walkways. These areas would range from a minimum of 150 feet to over 300 feet in width between existing agriculture and proposed new residences in the project site. In areas that are less than 300 feet wide, a vegetative screen consisting of at least two staggered tree rows and shrubs characterized by evergreen foliage extending from the base of the plants to the crowns would be incorporated into the landscaped design. The trees to be used in the landscape design would be vigorous, drought tolerant, and have a mature height of 15 feet or more. These areas would be continuously maintained. However, as noted previously, public exposure to dust, noise and odors associated with on-site and adjacent farming activities cannot be completely eliminated or reduced to less than significant levels. Similarly, the potential also exists for incidents of vandalism, pilferage, trespassing and complaints against standard legal agricultural practices to adjacent agricultural uses. Therefore, implementation of the proposed project would result in significant impacts related to compatibility with existing agricultural operations.

[35] Adjusted to account for approximately 11 acres of fill material along the west side of Haun Creek. The area washed out in a flood and, to stabilize the area, was subsequently filled with material that is not conducive to growing.

Effects on the Economic Integrity of the Agricultural Industry in Ventura County

Implementation of the proposed project would reduce lemon and avocado production locally. The loss of avocados and lemons at the project site will result in fewer of these crops being harvested. However, given the poor site conditions, the impact on the economic integrity of these crops will be limited. The loss of approximately 118 acres of avocados and 233 acres of lemon will represent approximately 0.6 percent and 1.1 percent of the current harvested acreage in the County, respectively. Impacts on the economic integrity of the agricultural industry in Ventura County would be less than significant.

4.2.5.4 County of Ventura

Soils

A total of 436 acres of the project site are designated as Agriculture by the Ventura County General Plan. This area is also designated as Prime or Unique Farmland on the State Important Farmland Map. Of this total, approximately 352 acres would be converted to non-agricultural use under the proposed Specific Plan.

According to the County of Ventura Initial Study Assessment Guidelines criteria, a significant impact would result with implementation of the proposed project due to the conversion of important farmland designated as Agricultural by the County General Plan. Table 4.2-6 summarizes these results. The conversion of 152 acres of Prime Farmland and 200 acres of Unique Farmland to urban uses would represent a significant impact under the County's criteria. Furthermore, because the project site was considered as part of existing agricultural land inventory in the 1998 Final EIR, the loss of these lands under the County criteria would be considered both individually and cumulatively significant.

TABLE 4.2-6
COUNTY OF VENTURA FARMLAND CONVERSION THRESHOLD CRITERIA

COUNTY GENERAL PLAN LAND USE DESIGNATION	FARMLAND CLASSIFICATION	THRESHOLD CRITERIA	IMPACTS OF THE PROPOSED PROJECT	IS IMPACT SIGNIFICANT?
Agricultural/Agricultural – Urban Reserve	Prime/Statewide	5 acres lost	152	**Yes**
	Unique	10 acres lost	200	**Yes**
	Local	15 acres lost	0	No
TOTAL ACREAGE IMPACTED			**352**	

Source: Impact Sciences. 2007.

Water Quality

Storm water runoff contains urban pollutants that degrade surface and groundwater quality. Storm water runoff in Ventura County is regulated by the Regional Water Quality Control Board (RWQCB) – Los Angeles. On July 27, 2000, the Regional Board adopted Board Order No. 00-108 and issued the final municipal stormwater permit for Ventura County (Ventura County Municipal Storm Water Permit NPDES Permit No. CAS004002). The Board Order required the Ventura County Watershed Protection District and other Co-Permittees to implement Permit No. CAS004002, which includes the Monitoring and Reporting Program, the Ventura Countywide Storm Water Quality Urban Impact Mitigation Plan (SQUIMP), and the Ventura Countywide Storm Water Quality Management Plan (SMP). The Ventura County Stormwater Quality Ordinance No. 4142 implements the SMP and requires development

applicants to file storm water pollution prevention and controls plans that include BMPs prior to issuance of grading and/or building permits. The SQUIMP was developed as part of the municipal storm water program to effectively prohibit non-storm water discharges, and reduce discharge of pollutants from storm water conveyance systems from new development and redevelopment by the private sector. The SQUIMP contains a list of the minimum required BMPs that must be used by projects.

As co-permittees of the NPDES Permit No. CAS004002, the City and County have developed programs to address the following:

- Implementation of controls to reduce pollution from commercial, industrial and residential areas.
- Implementation of structural/non-structural controls on land development and construction sites.
- Implementation of controls to reduce pollution from maintenance activities.
- Elimination of illegal connections, including discouragement of improper disposal.
- Encouragement of spill prevention and containment, and implementation of appropriate spill response.
- Inspection monitoring and control programs for industrial facilities.
- Implementation of public awareness and training programs.[36]

Adherence to Board Order No. 00-108, the implementation of standard BMPs and the preparation of a Business Plan, as discussed in Section 4.10 (Hazards and Hazardous Materials) would reduce the incidence and quantities of urban pollutants potentially affecting surface and groundwater. In addition, the proposed project includes features such as detention basins that would help to reduce the potential for contaminants entering the groundwater system or leaving the site in surface water runoff. Therefore, impacts to surface and/or groundwater would be less than significant with the incorporation of project design features and best management practices and adherence to NPDES permit conditions.

Water Supply

Currently, the site has approximately 405 acres of land under agricultural production within the 501-acre project site. Over the last five years, the water required to meet production needs has averaged 816.3 acre feet per year (AFY). The balance of the Specific Plan area consists of upland areas that are not irrigated.

The water demand for the Specific Plan provides an estimated 111.1 AFY for continued irrigation of the orchards within the agricultural preserve.[37] This demand is based on existing uses for irrigation of the orchards on the site. As the project proposes adequate water for existing agricultural use, there will be no impacts to water supply. The project as proposed therefore will not result in any impacts to the availability of groundwater in the Santa Paula or Fillmore Basins needed to support agriculture.

Because the site will not cause a net decrease in water available for agriculture, and because the site does not utilize imported water, impacts to the quantity of water available for agricultural uses would be less than significant.

[36] California Regional Water Quality Control Board - Los Angeles Region. 2000. *State of California, California Regional Water Quality Control Board – Los Angeles Region, Order No. 00-108, NPDES Permit No. CAS004002 Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within Ventura County Flood Control District, County of Ventura , and the Cities of Ventura County.*
http://www.swrcb.ca.gov/rwqcb4/html/programs/stormwater/VentCoPermit.pdf (accessed September, 1, 2004).
[37] City of Santa Paula. 2007. *Water Supply Assessment & Verification for the East Area 1 Specific Plan.*

Air Quality/Micro Climate

The proposed project is within 0.25 mile of other existing agricultural operation. These lands (located to the east) would be potentially impacted from dust generated during construction activities on the project site. However, these activities would be short-term in duration. Additionally, construction activities would be required to comply with the requirements of the Ventura County Air Pollution District as they relate to dust suppression. These impacts would be less than significant with the incorporation of dust suppression.

The proposed project would not decrease solar access to existing agricultural areas. The areas of the agricultural preserve to remain on-site are upslope from the development areas and would not be impacted. Off-site areas would not be impacted from development as buffer areas would be established as previously discussed to the agricultural lands to the east. Therefore, impacts associated with solar access would be less than significant.

There are existing tree rows located on the project site. These include palms located along Padre Lane, cottonwoods within the upper portions of the project site and trees located along Haun Creek. The proposed project offers to maintain the tree rows along Padre Lane and Haun Creek and incorporate them as part of the landscape plan. The existing cottonwood trees that are located in the upper portion of the site along existing drainages may be retained (pending finalization of the grading and site plan). However, these tree rows, should they be removed, would not be adjacent to any agricultural areas, therefore, their removal would be less than significant.

The introduction of urban uses, including impervious surfaces (roadways, roofing material, etc.), light reflective sources and other heat radiating materials would increase the existing day and night-time ambient temperatures (i.e., "heat island") although the extent to which this would occur is unclear for the project site. However, the United States Environmental Protection Agency (USEPA) indicates that "heat islands" can result in temperature increases ranging from one to ten degrees Fahrenheit.[38] In addition, on-site wind patterns may also be affected by implementation of the proposed project (due to the construction of buildings and landscape trees), although the extent of this change is unclear. Moreover, localized air quality would be affected by the introduction of automobiles and other urban pollution sources associated with the proposed project, including increased levels of carbon monoxide (although these would be ameliorated to some extent due to atmospheric mixing). Therefore, implementation of the proposed project could result in potentially significant impacts related to micro climates.

Pests/Diseases

The County Agriculture Commissioner monitors all aspects of the agricultural production in the County and has the duty to exercise the powers and duties of that office to protect the environment, as it relates to agricultural activities, from adverse effects of biological organisms released into the environment and to protect beneficial biological organisms in the County. In addition, buffer areas, as shown on Figure 4.2-2 will be implemented within the northern and eastern portions of the project site. However, as noted previously, it is unclear if implementation of the proposed project could completely reduce impacts associated with the introduction of animals or other vectors, insects, or pests. Therefore, implementation of the proposed project would result in adverse impacts related to compatibility with existing agricultural operations.

[38] Note: The term "heat island" refers to urban air and surface temperatures that are higher than nearby rural areas. Many U.S. cities and suburbs have air temperatures up to 10°F (5.6°C) warmer than the surrounding natural land cover. Heat islands form as cities replace natural land cover with pavement, buildings, and other infrastructure. Source: United States Environmental Protection Agency website: http://www.epa.gov/heatisland/ accessed October 7, 2007.

Land Use Compatibility

The proposed project would be located within 0.25 mile of existing agricultural lands (located to the east), and portions of the project site will be within 300 feet of irrigated agriculture. The proposed project would also include an agricultural preserve on the northern portion. This area would be adjacent to new development consisting of single-family residential housing. The proposed project has also been designed to minimize and reduce urban development/agriculture compatibility issues. To this end, open space, greenways and passive recreation have been proposed for areas along the project site's eastern boundary, while buffers (as recommended by the Ventura County Agricultural Commissioner) have also been included along the northern portion of the project site. Despite the provision of these features, public exposure to dust, noise and odors would not be completely eliminated or reduced to less than significant levels. Similarly, the potential also exists for incidents of vandalism, pilferage, trespassing and complaints against standard legal agricultural practices to adjacent agricultural uses. Therefore, implementation of the proposed project would result in significant impacts related to compatibility with existing agricultural operations.

The proposed project also has the potential to result in changes in the existing environment which could result in the conversion of farmland to non-agricultural uses. These potential impacts are discussed in detail in Section 6.0 (Growth Inducing Impacts) of this EIR.

4.2.6 MITIGATION MEASURES

The following mitigation measures are recommended as part of project approvals to mitigate the significant direct impact of the loss of 352 acres of Prime and Unique Farmland by the project on agricultural resources.

A-1 The applicant must record a conservation covenant, in a form approved by the City of Santa Paula, on the 55 acres of land currently in agricultural production in the proposed agricultural preserve located along the northern portion of the East Area 1 site that restricts activities to agricultural operations. This covenant will also require use of modified farming cultural practices, such as the restriction of the use of agricultural chemicals and practices that would generate high levels of dust, noise and odors.

A-2 The applicant must record an agricultural conservation covenant, in a form approved by the City of Santa Paula, on 34 acres of other agricultural land owned by the applicant and currently under agricultural production within the City of Santa Paula's Area of Interest.

4.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed project would result in significant unavoidable adverse impacts. A significant impact would result from the conversion of Prime Farmland and Unique Farmland. Significant impacts would result from the conversion of cultivated farmland. Significant impacts would result from the effects of long-term air quality impacts on existing regional agricultural operations. Significant impacts would result from proximity of new residential and urban uses to existing agricultural lands.