

2.0 Project Description

2.1 Project Proponent/Lead Agency

The project proponent and lead agency is the County of Santa Barbara (County), Planning and Development Department, Long Range Planning Division, located at 123 East Anapamu Street, Santa Barbara, California 93101.

2.2 Project Area

The Hoop Structures Ordinance Amendment (Project) applies to approximately 927,014 acres of land zoned Agricultural I (AG-I) and Agricultural II (AG-II) within the unincorporated, inland areas of the County outside of Montecito (Figure 2-1). The County is located on the Pacific Coast of California, extending approximately 45 miles north from the south-facing coastline and approximately 65 miles inland from the west-facing coastline. The County has an approximate land area of 2,735 square miles (or 1.76 million acres) with a population estimated at more than 446,000 residents in 2016 (U.S. Census Bureau 2017). The Inland Area of the County is estimated to be approximately 2,372 square miles (or 1.52 million acres), including the County's incorporated cities. The County is bounded to the east by Ventura County, to the south and west by the Pacific Ocean, and to the north and northeast by San Luis Obispo and Kern counties. Within the County's jurisdiction are many unincorporated communities, including populous urban areas adjacent to incorporated cities and towns, as well as small rural farming communities.

The County is home to eight incorporated cities, Vandenberg Air Force Base, Los Padres National Forest, University of California, Santa Barbara, and the sovereign nation of the Santa Ynez Band of Chumash Indians. In addition, the County's territory includes four of the eight Channel Islands: San Miguel, Santa Rosa, Santa Cruz, and Santa Barbara, located to the south. Most of these islands are part of the Channel Islands National Park. The Project would not apply to any of these areas or to the County's incorporated cities.

2.3 Background

a. County Zoning Codes

In the Inland Area, hoop structures are defined in the County Land Use and Development Code (LUDC) as “[a] structure consisting of a light-weight, frame with no permanent structural elements (e.g., footings, foundations, plumbing, electrical wiring) and an impermeable, removable covering used to protect plants grown in the soil or in containers upon the soil. Includes structures commonly known as berry hoops and hoop houses” (County of Santa Barbara 2017a). Shade structures are similarly defined in the LUDC as “[a] structure consisting of a frame with no permanent structural elements (e.g., footings, foundations, plumbing, electrical wiring, etc.) and a dark, permeable, removable covering (e.g. netting) used to shade plants grown in the soil or in containers upon the soil.”

Hoop structures and shade structures, referred to as crop protection structures within this document, are not specifically identified as allowable uses on lands zoned for agriculture. However, hoop structures would be permitted in the same manner as greenhouses in areas regulated by the LUDC, requiring a Land Use Permit for less than 20,000 square feet, and a Development Plan for 20,000 square feet or more, which also requires environmental review and a hearing before the Planning Commission (LUDC Section 35.42.140).

The Coastal Zoning Ordinance (CZO) similarly defines hoop structures and shade structures but also sets forth permit requirements within the Coastal Zone. The Project does not include amendments to the CZO.

b. County Building Code

Pursuant to the County Building Code, a building permit is not required for hoop structures that are 20 feet or less in height. The Building Code first exempted “readily removable plastic covered hoop structures without in ground footings or foundations that are not more than 12 feet in height” in 2011. On April 19, 2016, the Board of Supervisors adopted an amendment to the County Building Code that increased the maximum allowable height – from 12 feet to 20 feet – without the issuance of a building permit. The Building Code also does not require a building permit for “shade cloth structures constructed for nursery or agricultural purposes” (County of Santa Barbara 2016a).

The Board of Supervisors included the Project in the Long Range Planning Division’s 2017-2018 Annual Work Program, directing an ordinance amendment to exempt hoop structures from planning permits in the Inland Area consistent with the Building Code exemption from building permits. The similarity of shade structure issues with hoop structure issues warrants their inclusion in this ordinance amendment.

2.4 Project Objectives

The California Environmental Quality Act (CEQA) Guidelines Section 15124(b) requires that the Environmental Impact Report (EIR) project description include a statement of objectives of the proposed Project. The primary objectives of the Project are to:

1. Simplify and streamline the permit process for hoop structures and shade structures to allow farmers more flexibility and efficient agricultural operations in support of the County’s agricultural economy.
2. Exempt hoop structures and shade structures of a given height from planning permits on agriculturally zoned lands in the Inland Area.
3. Identify development standards with which hoop structures and shade structures must comply in order to be exempt from planning permits.

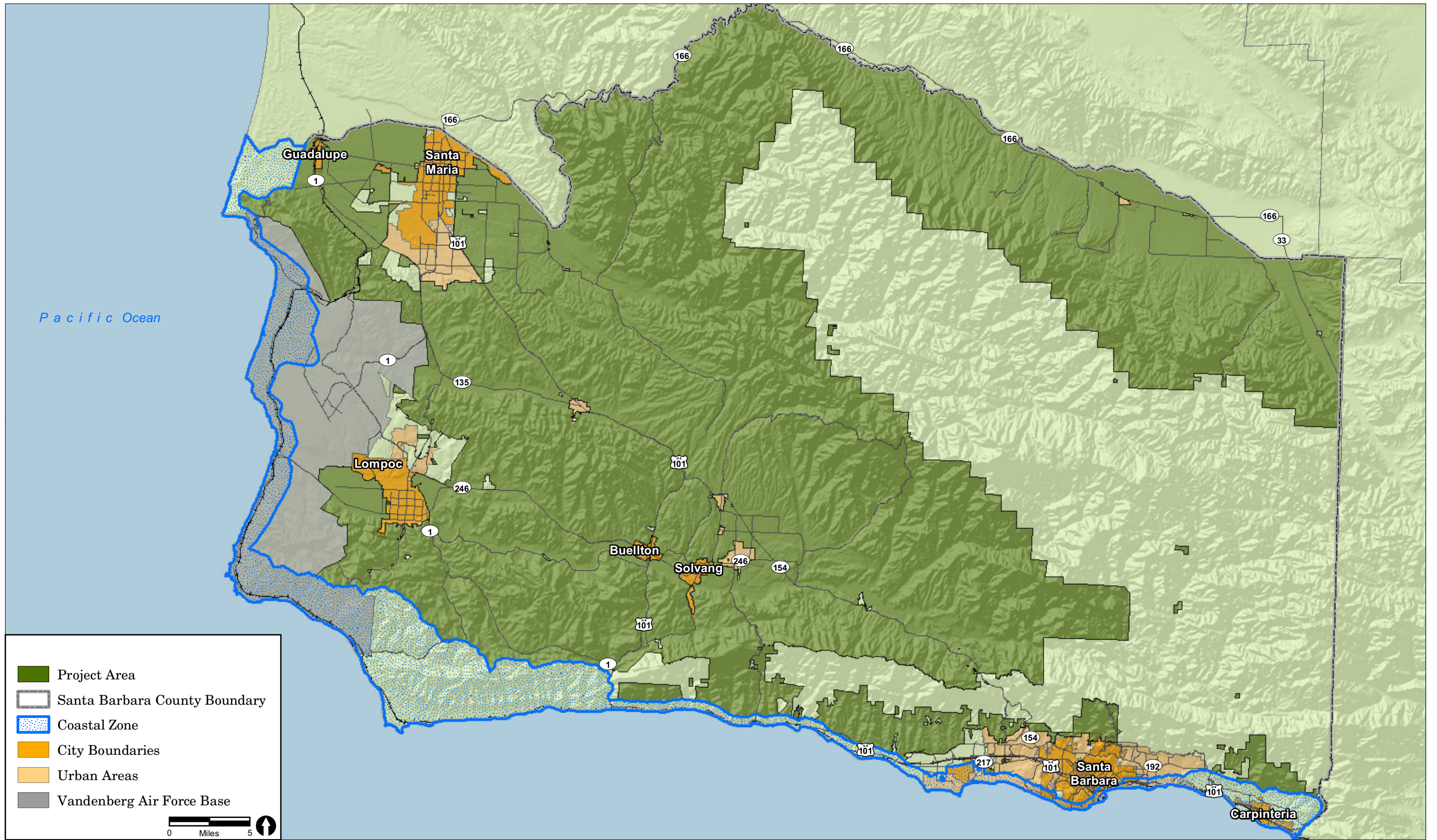


FIGURE 2-1
Project Area

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4. Clarify permit requirements for taller hoop structures and shade structures.
5. Apply development standards and best management practices to hoop structure and shade structure uses to reduce or minimize potential adverse effects.

2.5 Project Characteristics

2.5.1 Ordinance Amendment

The Project would amend the LUDC to revise and clarify the permitting requirements for hoop structures and shade structures on agriculturally zoned lands in the inland, unincorporated areas of Santa Barbara County. Appendix B provides draft ordinance amendment language.

The proposed Project would include the following components:

- Add hoop structures to the “Allowable Land Use” tables as an allowed use in the agricultural zones (AG-I and AG-II).
- Add shade structures to the “Allowable Land Use” tables as an allowed use in the agricultural zones (AG-I and AG-II).
- A permit exemption for hoop structures and shade structures regardless of size (i.e., square feet) in the AG-I and AG-II zones provided the hoop structures and shade structures are not more than 20 feet in height.
- Require a Development Plan for hoop structures and shade structures taller than 20 feet and 20,000 square feet or larger in size, or a Land Use Permit if less than 20,000 square feet in size in the AG-I and AG-II zones.
- A permit exemption for hoop structures and shade structures located within the Critical Viewshed Corridor Overlay only if they do not exceed 4,000 square feet per lot. The Critical Viewshed Corridor Overlay applies to AG-II zoned lands located along the U.S. Highway 101 corridor within the Gaviota Coast Plan area.
- To qualify for the permit exemption, hoop structures and shade structures shall not have electrical wiring, plumbing, mechanical (such as heaters), permanent footings, or foundations, and shall only be used to protect plants grown in the soil or in containers upon the soil.
- A new subsection that provides the criteria and development standards with which a hoop structure must comply in order to remain exempt, as well as development standards that would reduce any potential adverse effects arising as a result of hoop structure use.

2.5.2 Operational Characteristics of Hoop Structures

Information regarding the operational characteristics of crop protection structures was obtained from personal communications with a number of local farmers and other agricultural experts or persons knowledgeable about crop protection structures, as detailed below.

- Ben Faber, University Cooperative Extension (October 10, 2017)
- Jeff Clarin, City of Santa Maria Utilities Department Manager/Deputy Director (December 4, 2017)
- Claire Wineman, President of Grower-Shipper Association for Santa Barbara and San Luis Obispo Counties (October 26, 2016)
- Andrew Rice, Vice President Production, Reiter Affiliated Companies (October 26, 2016)

Information was obtained from public comments made at the October 26, 2017, Scoping Meeting in Santa Maria, from the following commenters:

- John De Friel, Farmer
- Ari Tremblay with Ferrari Metals (manufacturer of crop protection structures)

a. Hoop Structures

Hoop structures are removable agricultural plant protection structures that shelter crops from the elements and enhance the growing environment by moderating temperatures, protecting crops from dust and moisture that can cause disease, and extending the growing season. For example, raspberries are highly sensitive to direct sunlight (sunburn) as well as rain (mold and fungus) and the hoop structure protects the crop from these effects.

Hoop structures are widely used in the County to produce high-value crops. As there is an initial investment to purchase and install hoop structures, they are typically only economically viable for higher value crops that have a high return on investment. Recent trends indicate that more farmers are adopting hoop structures to maximize yields and extend the growing season and target harvest windows when higher prices can be obtained for a crop due to lower market saturation.

As agricultural practices evolve, hoop structures are being used for a wider variety of crops and are associated with a variety of farming methods. Hoop structures allow farmers flexibility with crop selection and rotation, as they can be (1) erected where needed to enhance production and to protect crops that are more sensitive to the elements, (2) moved to other parts of the farm when crops are rotated, and (3) removed entirely when crop selection indicates they are no longer needed.

Historically, hoop structures have most often been used to enhance the cultivation of high-value crops, particularly cut flowers, raspberries and blackberries, and to a lesser extent blueberries and strawberries, among others. Due to their lack of a foundation and any permanent structural elements, which allows them to be readily removed, hoop structures are an especially effective tool for enhancing the production of crops with an intermediate lifecycle (e.g., longer than one growing season to several years) that benefit from the protection of the structure. Eventually these crops reach the end of their productivity and

are removed, followed by tilling and plowing of the fields before a new, rotational crop is planted. A structure with foundations or permanent footings would not allow the soil to be prepared for a new crop. For example, the lifecycle of raspberry plants is two to three years, during which time the plants produce more than one harvest while under the protection of hoop structures. After two to three years, the hoop structures and the berry plants are removed, and the soil is tilled and prepared for a new crop. It is common for a rotational crop to be planted to allow the soils to recover from berry cultivation. As such, the use and location of hoop structures within the agricultural landscape changes over time.

Hoop structures consist of a metal frame, typically arched, that is anchored into the ground with metal poles approximately 6 feet long and appearing somewhat like a large, simple screw. The arched frame is attached to the anchors and an impermeable membrane, typically white or opaque, is stretched across the frame and lashed into place using cordage. Hoop structures vary in height depending on the crop, the width of the hoop tunnel, and the needs of the farmer. Most hoop structures are approximately 12 feet in height. However, taller hoop structures, up to 20 feet in height, which may accommodate the use of some farm equipment, have been observed. Typically, there is a gap of approximately 2 to 3 feet between the ground surface and the plastic covering to allow for airflow. Around the perimeter of a field and under certain weather conditions, hoop structure plastic may be extended to the ground to control airflow based on prevailing wind conditions to prevent damage to crops and/or equipment during weather events. The design of hoop structures is also changing over time, with hoop structures having a variable width at the base and varying heights and designs constantly evolving.

Depending on crop type, growing needs of the crop, timing of the crop's lifecycle, and climatic conditions, the plastic membrane may be rolled back and stored in the hoop structures' gutters or it may be kept in place throughout the lifecycle of the crop. It may also be removed and subsequently replaced. Netting is commonly used at the end of hoop rows to keep out birds. Other plastic fencing materials are also commonly seen at the end of hoop structure rows to exclude dust and further protect the crop.

b. Shade Structures

Shade structures are similarly removable agricultural plant protection structures that provide varying degrees of shelter to crops. In Santa Barbara County, they are not currently used as extensively as hoop structures, but usage trends are variable and can depend on crop choice and desired farming method. The primary difference between hoop structures and shade structures is that shade structures typically employ a permeable cover that provides variable amounts of shade and protection from the elements depending on shade cloth (or membrane) color and size of the openings in the permeable mesh. Shade structures employ a wider variety of framing, from a curved frame similar to that used in a hoop structure, to a simpler post-in-ground configuration using wires between posts to create a square frame. Shade membrane color may vary from black to brown, green, and lighter tan colors, although other colors could be used as there is constant innovation and

change with agricultural practices. Shade structures offer farmers the same flexibility with crop selection and rotation, as they can be (1) erected where needed to enhance production and to protect crops that are more sensitive to the elements, (2) moved to other parts of the farm when crops are rotated, and (3) removed entirely when crop selection indicates they are no longer needed.

2.5.3 Hoop and Shade Structure Growth Assumptions

In order to evaluate potential impacts associated with adoption of ordinance amendments allowing hoop and shade structures (crop protection structures) without a permit and allowing crop protection structures taller than 20 feet with a Development Plan permit, it is useful to understand what effect adoption of the ordinance may have on their potential future use and expansion. For purposes of this analysis, potential expansion of both hoop and shade structures are considered together, although currently hoop structures are more extensively used for crop protection. Ultimately, future use and expansion of crop protection structures will be largely driven by market conditions, crop choice, and a decision by farmers regarding the potential economic advantage of using crop protection structures.

Hoop structures are currently widely used in blackberry and raspberry production for their ability to extend the growing season and control weather variations, which allows farmers to manipulate the timing of harvests to take advantage of a small window of profitability that is dictated by global supply and demand. There is a cost associated with installation of crop protection structures that makes their use primarily suitable for high-value crops.

Currently, raspberries and blackberries are the primary commodities grown in hoop structures; however, blueberries, strawberries, tomatoes, and other crops are also grown in hoop structures. As market conditions, cost of inputs, and other factors change, farmers continue to adapt and modify their choice of crop and method of production. Thus, while raspberries and blackberries are currently the most widespread crops grown in hoop structures based on communications with farmers, the University of California Cooperative Extension, and observations in the field, trends may shift in the future where other high-value crops, such as blueberries and strawberries, adopt hoop structure use more widely.

It is generally not possible to accurately predict future changes in the use of crop protection structures due to the number of variables associated with an agricultural operation. However, in order to identify a possible estimate of crop protection structure use in the future, a number of sources were reviewed. Limited data is available on actual trends of use of crop protection structures; thus, potential growth assumptions are extrapolated based on available crop production data and information obtained during interviews with farmers and other agricultural experts.

a. Strawberry Production data from California Strawberry Commission

The California Strawberry Commission publishes a survey twice a year reporting on the acreage of planted strawberry acreage by strawberry production districts. Santa Barbara and San Luis Obispo County are part of the Santa Maria production district and data for

these regions is combined. Although data is not solely for Santa Barbara County, the data was reviewed to identify any trends. As shown in Table 2-1, planted strawberry acreages for both fall and summer planted crops varied from year to year, with some years showing a decrease compared to the prior year acreage. However, when calculating the percent change from year to year and taking an average of the annual change for the years presented, the data shows an average annual growth in fall planted strawberry acreage of 2 percent and an average annual growth in summer planted strawberry acreage of 21 percent.

Table 2-1: Santa Maria Production District Planted Strawberry Acreage 2013 – 2017¹

	2013	2014	2015	2016	2017	Average Annual Percent Change in Planted Acres
Fall Planted Acreage ²	9,066	9,229	8,577	8,610	9,690	2%
Summer Planted Acreage ³	1,879	2,407	3,401	4,089	3,925	21%

Source: California Strawberry Commission 2017.
¹The Santa Maria Production District includes both San Luis Obispo and Santa Barbara counties.
²Includes both conventional and organic acreage for winter, spring and summer production.
³Includes both conventional and organic acreage for fall production.

b. County of Santa Barbara, Agriculture Weights and Measures Crop Reports

The County agricultural commissioner publishes crop reports on an annual basis that identify harvested acreage and value of crops produced within the County, including incorporated cities. Harvested acreage and values of blackberries, raspberries, and strawberries between 2014 and 2016 are summarized in Table 2-2. This data highlights the fact that crop acreage and values vary from year to year based on a number of variables including market demand, cost of inputs, and yield per acre, among other factors. Blackberries and raspberries saw a 54 percent increase in harvested acreage between 2012 and 2013 with increases in crop values attributed to strong market prices and increased production per acre (County of Santa Barbara 2013). As shown, prices and harvested acreage vary widely and do not correlate well. For example, for a third year in a row, strawberries experienced a reduction in gross value primarily due to a drop in unit price even though strawberry acreage and production volume continued to rise (County of Santa Barbara 2016b).

Table 2-2: Harvested Acreage and Value 2014 – 2016

Crop	2014		2015		2016	
	Harvested Acreage	Value	Harvested Acreage ¹	Value	Harvested Acreage	Value
Blackberries	NR		979	13,700,180	610	\$23,277,600
Raspberries	1,460	45,155,060	2,144	60,480,271	820	\$16,046,416
Strawberries	7,837	464,721,467	7,895	438,327,559	8,055	\$413,999,130
Blueberries	NR		NR		386	\$7,850,524
Source: County of Santa Barbara Crop Reports 2014 – 2016. NR = Not reported ¹ Harvested acreage is not reflective of land area, but of acres harvested where in some cases, crops may be harvested more than once per year.						

c. Estimate of Potential Growth

In considering the data presented in the preceding sections, it is clear there is no commonly accepted value for planted crop acreage for berry crops and no clear trajectory for growth. The choices of types of crops planted and the method of production is based on a number of factors, but most importantly, the market dictates trends in agricultural production. The projected value of a crop in a given year, cost of inputs, market demand and saturation, among other factors are the primary determinants of agricultural land use changes, including the decision to plant a higher value crop under hoop or shade structures.

Recent changes in rules and regulations surrounding agricultural labor have been raised as a significant issue affecting farmers. These include the increase in the state minimum wage and changes to the standard workweek for agricultural labor that will now require overtime pay for all work over 40 hours within one week. Further, agricultural labor is scarce and farmers have to provide incentives to retain laborers. Improved working conditions for agricultural labor are another aspect of hoop and shade structures being considered by farmers. Hoop and shade structures allow laborers to harvest outside of the elements in improved working conditions, which can be a factor to attract and retain workers. This co-benefit could promote future use and expansion of crop protection structures.

Although potential future expansion in the use of crop protection structures will not likely be attributable to adoption of the LUDC amendments, for purposes of the EIR analysis, a certain amount of growth is assumed to be a result of the Project. Based on the existing extent of hoop structure use within the Project area as of 2015 (1,480 acres), for purposes of this analysis, it is assumed that the use of crop protection structures throughout the County will increase over time, with the increased distribution of those structures among the Project area regions being similar to the distribution as of 2015, with the majority of crop protection structures being located within the Santa Maria Valley Region (see Table 3-4). This is based on an assumption that high-value crop production in the County will continue on an upward trajectory and those crops will increasingly benefit from the use of crop protection structures.

Although there is a benefit to identifying a quantifiable acreage increase for crop protection structures for purposes of the environmental analysis, any specific number would be speculative. Thus, the analysis assumes a general expansion and evaluates specific issue areas in a general sense with the assumption that hoop and shade structures could theoretically be installed anywhere within the Project area that is zoned for agriculture, and that has land in agricultural production or that is suitable for agriculture (e.g., that is not developed and not located on a steep slope such as a 15 percent or greater slope).

d. Potential Cumulative Growth due to Cannabis Regulations

Potential growth of hoop and shade structures would be affected by anticipated growth in the cannabis industry due to the proposed regulations that would allow local cultivation of medicinal and recreational cannabis, which can be grown in hoop structures. The County of Santa Barbara Cannabis Land Use Ordinance and Licensing Program proposed regulations would provide the regulatory framework to allow expansion of cannabis cultivation and processing. According to the Public Review Draft EIR prepared for the Cannabis Land Use Ordinance and Licensing Program, there are 396 acres of existing cultivation Countywide based on self-reported data in the 2017 Cannabis Registry. Of the 396 acres, it is estimated based on review of the raw registry data that approximately 36.6 of the 396 acres is under some sort of hoop structure, or 9.2 percent of the existing cannabis production. The Cannabis EIR estimates that the demand for new cannabis canopy coverage could be approximately 730 acres for a total of approximately 1,126 acres, representing an increase of 284 percent over existing cannabis canopy coverage. For purposes of estimating a potential increase in hoop structures that could result from the Cannabis Land Use Ordinance and Licensing Program, it is estimated that 9.2 percent of the 730-acre estimated increase in cannabis production would be grown under hoop structures. Thus, this EIR estimates a contribution of 67 acres of cannabis production in hoop structures for purposes of a cumulative analysis. The raw data suggests that future hoop structure use for cannabis would likely be less than this estimate; however, given the uncertainty regarding the future cannabis industry, this estimate is provided as a reasonable worst-case scenario.

Expansion of hoop and shade structures for cannabis cultivation associated with the proposed Cannabis Land Use Ordinance and Licensing Program regulations is evaluated in the context of cumulative impacts in Chapter 4.

2.6 Required Actions and Approvals

The County is the lead agency for the Project, consistent with State CEQA Guidelines Section 15065(b). As such, the County will use this EIR to both evaluate the potential environmental impacts that could result from implementation of the Project, and develop changes in the Project and/or adopt mitigation measures that would address those impacts. Pursuant to State CEQA Guidelines Section 15093, the decision-makers must “. . . balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a

proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’” If the County, as lead agency, approves the Project, a statement of overriding considerations must be written, which shall state the specific reasons to support its action based on the Final EIR and/or other information in the record.

Following recommendations from the County Planning Commission, the County Board of Supervisors must take the following actions to approve the project:

1. Make findings for approval, including CEQA findings.
2. Certify the Final EIR, and, if needed, adopt a Statement of Overriding Considerations for any unavoidable, significant environmental impact that would result from the Project.
3. Adopt amendments to the LUDC to address the permit requirements of hoop structures and shade structures.