5.4 LAND USE & AGRICULTURE

The proposed project would result in the creation of two new zoning districts: the AG-I-OF and AG-I-CARP zones. The objective of AG-I-OF is to preclude future greenhouse development greater than 20,000 sf while promoting existing open field agricultural uses and continuation of existing greenhouse operations. The AG-I-CARP zone is intended to direct the location and amount of future greenhouse development on balance with protection of the Valley's sensitive coastal resources. Approximately five million square feet of greenhouses and related structures development are currently located on properties that are proposed to be zoned AG-I-OF. Those existing structures would be allowed to be maintained, but they could not be significantly expanded. Under the proposed AG-I-CARP zone, approximately three million square feet of new greenhouse structures development could be developed in the project study area in addition to the existing 14.9 million square feet that currently exists.

The development of new greenhouses adjacent to residential areas would have the potential to result in significant land use conflicts resulting from project-related noise, traffic, visual changes, and agricultural practices. Such development and support facilities on properties located within the project study area would cover current open field prime agricultural soils.

5.4.1 Setting

a. Regional Land Use and Agriculture Characteristics. Santa Barbara County consistently ranks in the top 20 counties statewide in overall agricultural production, and agriculture is Santa Barbara County's major industry. In 1998, the total value of crops produced in the County was estimated to be $611,859,484. Overall, Santa Barbara County's agriculture industry contributes over one billion dollars to the local economy (1998 Agricultural Production Report). In 1998, the top 10 revenue crops that were produced in the County included broccoli, strawberries, wine grapes, head lettuce, cauliflower, avocados, cattle, celery, mums, and lilies.

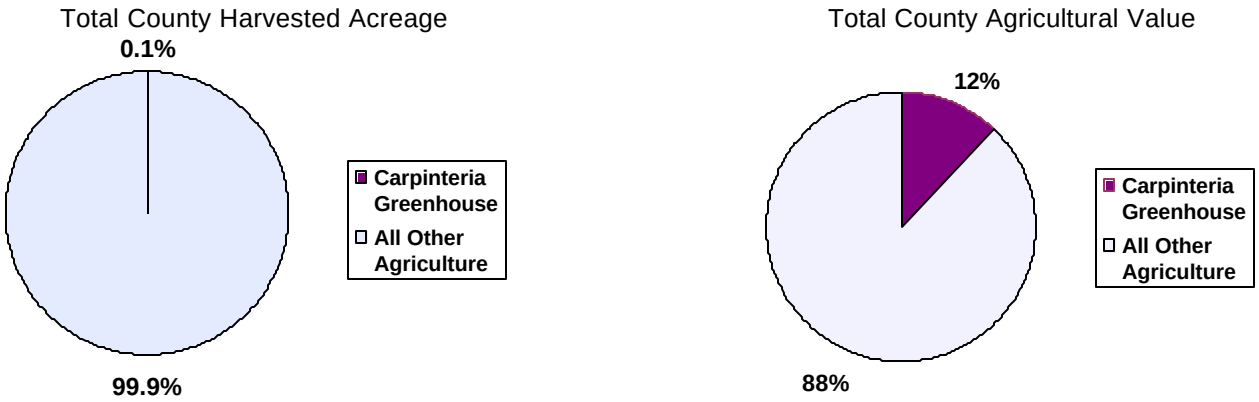
In 1998, County-wide production of nursery products, including cut flowers, potted plants, ground covers, bulbs, and transplant stock for fruits, vegetables and vines, had a total value of $125,620,050. It is estimated that countywide, there are 31,178,558 square feet (715 acres) of greenhouse structures and 2,238 acres of open field nursery stock production.

Within the Carpinteria Valley, there are approximately 14.9 million square feet of greenhouse structures development and 3,4703,540 acres in open field production. While occupying less than 0.1% of the County's total harvested acreage, Carpinteria Valley greenhouses produce approximately 12% of the total agricultural value, or approximately $76 million, as illustrated on the following page. Greenhouse operations also account for approximately 72% of all agricultural employment in the Carpinteria Valley, with approximately 913 employees (County of Santa Barbara, 1999).

b. Project Area Land Use and Agriculture Characteristics.

Land Use. The study area is entirely within the Coastal Zone. Land use regulations for the study area are contained in the Santa Barbara County Local Coastal Plan and the Coastal Zoning Ordinance. Most of the parcels within the project study area have a land use designation of "Agriculture I", and are zoned "Agriculture-I" (AG-I). A range of parcel sizes is

Comparison of Greenhouse Acreage in the Carpinteria Valley to Total Agricultural Value



permitted in the AG-I zone. Most of the parcels that are zoned AG-I-5 and AG-I-10 (five and ten acre minimum parcel sizes) are located in the central and southern portions of the study area where the topography is generally level. Most of the parcels that are zoned AG-I-20 and AG-I-40 (twenty and forty acre minimum parcel sizes) are located in the northern portion of the study area where the topography is moderately to steeply sloping. Properties within the study area that have agricultural zoning designations comprise approximately 5,600 acres of the 7,196-acre study area.

Land uses in the project study area consist of open field and orchard agricultural operations, greenhouses and related structures, and residences. Throughout the study area, residential uses are located adjacent to agricultural operations. Many of the residences that are adjacent to greenhouses and open field agricultural operations are located within the City of Carpinteria, along the southern border of the project study area. Several small residential communities are also located within the study area, including the Serena Park, La Mirada, Ocean Oaks, and Shepard Mesa communities. Parcel sizes within these unincorporated communities generally range between 10,000 square feet and 3.3 acres. Within and to the north of the study area, there are numerous individual houses that have been developed on lots that are generally five acres or greater in size.

Open Field Agricultural Uses. The project study area has mild year-around temperatures, unique micro-climates, extensive areas with prime agricultural soils, available and adequate labor, and excellent solar exposure resulting from its south-facing orientation. These factors combine to allow growers to produce high quality, high yield crops year-round. In addition the Valley is located within easy access to large markets and international transportation hubs. Within the project study area, there are approximately ~~3,470~~3,540 acres in open field crop production (USEPA Basins 2.0, 1999). Open field agriculture production in the project study area is dominated by avocado orchards. However, the Valley's unique climate also results in the area being one of the state leaders in high-yield specialty crops including citrus, cherimoyas, passion fruit, kiwis, bananas and other sub-tropical fruits. Numerous small open field operations are located within the Shepard Mesa area in the eastern end of the Valley and are engaged in the viable production of these specialty crops. Numerous growers also use the Valley's unique resources to produce high quality cut flowers and nursery products in the lower reaches of the foothills and throughout the valley flat land. This diversity of crops

contributes to the overall agricultural productivity of the area by providing growers with the flexibility to respond to market and environmental changes.

Avocado production represents the dominant open field crop in the Carpinteria Valley, and also represents one of the most productive regions for avocados in the state (Ken Stanley, Cal Avo, 1999). While the California Avocado Commission (CAC) reports a 5-year average production value of $4,028 per acre for the state, average production value for the Carpinteria Valley District (including land as far north as Lake Casitas) was $6,440 to $7,000 per acre. Production values at low elevations of the Carpinteria Valley often average twice as much as other areas in California due to the Valley's mild climate and prime soils. Production value estimates for three ranches at low elevations in the Valley support this conclusion. With over 83 acres in production, these ranches generated an average production value of $17,118 per acre over the last 5 years (Table 5.4-1). The temperate coastal climate allowed the grower to hold the crop until late in the season, which generated an average $1.20 per pound, 33% above the state average.

Table 5.4-1 Representative Avocado Production Values for the Carpinteria Valley

	Acreage	Production (lb/acre)	Production Value* ($/acre)	Production Costs ($/acre)	Post-Production Costs (Picking) ($/acre)
Area 1 (cooler)	30	15,600	21,280	1,200	1,108
Area 2 (warmer)	13	14,110	16,250	1,350	1,058
Area 3 (warmest-Gobernador Canyon)	40	12,910	13,825	1,100	981
Total	***83***	***42,620***	***51,355***	***3,650***	***3,147***
Average Values	**N/A**	**14,207**	**17,118**	**1,217**	**1,049**

**after avocado market association deductions*

Historically, greenhouse development in the study area has been constructed on slopes of 5% or less. Of the approximately 2,500 acres of AG-I designated land in the study area meeting this criteria more than 99% is currently in some form of agricultural production (including fallow land with evidence of historic agricultural use). Approximately 3,100 acres of agriculturally zoned land occurs on slopes in excess of 5%, which is unsuitable for greenhouse development.

Greenhouse Agricultural Uses. The Carpinteria greenhouse industry has grown rapidly since first introduced in 1962. Starting with approximately 100,000 square feet of greenhouses and related development, greenhouse use grew to three million square feet by 1970, eight million square feet by 1982, and the current 14.9 million square feet in 1999. The majority of the greenhouse development has occurred in the western portion of the study area, south of Highway 192, east of Nidever Road, and west of Linden Avenue. In this area, approximately 9.1 million square feet (209 acres) of greenhouses and related facilities have been developed, which is approximately 60% of the total greenhouse development in the study area.

The demand for new greenhouse space has resulted primarily from the ability of growers to control growing conditions within the structures. Within modern greenhouses, water and fertilizer use, pest control measures, humidity levels, and light exposure can be carefully

controlled. This allows growers to produce hard-to-grow plant varieties, increases plant yields, and substantially increases the production value per acre.

The Carpinteria Valley's 42 separate greenhouse growers produce a variety of crops (Table 5.4-2). The most common product (grown by 40% of greenhouse growers) is cut flowers, which includes chrysanthemums, gerbera daisies, roses, lilies, and numerous other varieties. Orchids are grown by nearly 19% of growers, with 15% of growers devoting their operations to potted plants (flowers, greenery, and herbs) and 15% to landscape and nursery plants. Other products include fruits and vegetables (9%, mostly lettuce, tomatoes, cucumbers), starter plants (1 grower) and a distribution center where plants are transported and sold.

Table 5.4-2 Crop Varieties Grown in Carpinteria Valley Greenhouses[1]

Crop Variety	# Greenhouse Growers[2]	% of Greenhouse Growers
Cut Flowers	13	40.6
Orchids	6	18.7
Potted Plants	5	15.6
Landscape/Nursery	5	15.6
Fruits/Vegetables	3	9.4
Starter Plants	1	3.1
Distribution center	1	3.1

[1] Based on information available for 34 of the 42 growers in the Valley (26 grower responses to phone survey and 8 from staff field observations).
[2] Numbers and percentages do not total 100 % as some growers grow more than one variety of crop.

The large variety of crops that are grown in the study area greenhouses requires a diversity of growing methods. Growers plant in the ground, in containers, or use hydroponic systems (a combination of water and a non-soil root-stabilizing substrate) depending on the type of crop. Greenhouse growers also use an extensive variety of products to control plant pests and diseases. A list of pesticides and other agricultural substances that may be used by either greenhouse operations and/or open field growers is provided in Appendix I.

An important innovation in agricultural practices within greenhouses is the use of beneficial insects that prey upon pests; and soaps, oils, and other environmentally friendly pesticides and fungicides. Integrated pest management systems (IPM) are becoming increasingly popular as new methods are proven, leading to a reduction in the quantity of traditional pesticides and fungicides that are used. ~~In the Carpinteria Valley, there are currently fifteen growers using integrated pest management systems in their greenhouses.~~

Integrated Pest Management (IPM) is a decision making process that considers many methods for controlling and preventing pests and diseases. IPM is based on a variety of prevention methods and monitoring plants to determine pest pressures and using a variety of control techniques based on cultural, physical, biological and chemical aspects of plant production. According to the County of Santa Barbara Agricultural Commissioner's office (letter dated April 16, 1999), most growers (greenhouse and open field) use some form of IPM for controlling pests, although some growers may not identify with the term IPM. A wider range of IPM methods is generally available to greenhouse growers because of the controlled environment within greenhouses. Based on an informal telephone survey (only 26 respondents), there are currently fifteen growers in the Carpinteria Valley using integrated pest management systems

in their greenhouses. However, as stated above in the Agricultural Commissioners letter, some of the growers responding to the survey may not identify with the term IPM and this number is likely to be higher. The following discussion outlines several IPM components.

Monitoring. The most common pest monitoring tools are yellow sticky cards and visual inspections. The cards are placed above the plant foliage and attract flying insects, especially thrips, leaf miners, fungus gnats and whiteflies. The cards are checked, usually on a weekly basis, and the insect counts are used to determine pest populations, hot spots of pest activity, and presence of biocontrol insects. This information is used to determine what, if any, pest management action is required. While these cards can be important monitoring tools, they are restricted to revealing populations of the mobile life stages of the insects or mites.

Another monitoring device for field and shadehouse production is a light trap, to determine peak populations of adult moths. This information is used for proper timing of chemical applications, especially *Bacillus thuringiensis*, for controlling young caterpillars. Pheromone-baited traps are also used in this way.

Exclusion. Growers use a variety of techniques to keep pests from becoming established in nurseries, especially in greenhouses. Some growers use quarantine areas where they hold incoming shipments for a short time to make sure pests are not brought in on these plants. Removing weeds in and around growing areas before seed set reduces weed pressure in the crops.

Biological Controls. Biological control is sometimes viewed as the opposite of traditional, chemically intensive agriculture. Biocontrol is the use of any biological agent to control pests. There are beneficial nematodes, fungi, bacteria, mites and insects. Many of these may be classified as predators, parasites or parasitoids.

Chemical Controls. Any material that is used to control a pest is legally defined as a pesticide, even if the material is an antagonistic fungi that attacks plant pathogens, a beneficial bacteria, a growth regulator, or a naturally occurring, botanically derived material. In IPM, chemical controls are usually used after all other options have been exhausted. There are many low toxicity materials available to help control specific pests, and these have largely replaced the more broad-spectrum materials. Spot spraying, when pests have been detected at low levels, reduces pesticide use and retains the biological balance of beneficials. Growers are using pesticides with lower toxicities, shorter half-lives, and "softer" chemistries which are more compatible with beneficial insects. This shift away from restricted material, with higher toxicities and broad-spectrum pest targets, has been dramatic, especially when compared to restricted materials permits from ten or twelve years ago (Agricultural Commissioner, 1999). Growers have limited pesticide applications to a minimum for economic reasons, since pesticides can be very expensive. Other pesticide-associated costs include applicator-hours, pesticide training, protective equipment, and restricted access or lack of access to treated areas after application.

Greenhouse production is more intensive and efficient than open field production, resulting in a better quality product and higher yields per acre. More pesticides are used in greenhouses than in open field production on a per-acre basis, but fewer pesticides are used in greenhouses than

in open field production on a per-stem or per-unit basis (Agricultural Commissioner, 1999). Many of the IPM techniques are easier to apply to greenhouse operations than in open field operations. Biocontrol agents are also more effective when contained in a greenhouse setting.

Hydroponics. The most sophisticated IPM systems are often associated with greenhouse growers using hydroponic growing systems. Plants are generally healthier and less stressed in a hydroponic system, and less stressed plants are less susceptible to diseases and plant pests, so generally, may require fewer pesticide applications. When pesticides are needed, they are often applied through ~~out~~ the system's computer-controlled nutrient and water delivery system, allowing for precise application rates.

The hydroponically-grown plants are not exposed to soil-borne fungal diseases, so fewer fungicides are required. In most hydroponic systems, the greenhouse ground is covered with white horticultural matting. Several insect pests, especially leafminers and thrips, pupate in the soil, so this white mat effectively breaks the life cycle of some pests, greatly reducing the populations and the need for control.

Depending on the type of flower crop, growers will use night lighting to increase growing and blooming rates. Both greenhouse and open field flower growers use night lighting; however, the greenhouse grower has the advantage of being able to provide blackout curtains or screens to prevent light from leaving the greenhouse. ~~While~~ Of the nine growers who reported using night lighting in their greenhouses, ~~only~~ eight reported using blackout curtains.

Finally, eleven growers have retention basins for catching and slowing the rate of storm water runoff, and nine report onsite packing/shipping facilities. Such facilities range from a small corner of a greenhouse being used for shipping purposes to large buildings and loading docks specifically designed for packing, storage, and shipping. Usually, these latter types of structures are associated with the larger greenhouse operations. A summary of representative greenhouse operation characteristics for facilities in the project study area is provided in Table 5.4-3.

Table 5.4-3 Greenhouse Operations Summary

	Operations	Number of Growers Employing Each Operation[1]
Growing Method	In Ground	11
	Containers	21
	Hydroponic	7
Water Conservation	Drip Irrigation	14
	Water/Nutrient Recycling	10
	Hand Watering	6
	Ebb & Flow	2
Integrated Pest Management	Uses IPM	15
	Plans to Use IPM in Future	2
Lights	Night Lighting	9
	Blackout Curtains/Shades	8
Other	Retention Basin	11
	Onsite Packing/Shipping	9

[1] *Based on 26 grower responses to the telephone survey.*

figure 5.4-1 Soils

Soils. Many of the parcels located in the project study area have soils that are classified as being prime (Class I or II) agricultural soils. Portions of the project study area that have prime agricultural soils are depicted on Figure 5.4-1. Approximately 1,900 acres of the 7,196-acre project study area contain prime agricultural soils. These soils have few or moderate limitations that restrict their use for agricultural purposes. The remainder of the study area has soils that have been classified as non-prime soils (Class III and IV). These soils may present limitations that reduce the types of plants that may be grown or require special conservation practices.

Another system that has been developed to identify areas capable of supporting agricultural operations is the "State Important Farmlands Map." This mapping system considers soil quality and other agricultural suitability factors, and identifies farming areas with a variety of classifications, including "prime," "statewide importance," and "unique." The majority of the project study area has been identified as being "prime" and "unique" agricultural areas. Table 5.4-4 indicates that 4,152 acres of important farmlands have been identified in the study area.

Table 5.4-4. Inventory of State Important Farmlands In Study Area

Type	Acreage
Prime	1,870[1]
Statewide Importance	264
Unique	2,018

Source: California Department of Conservation, 1996
[1] Acreage does not reflect prime soils that may be categorized as statewide importance or unique.

Agricultural Suitability. The combination of mild climatic conditions, prime agricultural soils, available water sources, and proximity to major markets, makes the project study area a valuable agricultural resource. The ability to grow a diverse range of high-yield specialty crops, such as avocados, kiwis, cherimoyas, cut flowers, and nursery stock plants, provides growers with the flexibility to respond to market and environmental changes.

As demonstrated by the extensive agriculture operations that have been established, agricultural suitability in the Carpinteria Valley can be classified as being high to very high. The entire valley has an adequate water supply, nearby support facilities, and mostly prime soils.

c. Regulatory Setting. Existing regulations pertaining to agriculturally zoned land are provided by the County of Santa Barbara Coastal Zoning Ordinance (Article II of Chapter 35 of the Santa Barbara County Code). Cultivated open field agriculture and orchard production are not regulated. Conversion of uncultivated land to open field and orchard agriculture is allowed under the existing AG-I zone subject to certain provisions in the County grading ordinance. The Zoning Ordinance specifies that in the "AG-I" zone, greenhouse and related structure projects that do not exceed 20,000 square feet in area are permitted uses~~, which~~ and do not require the issuance of a discretionary land use permit. Only a Coastal Development Permit is required for projects under 20,000 square feet. For greenhouse ~~and related structure~~ development projects that exceed 20,000 square feet, the Coastal Zoning Ordinance requires that a Development Plan permit be approved. This regulation, however, was superceded in December 1998 when the Board of Supervisors adopted a resolution requiring that greenhouse

~~projects~~ development exceeding 20,000 square feet obtain a Conditional Use Permit rather than a Development Plan. The Conditional Use Permit process provides a mechanism to revoke the permit due to non-compliance with conditions of approval and provides an appeal process to the Coastal Commission. Information regarding the greenhouse development project that must be submitted with the project application includes: the gross acreage of the project property, the location and size of existing and proposed structures, landscaping that is to be provided, the location and number of parking spaces, and the location of access driveways. In addition, Coastal Zoning Ordinance Section 35-68.11 requires that landscaping plans for all greenhouse projects be submitted for review and approval by the Planning and Development Department.

The Coastal Zoning Ordinance provides setback and lot coverage requirements for new greenhouse development in the "AG-I" zone. New greenhouse~~s and related structures~~ development must be located at least 30 feet from the right-of way of an adjacent street, and at least 50 feet from the lot line adjacent to a residential zone. Lot coverage requirements are established based on the size of the project parcel: for lots less than five acres, no more that 75% of the lot can be covered by greenhouse~~s or related structures~~development; for parcels that are five to 9.99 acres in size, no more than 70% of the lot can be covered by greenhouse ~~structures~~development; and for lots 10 acres in size or greater, no more than 65% of the lot may be covered by greenhouse~~s~~ development.

Pesticide and herbicide application is regulated by federal and state laws and falls under the jurisdiction of the County Agricultural Commissioner. The Agricultural Commissioner's Office issues permits for California restricted materials to both greenhouse and open field growers. This permit process evaluates application methods along with many other criteria in order to avoid offsite drift and runoff, safe handling and container disposal. Proper storage of pesticides, herbicides, and fertilizers for safe containment is regulated by Article 80 of the Uniform Fire Code. The Carpinteria-Summerland Fire Protection District is responsible for this program in the Carpinteria Valley.

d. County of Santa Barbara Agriculture-Related Land Use Programs. To enhance and protect agricultural operations in Santa Barbara County, the County has adopted a variety of planning programs. A summary of major agriculture-related land use programs in Santa Barbara County is provided below.

Agricultural Element. The Agricultural Element of the Comprehensive Plan provides a variety of goals and policies that are intended to protect and maintain a healthy economy and to provide for the conservation of agriculture. Major goals include measures to enhance the continuation, and where appropriate, encourage the expansion of agriculture; protect agricultural lands from adverse urban influences; to encourage agricultural operations to implement soil conservation and fire risk reduction practices; and to facilitate the development of accessory uses that support the agricultural industry.

Right to Farm Ordinance. Santa Barbara County's "Right to Farm" Ordinance No. 3778 protects farming operations from nuisance complaints from surrounding urban uses. The Ordinance protects agricultural operations if the operation has been established for at least three years,

Figure 5.4-2 Agricultural Preserves

conducts farming activities in a manner consistent with accepted customs and standards, and was not a nuisance at the time the farming operation started.

Local Coastal Plan (LCP). The California Coastal Act requires that "*the maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses*…" To implement this requirement, the Santa Barbara County LCP contains policies pertaining to land use designations for agricultural lands; conversion of agricultural lands to non-agricultural uses; maintenance of the long-term productivity of agricultural lands; and policies regarding the permitting of greenhouse projects.

Williamson Act Contracts and County Uniform Rules**.** Williamson Act, or Land Conservation Act contracts, are agreements between the County and the owner of agricultural property. The contract agreement requires that the landowner keep the property in agricultural production for a period of ten years. Unless a notice of non-renewal is filed, the contract automatically renews every year. In return, the land under contract is taxed by the County at an agricultural use rate, not at a "highest and best" land use rate. The property owner must pay substantial tax penalties if the property is taken out of an agricultural preserve contract prior to the expiration of the ten-year contract. The County implements the Williamson Act through its Agricultural Preserve Uniform Rules.

Properties within the project study area that have entered into agricultural preserve contracts are depicted on Figure 5.4-2 and total approximately 2,900 acres. Table 5.4-5 describes the number of parcels and land area that are currently in agricultural preserves in each of the proposed zoning designations that would be created by the proposed project.

Table 5.4-5 Acreage in Agricultural Preserve Contracts

	Proposed AG-I-CARP Zone	Proposed AG-I-OF Zone
No. of Assessors Parcels	3	189
Acreage	40	2,860

5.4.2 Impact Analysis

a. Methodology and Thresholds of Significance.

Land Use. The potential for a project to result in significant long-term compatibility conflicts with surrounding land uses, or to cause a substantial change in the character of a community or neighborhood, are assessed by using a variety of criteria. To evaluate potential land use or "quality of life" impacts that a proposed project may have on surrounding land uses, the County considers factors including loss of privacy, noise and traffic nuisances that do not exceed adopted thresholds (County of Santa Barbara, *Environmental Threshold and Guidelines Manual, 1995).* To evaluate potential land use conflicts resulting from development of new greenhouse projects, two additional criteria have been considered: potential visual / light and glare impacts, and potential impacts resulting from agriculture-related activities such as dust and spraying. A significant land use conflict may occur if it can be reasonably argued that a

proposed project would result in a substantial adverse change to community character given existing privacy, noise, traffic or visual conditions; or substantially reduce the ability of adjacent residences to enjoy the use of their property.

Appendix G of the *CEQA Guidelines* assesses land use compatibility based on the potential for a project to physically divide an established community or conflict with adopted land use plans.

Agricultural Resources. The County's *Environmental Thresholds and Guidelines Manual (1995)* contains a methodology for establishing the agricultural viability of a parcel based on a weighting of the project site agricultural factors. According to the County's Agricultural Resource Guidelines, if a proposed project renders a viable agricultural parcel non-viable, the project would have a significant agricultural impact. As a general guideline, an agricultural parcel is considered viable if it is of sufficient size and capability to support an agricultural enterprise independent of any other parcel. Agricultural non-viability can result from either the conversion of agricultural land to a non-agricultural use, or from the creation of direct (physical) or indirect (procedural) impediments to continued commercial agriculture as the primary use of the property.

Appendix G of the *CEQA Guidelines* presents several questions that can be used to assess the potential significance of a project's impacts to agricultural resources. The questions address the potential for a project to convert Prime, Unique, or farmland of Statewide Importance to non-agricultural uses; conflict with existing zoning for agricultural use or a Williamson Act contract; or result in other changes to the environment that could result in the conversion of farmland to non-agricultural uses.

b. Project Impacts. The rezoning of the Study Area as proposed would provide for the future development of approximately 3 million square feet of new greenhouse ~~structures~~development. This level of new development has the potential to result in a number of land use incompatibility and agricultural impacts including:

- Loss of privacy in adjacent residential areas
- Nuisance noise on residents from greenhouse operations
- Increased traffic nuisance
- Increased light and glare on adjacent residential areas
- Interference with existing open field agricultural operations
- Removal of prime soils from production due to greenhouse accessory support structures

Conflicts between urban and agricultural land uses are not anticipated to increase with the continuance of agriculture in the AG-I-OF zone district because open field and orchard agriculture and greenhouse development of less than 20,000 sf cumulative per legal lot ~~is~~ are ~~an~~ existing practices that are accounted for in the existing zone district provisions. These provisions and the impacts associated with their continuation are a part of the environmental baseline (i.e. existing conditions) and will continue whether or not the project is approved. Therefore, there are no reasonably foreseeable significant land use impacts associated with the proposed AG-I-OF zone district. However, the proposed rezones would ~~also~~ result in beneficial impacts to agricultural resources by protecting large areas of the Carpinteria Valley for long-term open field agricultural use. By ~~precluding~~ limiting new greenhouse development

Figure 5.4-3

in the Open Field zone district, large ~~continuous~~contiguous tracts of prime soils could be preserved, promoting crop flexibility, especially for crops requiring large, contiguous tracts of agricultural land. ~~would be promoted, and~~ Additionally, the amount of potential covering of prime soils would be minimized, which could otherwise be covered by greenhouses, accessory structures and parking areas under the existing AG-I zone designation. Maintaining long-term crop flexibility (e.g., from row crop or cut flowers to orchards) is an important component that preserves growers' options to respond to market or environmental changes.

The project impacts identified below would result from potential buildout of 3.0 million sf of greenhouse development in the proposed AG-I-CARP zone district.

Impact LU/AG-I Development of new greenhouse and related structures in the proposed AG-I-CARP zone has the potential to result in significant land use conflicts with adjacent residential uses.

All of the proposed AG-I-CARP ~~zoning designation~~parcels are presently in agricultural production with either open field operations, orchards, greenhouses, or related structures. Approximately 3 million square feet of new greenhouse ~~space~~ development could be developed on these parcels. Redevelopment of older greenhouses, plant protection and shade structures to new greenhouses could result in adding to the amount of new greenhouse development in the Study Area. Specific quality of life issues that have the potential to result in land use conflicts resulting from new greenhouse development adjacent to residential uses are evaluated below. It is anticipated that these land use conflicts will be limited to residential areas located Figure 5.4-3 immediately adjacent to vacant parcels identified for future greenhouse expansion. These specific parcels are depicted in Figure 5.4-3. Other than visual and traffic nuisance issues (discussed in detail in Sections 5.1 and 5.5 respectively), new greenhouse development located on parcels that are not located immediately adjacent to residential uses are not anticipated to result in land use compatibility conflicts. Nevertheless, greenhouse activities located adjacent to residential uses have the potential to result in a number of potentially significant land use conflicts.

Agricultural operations commonly result in activities that have the potential to result in land use conflicts with adjacent residences. These conflicts can include fugitive dust from plowing and cultivation, over spray from fertilizer application, and odors. These types of conflicts are typically associated with open field agricultural operations, and may be periodically experienced by residences that are located within or adjacent to the project study area. Nevertheless, the County's "Right to Farm" ordinance recognizes that these types of conflicts may occur. While the Right to Farm Ordinance carries no regulatory authority, it does put residential property owners on notice that adjacent agricultural activities may result in certain nuisances, and allows farming operations that implement customary farming practices to continue to occur adjacent to urbanized areas.

By conducting agricultural operations in enclosed structures, it is anticipated that the potential for common agriculture-related land use conflicts with individual surrounding residences resulting from dust generation, pesticide and fertilizer application would be reduced to a less than significant level. However, other nuisance issues related to the loss of privacy, noise,

visual, and traffic related impacts may also occur from greenhouse operations as discussed below.

Loss of Privacy. Development that occurs adjacent to residential uses has the potential to result in new concentrations of people in areas that may interfere with use and enjoyment of private property. For example, certain agricultural operations such as row crop cultivation and orchards require a substantial number of farm employees present on site during planting and harvesting. When located adjacent to residential areas, this increase in farm employee presence can result in the loss of privacy and other nuisance impacts. The development of new greenhouses could result in an increase in the number of people that may be present on agricultural properties; however these employees would typically be working within greenhouse structures. Combined with the required setbacks and landscaping required for all new greenhouse development it is not anticipated that these employees would generate significant nuisance to adjacent residential areas. Moreover, while greenhouse operations result in year-round employees, they require substantially fewer employees per acre, particularly during planting and harvesting seasons. Therefore, the development of greenhouses in the AG-I-CARP zone would not result in significant loss of privacy impacts.

Nuisance Noise. Construction activity that would be required to develop new greenhouse structures would have the potential to generate noise levels above County significance thresholds for sensitive receptors. These potentially significant construction related noise impacts would be short-term and primarily related to the grading and erection of greenhouse structures on parcels immediately adjacent to residential areas as depicted in Figure 2-4. In addition, operational phase impacts associated with exterior loud speakers, and idling shipping or receiving trucks may also occur. Greenhouse shipping and receiving operations often operate during evening and early morning hours in order to ensure products are delivered on time during peak market seasons. Truck noise and loading and unloading activities can generate substantial nuisance noise when located near residential uses. In addition, ongoing noise from generators and boiler facilities used for heating and cooling can generate significant noise volumes. As discussed in Section 5.7, these noise-related conflicts result in potentially significant impacts to adjacent residential receptors.

Traffic. It is estimated that the buildout of greenhouses and related structures under the proposed AG-I-CARP zone would generate approximately 822 average daily vehicle trips, 91 a.m. peak hour trips and 183 p.m. peak hour trips. After distributing the project-generated traffic onto roadways and intersections throughout the project study area, impacts to the intersections of Cravens Road / Highway 192, Cravens Road / Via Real, Linden Avenue / Highway 192, Casitas Pass Road / Highway 192, and the Casitas Pass Road / U.S. 101north- and south-bound ramps would be less than significant (see Section 5.5). Other traffic related conflicts might result from loading and unloading of trucks on public roadways. Currently, several greenhouse operations lack sufficient space for shipping and receiving activities to take place onsite. As a result, large trucks often park on roadway shoulders or directly within the traffic lanes for extended time periods. When this occurs, motorists are faced with potentially hazardous conditions resulting from the lack of sight for on coming traffic. Without adequate onsite parking and turning areas, additional greenhouse development located throughout the Study Area could result in potentially significant traffic related nuisance impacts.

Visual/Light and Glare. Interior and exterior lighting that may be included in new greenhouse structures would have the potential to result in nuisance impacts to residences through the introduction of glare from greenhouse roof materials. Unlike other land use conflicts which typically only affect adjacent residences, these visual impacts could affect residences along foothill areas as well as from public roadways located throughout the Study Area. In addition, the introduction of greenhouse structures in areas currently under open field agricultural use would result in a change in visual character of the area. These potentially significant impacts are discussed in detail in the Visual Resources / Aesthetic Section.

Impact LU/AG-2 Implementation of the proposed AG-I-CARP zone would have the potential to result in the permanent placement of structures and pavement upon open field prime agricultural soils.

It is estimated that approximately 25% of the greenhouses in the project study area use hydroponic systems to grow plants (Santa Barbara County, 1999). The use of hydroponic systems allows for the precise application of plant nutrients, requires less labor, reduces water use, and increases plant yields. Other greenhouses in the project study area grow plants in containers, which also results in the production of plant products that do not rely on the use of the natural soil resources. However, the development of greenhouses, even those that do not rely on the native soil to grow plants, is not considered a conversion to a non-agricultural use as the land is still being used for agricultural production. Therefore, although new greenhouses developed in the AG-I-CARP zone may not rely on native prime agricultural soil resources, these projects would not result in a significant impact to agriculture.

A variety of agriculture-related accessory and support uses have been established in the project study area. Accessory uses include storage, shipping, and office facilities, driveways and parking lots. On-site agricultural accessory structures that have been developed on parcels with greenhouses and related operations are generally small, occupying an area that is typically about 5% to 15% of the parcel size (County of Santa Barbara Study Area Data base, 1999). Support uses include structures such as packing, storage, and shipping facilities. While accessory and support uses are necessary to conduct the intensive agricultural operations that are common in the Carpinteria Valley, these uses take agricultural land out of active production. After accessory uses have been developed with buildings or paving, it is unlikely that future farming operations will be established in those areas.

Under the proposed AG-I-CARP zoning designation, it is estimated that approximately ~~1.8~~ 2.23 million additional square feet of greenhouse development could occur on parcels that are currently developed with greenhouses or related structures and that contain prime agricultural soils. An additional ~~492,500~~ 567,000 square feet of greenhouse development could occur on properties that are presently in open field production and that have prime soils. In total, approximately ~~2.3~~2.8 million square feet (~~54.9~~64 acres) of new greenhouse development could occur on prime agricultural soils in the proposed AG-I-CARP zone. Assuming 15% lot coverage for accessory uses, approximately ~~351~~420,000 square feet, or ~~8.1~~9.6 acres, of prime soils could be taken out of active production as a result of accessory use development in the proposed AG-I-CARP zone. It is important to note that the remaining 200,000 square feet of potential buildout in the AG-I-CARP zone, while not occurring on prime soils, would take place on highly productive agricultural lands that are classified as Unique Farmland by the California

Department of Conservation. Due to the small area affected and the direct relationship to on-site agricultural activities, the removal of prime agricultural soils for accessory uses would not result in a project-specific significant agricultural resource impact with implementation of the proposed mitigation measures.

In addition, major support facilities such as warehouses or shipping facilities which are the primary use on the parcel can result in the covering of extensive areas of prime agricultural soils with buildings, driveways and parking areas. However, these uses provide necessary services that are required by the agriculture industry in the project study area. ~~Therefore, the potential~~ Potential development of additional major agriculture support uses on sites that have prime agricultural soils in the proposed AG-I-CARP or the AG-I-OF zones would not result in a potentially significant covering of prime agricultural soils ~~resource impact~~ provided the structures serve agricultural operations located in the project study area and that the proposed mitgation measures are applied.

Impact LU/AG-3 Greenhouse development in the proposed AG-I-CARP zone would have the potential to result in physical changes to the environment that could interfere with or disrupt existing agricultural operations that are located in the project study area.

A change from one type of crop to another in response to market conditions or consumer demand is common in the agriculture industry. The conversion of open field agriculture ~~and the construction of~~ to greenhouses in the project study area is an example of this type of shift in agricultural practices and market conditions.

As described in section 5.4.1b, greenhouse growers use a wide variety of pesticides and similar products. Due to the specialized nature of the crops that can be grown in greenhouses, operations may rely on more types of pesticides than open field operations. However, given the enclosed character of greenhouses, it is likely that overall pesticide use is reduced when compared to open field operations, and the potential for impacts from air-borne pesticides and over-spray onto adjacent properties would also be potentially reduced. The enclosed growing operations are also conducive to the use of integrated pest management practices, such as the use of beneficial insects.

Throughout the project study area, greenhouses have been developed adjacent to open field and orchard operations. Under the proposed AG-I-CARP zoning designation, additional greenhouse development would occur adjacent to open field agricultural operations. Some Carpinteria Valley open field growers have reported that crop production (such as avocados) has declined after greenhouses were developed on adjacent properties. ~~Although the~~ Potential causes for this asserted decline in production ~~are not known, it is assumed that it~~ may be related to a combination of factors such as changes in micro-climate, increased or different pest populations, overspray from painting, increased night lighting, or increased shading effects. ~~The~~ Since there is no statistical data available to substantiate crop production declines, the loss of open field production from adjacent greenhouse development is considered a potentially adverse, but not significant impact.

5.4.3 Mitigation Measures

a. Existing Comprehensive Plan/Coastal Plan Policies. The state Coastal Act, County Comprehensive Plan (Agricultural Element) and Local Coastal Program contain numerous goals and policies related to the preservation and enhancement of agriculture. These goals and policies are summarized in Section 4.0 (Policy Consistency). The County has also adopted a "Right to Farm" ordinance (Ordinance 3778, Chapter 3, Article IV, Section 3-19 of the County Code). The ordinance applies to lands designated for agriculture in the Comprehensive Plan and/or zoned exclusively for agricultural use, and protects agricultural uses from conflict complaints with non-agricultural land uses.

b. Proposed Development Standards. Greenhouse development standards that are proposed in the AG-I-CARP zone would include requirements for minimum setbacks, the provision of landscaping, preservation of existing on-site trees, night lighting controls, and building height limits as described below and included in the draft ordinance (Appendix B).

~~**Mitigation LU/AG-1** The maximum net lot coverage for all greenhouses, hothouses, plant protection structures, and accessory structures (packing sheds, retention basins, parking areas, etc.) shall be: 75% for lots less than 5 acres; 70% for lots 5 to 9.99 acres; and 65% for lots 10 acres or more. *(Addresses Impact LU/AG-1, LU/AG-2, LU/AG-3)*~~

Mitigation LU/AG-~~2~~1 The following setbacks shall be required for all new development:

- Front: Fifty (50) feet from the centerline and thirty (30) from the right of way line of any street.
- Side and Rear: Thirty (30) from the lot lines on which the building or structure is located.
- Interior: Twenty (20) from the lot lines on which the building or structure is located.
- In addition, no greenhouse or packing and shipping facility ~~structure~~ shall be located within fifty (50) feet of a~~ny~~ residentially-zoned lot or fifty (50) feet from an~~y~~ adjacent parcel ~~lot~~ where there is ~~with~~ an approved residential dwelling located ~~use~~ within fifty (50) feet of the ~~subject~~ parcel boundary. ~~*(Addresses Impact LU/AG/1, LU/AG-2, LU/AG-3)*~~
- Lots that contain one gross acre or less shall be subject to the setback regulations of the R-1/E-1 Single-Family Residential District. *(Addresses Impact LU/AG/1, LU/AG-2~~, LU/AG-3~~)*

Mitigation LU/AG-~~3~~2 A landscaping plan, approved by Planning and Development prior to the issuance of a Coastal Development Permit, shall be required for all new development which provides, to the maximum extent feasible, visual screening of all structures and parking areas from all adjacent public roads and view corridors. The landscaping plan shall consist of plants which will reasonably screen the development within five (5) years and which are compatible with the surrounding visual character of the area. *(Addresses Impact LU/AG/1~~, LU/AG-3~~)*

Mitigation LU/AG-~~4~~3 The maximum height of any structure shall be no greater than thirty (30) feet above finished grade. *(Addresses Impact LU/AG/1~~, LU/AG-3~~)*

Mitigation LU/AG-~~5~~4 To the maximum extent feasible, hardscaped areas (i.e., parking lots, loading bays, interior walkways in greenhouses, and accessory building footprints) shall be minimized in order to preserve the maximum amount of prime agricultural soils. Minimizing the covering of soils shall be accomplished through efficient site and building design and the use of ~~im~~pervious surfaces wherever feasible. (*Addresses Impact LU/AG-2*)

In addition to the above measures, mitigation measures identified in other impact sections of the EIR would also serve to mitigate land use incompatibility conflicts including VIS-1, VIS-2, VIS-4, VIS-5, VIS-8, VIS-9, and VIS-10, which proposes to limit maximum lot coverage of total greenhouse development to 65%.

c. Proposed Mitigation Measures. No additional mitigation measures are proposed.

5.4.4 Residual Impacts

The following discussion identifies the level of significance for project impacts after all available mitigation measures have been applied.

Impact LU/AG-1. As discussed in the representative sections of this document (i.e., Sections 5.1 Visual Resources, 5.5 Traffic, and 5.7 Noise), nuisance impacts related to these issue areas may result in potentially significant impacts. A number of mitigation measures have been identified to reduce such nuisance impacts to a level less than significant (except for visual impacts). However, when viewed cumulatively, these nuisance impacts, combined with the potential for the loss of privacy, can result in a greater degree of impacts than would occur individually, particularly in terms of community character and overall quality of life. Therefore, even with the prescribed mitigation measures, land-use conflict impacts from the development of approximately three million square feet of greenhouse structures are considered ***significant and unavoidable (Class I)***.

Impact LU/AG-2. The development of on-site accessory uses on agricultural parcels would result in removal of small areas from agricultural production. In addition, hardscaping associated with parking lots and walkways within greenhouses could also result in the removal of prime soils from production. However, due to the very small area that may be converted, and the direct and necessary relationship between the accessory uses and the agricultural operation, the incremental loss of prime agricultural soil production resulting from accessory use development would not be significant. Therefore, the proposed mitigation measures would reduce potential agriculture resource impacts resulting from potential development in the proposed AG-I-CARP zones to a ***significant but mitigable (Class II) level.***

Impact LU/AG-3. ~~The proposed mitigation measures would reduce conflicts with adjacent open field agricultural uses by providing adequate setbacks, landscape buffers and night lighting blackout screening. Additional reduction in conflicts can occur with the implementation of Mitigation VIS-10, which limits lot coverage of total greenhouse development to 65%. Although it is possible that minor conflicts with orchard or other open field crops may still exist related to shading, pests, and overspray effects, these impacts are considered to be ***Class II, significant, but mitigable, impacts***.~~ No specific mitigation measures are required to address this adverse, but less than significant impact (Class III).

5.4.5 Cumulative Impacts

Potential land use conflicts that may result from greenhouse-related impacts such as traffic, noise, agricultural practices, loss of privacy, and changes in visual character would affect the study area on a cumulative, valley-wide basis. Combined with other proposed development and land use changes that could occur in the Carpinteria Valley, these land use and community character impacts are considered ***significant and unavoidable (Class I)***.

Potential project-specific impacts related to loss of prime agricultural soils can be reduced to a less than significant level with the implementation of mitigation measures that would limit hardscaping and coverage by greenhouse-related accessory uses at individual project sites. In addition, no other changes in agricultural land use patterns are expected to occur in the Carpinteria Valley. ~~as agricultural land is considered a priority use within the Coastal Zone.~~ A number of LCP policies exist which protect agricultural resources and prohibit the conversion of coastal agricultural land to non-agricultural uses. Therefore, cumulative impacts to agricultural resources are considered ***significant but mitigable (Class II).***