

## 4.14 AGRICULTURAL RESOURCES

This section describes the agricultural resources in the project area and policies pertaining to those resources. Sources utilized in this section to assess impacts of the project include the City Anderson General Plan, Shasta County General Plan, the California Department of Conservation Farmland Conversion Reports, the California Department of Conservation Important Farmlands Map, and the Soil Survey of Shasta County Area, California (1974).

### 4.14.1 ENVIRONMENTAL SETTING

Prior to discussing agricultural resources in the context of the project site, it will be constructive to review concepts of classifying agricultural land and to outline issues in Shasta County concerning the conversion of agricultural land for other land uses.

#### FARMLAND CLASSIFICATIONS

The two primary systems used by the United States Department of Agriculture (USDA) and Natural Resource Conservation Service (NRCS, originally called the "Soil Conservation Service") to determine the agricultural productivity of soil are the Soil Capability Classification and the Storie Index Rating System. The "prime" soil classifications of both systems indicate the absence of soil limitations which, if present, would require the application of specific management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production.

#### Soil Capability Classification

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when the soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the ratings of the capability classification system increase, the yields and profits are more difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in **Table 4.14-1**.

**TABLE 4.14-1**  
**SOIL CAPABILITY CLASSIFICATION**

Class	Definition
I	Soils have slight limitations that restrict their use.
II	Soils have moderate limitations that reduce the choice of plants or require moderate conservation practices.
III	Soils have severe limitations that reduce the choice of plants or require special conservation practices, or both.
IV	Soils have very severe limitations that restrict the choice of plants or require very careful management, or both.
V	Soils are subject to little or no erosion but have other limitations, impractical to remove, that limit their use largely to pasture, range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and that limit their use largely to pasture, range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture, range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife habitat, or water supply, or to esthetic purposes.

Source: USDA Soil Conservation Service and Forest Service, *Soil Survey of Shasta County Area, California, 1974*.

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### Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production, to Grade 6 soils (less than 10), which are not suitable for agriculture. Under this system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in **Table 4.14-2**.

**TABLE 4.14-2**  
**STORIE INDEX RATING SYSTEM**

<b>Grade</b>	<b>INDEX RATING</b>	<b>Definition</b>
1 – Excellent	80 through 100	Soils are well suited to intensive use for farming.
2 – Good	60 through 79	Soils are good and are also well suited to use for farming, although they are less desirable than soils of grade 1.
3 – Fair	40 through 59	Soils are only fairly well suited to use for farming.
4 – Poor	20 through 39	Soils are poorly suited to use for farming.
5 – Very Poor	10 through 19	Soils are very poorly suited to use for farming.
6 – Nonagricultural	Less than 10	Soils and land types that are not suited to farming.

*Source: USDA Soil Conservation Service and Forest Service, Soil Survey of Shasta County Area, California, 1974.*

### Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the U.S. Department of Agriculture, Soil Conservation Service (USDA-SCS). The intent of the USDA-SCS was to produce agricultural resource maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland Maps are derived from the USDA-SCS soil survey maps using the LIM criteria.

Since 1980, the State of California has assisted the USDA-Soil Conservation Service (now known as USDA-Natural Resource Conservation Service), with completing its mapping in the state. The FMMP was created in the State Department of Conservation (DOC) to continue the mapping activity with a greater level of detail. The DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilize the SCS and Storie Index Rating systems, but also consider physical conditions such as a dependable water supply for agricultural production, soil temperature range, depth of the ground water table, flooding potential, rock fragment content, and rooting depth.

In California, Important Farmland Maps are compiled by the State Department of Conservation using the modified LIM criteria, as described above, and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into the surrounding classification. The Important Farmland Maps identify five agriculture-related categories: prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and grazing land. Each is summarized below, based on

*A Guide to the Farmland Mapping and Monitoring Program* (2004), prepared by the California Department of Conservation.

### Prime Farmland

Prime farmland is considered land with 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

Farmland of statewide importance is considered land 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

Unique farmland is land of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated 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

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. Farmland of local importance in Shasta County includes "Dryland grain producing lands. Also included are farmlands that are presently irrigated but do not meet the soil characteristics of Prime or Statewide. The majority of these farmlands are located within the Anderson Cottonwood Irrigation District. These soils include Newtown gravelly loam (8 to 15 percent slopes), Moda loam, seeped (0 to 3 percent slopes), Moda loam, shallow (0 to 5 percent slopes), and Hillgate loam." (DOC, 2006)

### Grazing Land

Grazing land is considered 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 for Grazing Land is 40 acres.

### Urban and Built-Up Land

Urban and built-up land is considered land occupied by structures with a building density of at least 1 unit per 1.5 acres, or approximately 6 structures per 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

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### Other Land

Other land is considered 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.

### **California Government Code Section 56064**

The project will require a government reorganization pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. As such, the Shasta County LAFCo will need to review potential impacts to prime agricultural land during their review of the proposed reorganization. However, LAFCo utilizes the definition of prime agricultural land provided in Section 56064 of the California Government Code, not the Farmland Mapping and Monitoring Program definition identified above. According to Section 56064, "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.

### CONTRIBUTION OF AGRICULTURE TO THE SHASTA COUNTY ECONOMY

In 2003 and 2004, Shasta County ranked forty-first in agricultural production out of fifty-eight counties in the State, with gross revenues from the sale of agricultural commodities of \$52.198 million in 2003 and \$59.623 million in 2004. In 2005, gross revenues increased by 41.2 percent to \$84.209 million. This resulted in Shasta County being elevated in the State's agricultural production rankings to thirty-ninth place. (U.S. Department of Agriculture, National Agricultural Statistics Service, 2005 and 2006).

In 2004, the leading agricultural resources included stocker and feeder cattle, strawberry plants, hay, beef cows, range pasture and irrigated pasture, as seen in **Table 4.14-3**. In 2005, stocker and feeder cattle remained the top commodity for the county, increasing in value by \$1.4

million from the previous year. Other values increased as well, with only livestock and nursery products experiencing a slight decline in value, as see in **Table 4.14-4**.

**TABLE 4.14-3  
LEADING COMMODITIES FOR GROSS VALUE OF AGRICULTURAL PRODUCTS IN SHASTA COUNTY, 2004**

<b>Commodities</b>	<b>Value</b>
Cattle, Stockers and Feeders	\$10,892,000
Plants, Strawberries	\$6,945,000
Hay, Other	\$6,773,000
Pasture, Range	\$3,475,000
Pasture, Irrigated	\$3,300,000
Hay, Alfalfa	\$3,156,000
Livestock	\$3,054,000
Nursery Products	\$2,879,000
Beef Cows	\$2,796,000
Rice, Wild	\$2,552,000

*Source: California Agricultural Statistics Service: Summary of County Agricultural Commissioners' Reports, 2003-2004.*

**TABLE 4.14-4  
LEADING COMMODITIES FOR GROSS VALUE OF AGRICULTURAL PRODUCTS IN SHASTA COUNTY, 2005**

<b>Commodities</b>	<b>Value</b>
Cattle, Stockers and Feeders	\$12,328,000
Plants, Strawberries	\$9,146,000
Hay, Other	\$7,240,000
Beef Cows	\$3,513,000
Pasture, Range	\$3,475,000
Hay, Alfalfa	\$3,402,000
Pasture, Irrigated	\$3,300,000
Rice, Wild	\$2,806,000
Livestock	\$2,586,000
Nursery Products	\$2,477,000

*Source: California Agricultural Statistics Service: Summary of County Agricultural Commissioners' Reports, 2004-2005.*

**SHASTA COUNTY FARMLAND CONVERSION**

One of the basic underlying premises of agricultural conversion says that the proximity of agricultural land to urban uses increases the property value of the agricultural land either directly through formal purchase offers or indirectly through recent sales in the vicinity, and through the extension of utilities and other urban infrastructure into productive agricultural areas. These influences may contribute to further conversion of agricultural land. The trend of the conversion of Important Farmland in Shasta County from 1998 to 2004 is illustrated in **Table 4.14-5**. The 2002 Census of Agriculture defined a farm as any place from which \$1,000 or more in agricultural products were produced and sold, or normally would have been sold, during the census year.

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According to the 1997 Census of Agriculture (the date when the previous Census of Agriculture was completed) prepared by the USDA, Shasta County had 850 farms totaling 316,743 acres with an average farm size of 373 acres and a total of 13.1 percent of land in farms. The total amount of cropland harvested was 22,659 acres. In 2002, the date of the most recent Census of Agriculture, Shasta County had 1,126 farms totaling 333,828 acres and a total of 13.8 percent of land in farms, with an average farm size of 296 acres. The total amount of cropland harvested was 20,492 acres.

Also, according to the California County Estimate Reports released by USDA, there were 29,000 cattle and 16,000 beef cows in Shasta County in 2003. In 2004, the number of beef cattle increased to 32,000 cattle, or by 10.3 percent, while the number of beef cows remained unchanged. In 2005, the number of cattle and beef cows remained the same as in 2004. Data for 2006 and 2007 have not yet been made available.

**TABLE 4.14-5  
ACRES OF IMPORTANT FARMLANDS - SHASTA COUNTY (1998 TO 2004)**

Year	Acres Present by Type				
	Prime Farmland	Farmland of Statewide Importance	Unique Farmland	Farmland of Local Importance	Total Important Farmlands
1998	21,502	4,685	402	10,212	36,801
2000	20,218	4,583	358	10,172	35,331
2002	15,717	4,222	940	9,482	30,361
2004	14,848	4,058	761	9,171	28,838
6 Year Difference	-6,654	-627	+ 359	- 1,041	-7,963
Annual Average Difference	-1,109	-104.5	+ 59.8	- 173.5	- 1327.2
6 Year Percent Difference	-30.9 %	-13.4 %	+ 89.3 %	- 10.2 %	- 21.6 %

Source: California Department of Conservation, *Historic Land Use Conversion Report 1984 to Present*.

Despite a 32.5 percent increase in the number of farms and a 5.4 percent increase in the acreage dedicated to agricultural use between Census dates (1997-2002), approximately 21.6 percent of the land designated as Important Farmland in Shasta County was converted to other uses or lesser grade farmland during a similar period (1998-2004). This decrease equates to an average loss of approximately 1,327.2 acres of Important Farmlands annually, which includes land both in and out of production. It would appear that the majority of this farmland is being lost due to economic incentives to convert land to developed uses as can be seen in **Table 4.14-6**. Further, between 1998 and 2004, Shasta County experienced a 9.56 percent growth in population.<sup>1</sup> While population growth and the residential and commercial development to support this growth have certainly resulted in a significant conversion of Important Farmland, there may be other factors (e.g., a shift within the agricultural community) that have also contributed to the conversion of Important Farmland. In addition to Important Farmland loss, the California Department of Conservation also identified that total grazing land in Shasta County decreased from 409,926 acres in 1998 to 408,927 acres in 2004.

<sup>1</sup> California Department of Finance, E-2 and E-4 Reports.

According to the California Department of Conservation Farmland Mapping and Monitoring Program, the changes that occurred to farmland in Shasta County between 2002 and 2004 are listed in **Table 4.14-6**.

**TABLE 4.14-6  
FARMLAND CONVERSION FROM 2002-2004**

Type of Farmland and Changes to the Type of Farmland	2002- 2004 Conversion in Quads on the 2002-2004 Conversion Maps
Prime Farmland, Farmland of Statewide Importance, and Unique Farmland <b>to</b> Urban and Built-up Land	<p>There were six conversions of agricultural land to urban land this update. In the City of Anderson, the new Dan Gamel RV dealership (≈20 acres) was added and some homes were noted. Near the Community of Millville some homes (≈10 acres) were added due to increased housing density. In the City of Redding some commercial buildings (≈10 acres) and some homes were noted.</p>
Farmland of Local Importance, Grazing Land, Other Land <b>to</b> Urban and Built-up Land	<p>There were 92 conversions of local, grazing, or other land to urban land this update. The majority of the changes were due to either new home construction or areas of increased housing density. Other changes were due to new commercial buildings, new or expanded industrial, school expansions, and landfill expansions. The changes occurred throughout the county with the majority being concentrated in the cities along the Interstate-5 highway corridor.</p> <p>In the City of Redding there was a substantial amount of urban growth. Like the county as a whole, housing was the majority of the change. The Alder Creek (≈20 acres), Amber Ridge (≈50 acres), Carriage Glen (≈15 acres) and Crown Estates (≈45 acres) housing developments are examples of new homes. Housing was also added due to increased density (areas that were formerly in Other Land until the housing became dense enough to qualify for Urban Land due to infill construction). Changes due to increased housing density include approximately 150 acres at the Ranchland Acres community and approximately 45 acres at the Tierra Oaks Golf Club. Other changes in Redding include the Westside Church and expansion of Grant Elementary School (≈20 acres total), the expansion of the Enterprise Community Park (≈10 acres), the new Blue Shield office building and parking lot (≈15 acres), the Fintech Precast Inc. industrial buildings (≈25 acres), and the expansion of the Benton Landfill (≈10 acres).</p> <p>The Cities of Anderson and Cottonwood also experienced some urban growth. In Anderson, the Ravenwood Estates (≈40 acres) housing development was added, the new Gateway Apartments and Regency Place senior apartments (≈10 acres total) were noted, the Anderson-Cottonwood Church and some homes (≈10 acres total) were added, and the Anderson Landfill was expanded (≈30 acres). In Cottonwood, the Black Oak Estates (≈15 acres) housing development was added and some new homes (≈35 acres) were noted.</p> <p>Other changes of note include the expansion of Foothill High School (≈25 acres) in the Community of Palo Cedro, the expansion of the Black Butte School complex in the Community of Shingletown so that it was now large enough to map (≈10 acres) and some new homes (≈20 acres) in the City of Shasta Lake.</p>
Prime Farmland, Farmland of Statewide Importance, and Unique Farmland <b>to</b> Farmland of Local Importance and Grazing Land	<p>There were 19 conversions of irrigated farmland to local or grazing land this update. The majority of these changes occurred in the Sacramento Valley and were due to farmland being fallow for three update cycles. Most of these changes were in parcels of 50 acres or less. On the Balls Ferry quad there was one larger conversion (≈50 acres). The Enterprise quad had two large conversions, one was approximately 60 acres and the other was an approximately 400-acre parcel east of the Redding Municipal Airport. The</p>

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Type of Farmland and Changes to the Type of Farmland	2002- 2004 Conversion in Quads on the 2002-2004 Conversion Maps
	Project City quad also had a large conversion (≈75 acres).
Prime Farmland, Farmland of Statewide Importance, and Unique Farmland to Other Land	There were 20 conversions of irrigated farmland to other land this update. These changes occurred in the Sacramento Valley and were due to small, isolated areas (less than 40 acres) being fallow for three update cycles or low-density housing (ranchettes). All of these changes were small (25 acres or less) except for one fallow parcel on the Cottonwood quad. This change was approximately 45 acres and was placed into Other Land due to the presence of wetlands.
Grazing Land to Other Land	<p>This update there were 99 conversions of grazing land to other land. These changes were scattered throughout the county and were largely due to the use of digital orthoquads to distinguish low-density housing (ranchettes) in the forested areas of the county. The majority of these changes were fairly small (30 acres or less). Some changes of note include a large area of ranchettes (≈750 acres) in the hills north of the Community of Bella Vista (Bella Vista and Project City quads), an approximately 125-acre area of ranchettes on the Bella Vista quad, a large area of ranchettes (≈110 acres) on the Cottonwood quad, an approximately 130-acre area of ranchettes on the Ono quad, and two large areas of ranchettes on the Palo Cedro quad (≈100 acres each).</p> <p>Other changes were due to small water bodies (less than 40 acres), an equestrian center, and some mine tailings.</p>
Farmland of Local Importance, Grazing Land, and Other Land to Prime Farmland, Farmland of Statewide Importance, and Unique Farmland	There were 14 conversions of local, grazing or other land to irrigated farmland this update. The majority of these changes occurred in the Sacramento Valley and were due to new irrigated pastures and some row crops. Some irrigated pastures were also added in the hills near the Community of Whitmore and near the Community of Ono. All of these changes were small in size (30 acres or less).

Source: California Department of Conservation: Farmland Mapping and Monitoring Program. 2004 Field Report, Shasta County.

### PROJECT SITE CHARACTERISTICS

#### Production and Soil Conditions

The entire 2,248-acre Vineyards at Anderson project area has been designated Grazing Land by the Farmland Mapping and Monitoring Program, of which 2,000 acres are actively utilized for cattle grazing. Some properties adjoining the site are also used to graze cattle, although there are no large-scale cattle-handling facilities (e.g., pens, stockyards, etc.) in the immediate vicinity. The site's foothill topography, lack of feasible irrigation and highly variable soil characteristics have resulted in limited potential for crop production. Even grazing offers limited rewards. According to the rancher who leases the 2,000 acres from the property owner, the site supports only 150 head of cattle per year.

According to the Soil Survey of Shasta County Area, the predominant soils at the site are Newtown gravelly loam, 30 to 50 percent slopes, eroded (approximately 25 percent of the Specific Plan area); Newtown gravelly loam, 15 to 30 percent slopes (approximately 19 percent of the Specific Plan area); Red Bluff gravelly loam, moderately deep, 0 to 3 percent slopes (approximately 15 percent of the Specific Plan area); Red Bluff gravelly loam, moderately deep, 3 to 8 percent slopes (approximately 11 percent of the Specific Plan area); and Perkins gravelly loam, 15 to 30 percent slopes (approximately 11 percent of the Specific Plan area). (See **Table 4.14-7** below for a complete listing of soil types within the Specific Plan area.) None of the soil types listed is considered a Prime Farmland soil. While soil types do exist within the project area

that would be considered by the FMMP to be Prime Farmland and Farmland of Statewide Importance if irrigated, there has been no irrigation of the site.

The soil capability classification, Storie Index rating and grade, and the ability to support livestock are presented for each of these soils in **Table 4.14-7** below. As indicated in this table, Class II soils are present within the project site. According to Government Code Section 56064, these soils would be considered “prime agricultural land” if irrigated, or if not irrigated so long as irrigation is feasible. Class II soils comprise approximately 101 acres of the project site, of which approximately 95 acres have been proposed for development. Their approximate distribution within the Specific Plan area can be seen in **Figure 4.14-1, Class II Soils Map**.

It should be again noted that the proposed Vineyards at Anderson project has some agricultural elements incorporated in its own design. Consistent with the theme of the project’s title, the project proposes to include vineyards. As described in Specific Plan Section 7.4, approximately 115 acres of the plan area are proposed to be utilized for agriculture. The vineyards and possibly other crop plantings would be located along roadways and side slopes where they would provide a visual identity for the project. The vineyards are expected to be leased to farmers.

### 4.14.2 REGULATORY FRAMEWORK

#### STATE

##### **Williamson Act**

The California Land Conservation Act, also known as the Williamson Act, was adopted in 1965 in order to encourage the preservation of the state’s agricultural lands and to prevent their premature conversion to urban uses. In order to preserve these uses, the Act established an agricultural preserve contract procedure by which any county or city within the state taxes landowners at a lower rate, using a scale based on the actual use of the land for agricultural purposes, as opposed to its unrestricted market value. In return, the owners guarantee that these properties remain under agricultural production for a ten-year period. The contract is renewed automatically unless the owner files a notice of non-renewal. In this manner, each agricultural preserve contract (at any given date) is always operable at least nine years into the future. Currently, approximately 70 percent of the state’s prime agricultural land is protected under this Act. Prime farmland under the Williamson Act includes land that qualifies as Class I and II in the SCS classification of land that qualifies for rating 80 to 100 in the Storie Index Rating. The project site is not subject to a Williamson Act contract.

#### LOCAL

##### **City of Anderson General Plan**

Agricultural preservation and conversion issues are addressed in the Open Space and Conservation Element of the City of Anderson General Plan. **Table 4.14-8** identifies the General Plan agricultural policies that are directly applicable to the proposed project in the context of CEQA, and presents an evaluation of the consistency of the project with these statements as required by CEQA. While this EIR analyzes the Specific Plan’s consistency with the City of Anderson General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the project’s consistency with this General Plan ultimately rests with the City of Anderson City Council.

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**TABLE 4.14-7  
ON-SITE SOIL CAPABILITY CLASSIFICATION AND STORIE INDEX RATING**

Soil Map Symbol and Name	Soil Capability Classification	Storie Index Rating	Storie Index Grade	AUM <sup>1</sup>
Anderson gravelly sandy loam (Ad)	III	43	3 – Fair	2.0
Churn gravelly loam, 0 to 3 percent slopes (CeA)	II	72	2 – Good	3.0
Churn gravelly loam, deep, 0 to 3 percent slopes (CfA)	II	65	2 – Good	3.0
Clough gravelly loam, 3 to 8 percent slopes (CgB)	IV	20	4 – Poor	1.5
Cobbly alluvial land, frequently flooded (Ck)	VII	12	5 – Very Poor	1.0
Honcut gravelly loam (He)	II	75	2 – Good	3.0
Newtown gravelly loam, 8 to 15 percent slopes (NeC)	III	35	4 – Poor	2.0
Newtown gravelly loam, 15 to 30 percent slopes (NeD)	IV	31	4 – Poor	2.0
Newtown gravelly loam, 30 to 50 percent slopes, eroded (NeE2)	VI	11	5 – Very Poor	NA
Perkins gravelly loam, 3 to 8 percent slopes (PmB)	II	55	3 – Fair	3.0
Perkins gravelly loam, 8 to 15 percent slopes (PmC)	III	51	3 – Fair	3.0
Perkins gravelly loam, 15 to 30 percent slopes (PmD)	IV	45	3 – Fair	3.0
Red Bluff gravelly loam, moderately deep, 0 to 3 percent slopes (RcA)	III	52	3 – Fair	2.0
Red Bluff gravelly loam, moderately deep, 3 to 8 percent slopes (RcB)	III	45	3 – Fair	2.0
Redding gravelly loam, 0 to 3 percent slopes (RdA)	IV	17	5 – Very Poor	1.5
Redding gravelly loam, 3 to 8 percent slopes (RdB)	IV	16	5 – Very Poor	1.5
Redding-Red Bluff gravelly loams, 0 to 3 percent slopes (RdB)	IV	16	5 – Very Poor	1.5
Riverwash (Rw)	VIII	<5	6 – Nonagricultural	NA

<sup>1</sup> AUM means animal-unit-month and refers to the amount of forage or feed required to maintain one cow, horse, or mule or five sheep or goats, for 30 days without damage to the pasture.

Source: USDA Soil Conservation Service and Forest Service, Soil Survey of Shasta County Area, California, 1974.



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**TABLE 4.14-8  
SPECIFIC PLAN CONSISTENCY WITH THE CITY OF ANDERSON GENERAL PLAN POLICIES - AGRICULTURE**

General Plan Policies	Consistency with General Plan	Analysis
It is the policy of the City of Anderson to preserve agricultural land outside the City Limits by encouraging development within the City Limits so that viable agricultural operations in the unincorporated area can continue. (Policy AP-1)	Yes	Although grazing within the unincorporated portions of the project area would be phased out as that land is annexed and developed over the next twenty years, the production of vineyards would result in a shift in the "viable agricultural operation" from grazing to grapes.

### Shasta County General Plan

Agricultural preservation and conversion issues are addressed in the Agricultural Lands Element of the Shasta County General Plan. **Table 4.14-9** identifies the General Plan agricultural policies that are directly applicable to the proposed project, and presents an evaluation of the consistency of the project with these statements as required by CEQA. While this EIR analyzes the project's consistency with the Shasta County General Plan pursuant to State CEQA Guidelines Section 15125(d), the determination of the project's consistency with this General Plan ultimately rests with Shasta County's Board of Supervisors.

**TABLE 4.14-9  
PROJECT CONSISTENCY WITH THE SHASTA COUNTY GENERAL PLAN POLICIES - AGRICULTURE**

General Plan Policies	Consistency with General Plan	Analysis
<p>In order to protect full-time agricultural uses from incompatible land uses, lands being divided in areas designated either RA or RB that adjoin lands designated for full-time agricultural uses shall comply with one of the following:</p> <ul style="list-style-type: none"> <li>• If outside of a rural community or town center, the minimum parcel size shall be ten acres or more depending on other policies or standards. Residential building sites shall be located, to the extent feasible, to avoid negative impacts on the adjacent land uses.</li> <li>• If within a rural community or town center, the minimum parcel size shall be five acres or more depending on other policies or standards. Residential building sites shall be located, to the extent feasible, to avoid negative impacts on the adjacent land uses.</li> <li>• If it can be shown that topographic or man-made features will sufficiently separate the uses, the above-mentioned standards shall not be applied. (Policy AG-d)</li> </ul>	Yes, as mitigated	Although the unincorporated portions of the project area would be annexed to the City of Anderson prior to development, and have been designated for rural residential use by the County (RA and RB), some lands adjacent to the project area have been designated by the County for full-time agricultural use (AG). According to the Shasta County General Plan, residential properties adjacent to properties designated for full-time agricultural use shall be no less than five acres if located within a community or town center, unless buffers exist or can be constructed to minimize potential conflicts. Mitigation Measure 4.14.2, described below, satisfies the intent of this policy by requiring those residential lots located immediately adjacent to County lands designated for full-time agricultural use to include a man-made structure (i.e., fence or wall) that would minimize potential conflicts between uses unless the existing topography would provide a sufficient buffer.

**Shasta Local Agency Formation Committee (LAFCo)**

As noted above concerning LAFCo criteria, the Cortese-Knox-Hertzberg Local Government Reorganization Act addresses agricultural preservation and conversion issues utilizing a different set of criteria for prime agricultural lands, pursuant to Government Code 56064. **Table 4.14-12** evaluates whether lands within the project’s proposed reorganization areas qualify as prime agricultural lands, according to these criteria.

**TABLE 4.14-10  
PRIME AGRICULTURAL LANDS PURSUANT TO GOVERNMENT CODE 56064**

Prime Agricultural Land Qualifications	Qualifies As Prime Agricultural Lands	Analysis
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.	No	Lands within the reorganization area, as indicated in Table 4.14-9, have Soil Capability Classifications ranging from Class II to Class VIII, if irrigated, which meets this qualification. However, irrigation is economically infeasible because of the dispersed nature of Class II soils, as indicated in Figure 4.14-1) and the topography of the area. Therefore, the lands within the reorganization area do not qualify as prime agricultural land according to this criterion.
Land that qualifies for rating 80 through 100 Storie Index Rating.	No	Lands within the reorganization area have a Storie Index Rating ranging from less than 5 to 75. Therefore, the lands within the reorganization area do not qualify as prime agricultural land according to this criterion.
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.	No	Lands within the reorganization area currently support livestock (cattle) used for the production of food. The annual carrying capacity of the land is equivalent to less than one animal unit per acre. The highest carrying capacity, as indicated on Table 4.14-9, is 3.0 AUM, which is equivalent to 0.25 animal units per acre. Therefore, the lands within the reorganization area do not qualify as prime agricultural land according to this criterion.
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.	No	Lands within the reorganization area are currently utilized as grazing lands and are not planted with fruit or nut-bearing trees, vines, bushes, or crops. Therefore, the lands within the reorganization area do not qualify as prime agricultural land according to this criterion.
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.	No	Lands within the reorganization area are currently utilized as grazing lands and are not used in the production of unprocessed agricultural plant products. Therefore, the lands within the reorganization area do not qualify as prime agricultural land according to this criterion.

## 4.14 AGRICULTURAL RESOURCES

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### The Vineyards at Anderson Specific Plan

The proposed Vineyards at Anderson Specific Plan contains a number of policies pertaining to agricultural land use within the Plan area. However, none of these policies address the conversion of agricultural land as discussed in this section. Where relevant, these policies are discussed elsewhere in the Draft EIR, including Biological Resources, Hydrology and Water Quality, and Hazards.

#### 4.14.3 IMPACTS AND MITIGATION MEASURES

##### STANDARDS OF SIGNIFICANCE

The following standards of significance were based on existing laws and regulations affecting agricultural resources, as outlined in the *State CEQA Guidelines*.

- 1) 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;
- 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- 3) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

In addition to the above thresholds of significance, the EIR also evaluated whether the project would impact prime agricultural land as defined by Government Code Section 56064, pursuant to LAFCo criteria.

##### METHODOLOGY

Evaluation of potential agricultural impacts of the proposed project was based on review of the City of Anderson General Plan, the City of Anderson Zoning Ordinance, Shasta County General Plan, and field review of the project and surrounding area. The agricultural analysis considered information gathered from: the City of Anderson General Plan; the California Department of Conservation Farmland Conversion Report (1984 to present); the California Department of Conservation Farmland Field Reports (2000 to 2004); the California Department of Conservation Important Farmlands Map; consultation with the Shasta County Agricultural Commissioner; and the Soil Survey of Shasta County Area, California (1974). The proposed project was also compared to the existing conditions to determine the impacts due to loss of agricultural resources.

A California Agricultural Land Evaluation and Site Assessment (LESA) Model, developed by the California Department of Conservation, was also conducted to define the relative quality of land resources in the Specific Plan area, based on scientific measurable features. A summary of the results of the model is provided in **Appendix 4.14-1**.

**PROGRAM LEVEL (PROJECT BUILDOUT) IMPACTS AND MITIGATION MEASURES****Agricultural Conversion**

**Impact 4.14.1** At buildout, the project would result in the conversion of approximately 2,000 acres of grazing land in the project area, plus additional small amounts of grazing land that would be converted to accommodate the construction of new roads to serve the Specific Plan area from the south, west and east. This impact is considered **less than significant**.

At buildout, the proposed project would convert approximately 2,000 acres of active grazing land and an additional 248 acres of designated grazing land to urban uses. Construction of roads to serve the Specific Plan area from the south, west and east would also remove designated grazing land. The conversion of the project site from grazing land to urban uses would not reduce the amount of Important Farmland as defined by the FMMP (Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance). Conversion of the project site would result in the approximate loss of 0.67 percent of the total amount of estimated grazing land in Shasta County (408,927 acres in 2004). Thus, the project would not substantially reduce the overall agricultural production of the County. This conversion would also occur in an area where intensive farming and/or grazing operations are limited due to the foothill topography, marginal soil conditions and the proximity of the site to adjacent developed areas (i.e., City of Anderson and Community of Cottonwood).

While the project would not impact Important Farmland as defined by the Farmland Mapping and Monitoring Program, the project site does encompass approximately 101 acres of potential "prime agricultural land" as defined by Section 56064 of the Government Code (i.e., Class II soils). However, in order for these soils to be considered "prime agricultural land" pursuant to Section 56064, the Class II soils would need to be irrigated or, at the very least, irrigation of these soils would need to be feasible. With 5,288 homes being proposed for development within the project area, it is clear that the delivery of water to the site is feasible. However, the question then arises whether it would be feasible to develop a system for delivering water to the site if it were not for the return on the investment provided by the proposed development. Given the dispersed nature of Class II soils in the project area, the foothill topography of the site, and the considerable cost associated with constructing an irrigation system for limited agricultural production, it would appear impractical to develop such a water delivery system solely for agricultural irrigation. That is, if the water delivery network was not being subsidized through the construction of a residential/commercial development, the water system would not likely ever be constructed in order to irrigate the site for the purpose of farming. It is also noted that the project proposes to develop approximately 115 acres of Vineyards at locations that will complement the project layout. Thus, this potential impact is considered **less than significant**.

Mitigation Measures

None required.

**Impairment to Productivity/Land Use Compatibility**

**Impact 4.14.2** At buildout, the project would place urban land uses adjacent to agricultural uses, which may impair adjacent cattle grazing activities and result in land use compatibility conflicts. This impact is considered **potentially significant**.

## 4.14 AGRICULTURAL RESOURCES

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The proposed project would result in the conversion of approximately 2,000 acres of grazing land at buildout. Adjacent land uses to the project site include residential and grazing lands. The construction of roadways to serve the Specific Plan area from the south, west and east would result in an additional minor loss of grazing land. Potential conflicts between the proposed project and adjacent grazing activities may include residents trespassing onto active cattle lands where large animals are present, as well as odors, noise, flies, and noise from ranching activities impacting future residents. There may also be traffic delays from ranchers transporting livestock and/or cattle wandering into residential areas.

While the City of Anderson General Plan does not address the buffering of residential and agricultural land uses, Policy AG-d of the Shasta County General Plan indicates that residential properties adjacent to full-time agricultural uses should be no less than five acres in size, unless buffers exist or can be constructed to minimize potential conflicts. However, with no cattle-handling facilities (e.g., feed lots, livestock auction yards, and slaughterhouses) in the immediate vicinity of the project site that might result in a focused area of land use conflict (e.g., noise and odor), there are no specific areas around the site where setbacks or buffers would need to be considered. Nevertheless, it is prudent to ensure that there is physical separation between agricultural uses and urban land uses.

### Mitigation Measures

**MM 4.14.2a** For those residential properties proposed north of West Anderson Drive and immediately adjacent to County lands designated for full-time agricultural use (i.e., A-G), unless sufficiently buffered by topography, the project's design shall incorporate a physical barrier between the residential properties and existing ranch parcels. The barrier shall be of sufficient design to prevent cattle from entering residential lots, and restrict the development's residents from entering the adjoining ranch lands (i.e., no gates). The development's homeowners association shall adequately maintain the barrier to provide continued effectiveness of the barrier.

*Timing/Implementation:*      *The design of the barrier shall be established prior to final map approval for the phase of development in which these lots would be located. Installation shall be completed prior to issuance of the first certificate of occupancy for the phase in which they would be located. Maintenance of the barrier shall be the responsibility of the homeowners association.*

*Enforcement/Monitoring:*      *City of Anderson Planning Department*

**MM 4.14.2b** Prior to approval of the first final map and subsequent maps, the project applicant shall include a disclosure statement in the project's Covenants, Codes, and Restrictions (CC&Rs) stating, in effect, that:

*If your property is adjacent to property used for agricultural/grazing operations, you may be subject to inconveniences or discomforts arising from such operations on a 24-hour basis. Said discomforts may include, but shall not be limited to, noise, odors from manure or other chemicals, truck traffic, flies, and dust or smoke. Shasta County and The City of Anderson recognizes and supports the right to farm agricultural lands in a manner consistent with*

*accepted customs and standards. Shasta County and City of Anderson has also determined that inconvenience or discomforts with such agricultural operations shall not be considered a nuisance if such operations are consistent with accepted customs and standards.*

*Timing/Implementation: Prior to approval of each final map*

*Enforcement/Monitoring: City of Anderson Planning Department*

Implementation of mitigation measures **MM 4.14.2a** and **MM 4.14.2b** would reduce this impact to **less than significant**.

### PROJECT LEVEL (PHASE 2) IMPACTS AND MITIGATION MEASURES

#### **Agricultural Conversion**

**Impact 4.14.3** At Phase 2, the project would result in the conversion of approximately 243 acres of grazing land in the project area, plus additional small amounts of grazing land that would be converted to accommodate the extension of Anderson Hills Parkway to Rhonda Road. These grazing lands do not include Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance or lands defined as "prime agricultural land" pursuant to Section 56064 of the Government Code. This impact is considered **less than significant**.

As identified in Impact 4.14.1, the conversion of the project site (including Phase 2) from agricultural uses to urban uses would not reduce the amount of Important Farmland in Shasta County. As noted in the setting discussion above, the project site is less than optimal for either farming or grazing. As such, conversion of the project site would not substantially reduce the overall agricultural production of the County.

As evaluated in **Table 4.14-10**, the farmland in the LAFCo reorganization area is not considered prime farmland, pursuant to Government Code 56064. The area currently lacks a sufficient irrigation system. In addition, it is not economically feasible for an irrigation system to be constructed to serve the dispersed Class II soils. Irrigation of the area is considered infeasible because there is no existing irrigation system on the site that can adequately serve the site, the foothill topography makes it difficult for crop production, and it is extremely difficult to achieve a viable economic return on crops through irrigated production on site.

A California Agricultural Land Evaluation and Site Assessment (LESA) Model, developed by the California Department of Conservation, was conducted to define the relative quality of land resources in the Specific Plan area, based on scientific measurable features. The LE subscore was below 20 points. Therefore, the potential significance of this project's conversion of agricultural lands is considered **less than significant**. No further analysis was necessary to determine the SA subscore or the final LESA Score since the LE subscore did not attain the minimum score. **Appendix 4.14-1** shows the results of the LESA model that determined a less than significant score.

#### Mitigation Measures

None required.

## 4.14 AGRICULTURAL RESOURCES

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### 4.14.4 CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

#### CUMULATIVE SETTING

The Vineyards at Anderson project is located within and adjacent to the City of Anderson in Shasta County. The project site is in the southern portion of the city limits and west of Interstate 5. The City of Anderson and the surrounding area of Shasta County, including the community of Cottonwood, should be considered for the purpose of evaluating land use issues on a cumulative level.

#### CUMULATIVE IMPACTS AND MITIGATION MEASURES

##### **Agricultural Conversion/Conflicts**

**Impact 4.14.5** The project would convert approximately 2,248 acres of grazing land to urban uses. This loss would contribute to the cumulative loss of farmland in the region and could contribute to cumulative conflicts with agricultural uses. In the context of cumulative impacts, this impact is considered **potentially significant**.

The project would contribute to the on-going conversion of farmland in Shasta County to urbanized uses by converting approximately 2,248 acres of grazing land to residential, commercial and recreational uses. This farmland is not considered Important Farmland by the Farmland Mapping and Monitoring Program, nor is it defined as "prime agricultural land" pursuant to Section 56064 of the Government Code.

The project site is designated as part of the City of Anderson Planning Area, which anticipates the expansion of urban land uses in the General Plan. As discussed in the EIR for the City's last General Plan revision, the City of Anderson's overall policy position concerning Farmland is that the City is the appropriate place for urban-type land use and development densities. Although the City recognizes the various economic, social and environmental values of agricultural land, it does not recognize that lands within the planning area that might be classified by the State as "Important Farmland" generally have production value that warrants exclusive agriculture status. The principal related policy in the proposed General Plan, contained in the Open Space and Conservation Element, is AP-1: "Agricultural land can best be preserved by encouraging development within the City Limits so that viable agricultural operations in the unincorporated area can continue."

In the Open Space and Conservation Element, under Section 4.3.4, Agricultural Resources, the City acknowledges that, while the City recognizes the historic role of agriculture within the Anderson community and supports continued agriculture, the transition from agriculture to urban uses limits the potential for large-scale commercial agriculture within the city limits. The City does endeavor to see that new development is compatible with adjacent agricultural uses. The General Plan has several policies and implementation measures to protect agricultural resources and to support the agricultural character of the community, including the following:

AP-3: Avoid conflicts between agricultural and urbanization within the City's area of influence. Reduce the negative impacts resulting from urban uses and neighboring agricultural uses in close proximity.

AP-7: Incorporate parks, open space and trails between urban and agricultural uses to provide buffer and transition between uses.

AI-1: Require landowners close to agricultural uses (even those outside the City Limits) to sign and record a "Right-to-Farm" statement at the time of development.

In conclusion, the City concedes that the General Plan does, in part, facilitate the on-going conversion of lands that are classified as "important farmland" within the city limits to uses other than agricultural uses. The City feels that the limited amount of conversion, although by definition is considered "significant", is justified and acceptable in the context of the orderly and compact expansion of the City. Therefore, the impact on important farmland was, in the General Plan EIR, considered significant and unavoidable, and the City adopted a statement of overriding consideration.

However, as noted in the setting discussion for the Vineyards at Anderson project above, and in Impact 4.14.1, project site soils are considered marginal for agricultural use (see **Table 4.14-7**). Conversion of the project site would result in the approximate loss of 0.67 percent of total amount of estimated grazing land in the County (408,927 acres in 2004) and would not substantially reduce the overall agricultural production of the County. This conversion would also occur in an area where intensive agricultural operations are limited as a result of the foothill topography, highly variable soil conditions and the proximity to developed areas (i.e., City of Anderson). Given that the project site does not consist of Important Farmland and would result in the conversion of marginal grazing land, the project's contribution to the loss of agricultural resources is considered less than significant, even under cumulative conditions.

As noted under Impact 4.14.2, the project could result in conflicts with adjoining agricultural land uses, which is a regional and statewide issue. As noted in the setting discussion above, the project area soil conditions and limited water sources limit the extent of future expanded agricultural activities (beyond existing conditions). University of California Cooperative Extension Shasta County staff noted that continued open-range grazing is a reasonable assumption for future conditions in the project area (Forero, 2007).

Implementation of mitigation measures **MM 4.14.2a** and **MM 4.14.2b** would reduce the project's contribution to this impact to **less than significant**.

### Mitigation Measures

None required.

## 4.14 AGRICULTURAL RESOURCES

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