

7 AGRICULTURE

Agricultural production comprises a large portion of the land uses and economic activity in the County. This section discusses the current agricultural production in the County, the potential loss of important agricultural lands, the restriction of land under preservation (“Williamson Act”) contracts, and the potential for conflict with normal agricultural practices. To provide context for these issues, this section:

- Summarizes agricultural production in Mariposa County and the project area
- Explains the importance of agriculture to the local economy
- Presents the classification of farmlands
- Describes Williamson Act provisions
- Lists properties within the affected area under Williamson Act contracts
- Lists local agricultural preservation policies
- Explains the link between land use policies, the Project, and agricultural practices
- Examines potential project impacts on the use of land for agriculture
- Recommends mitigation and monitoring measures to reduce adverse impacts

7.1 AGRICULTURAL LAND USES

Agriculture is a very important land use in Mariposa County. The office of the California Agricultural Commissioner reports that 261,000 acres in the County are devoted to agriculture including rangeland, tree fruits, viticulture, forages and field crops. The US Census of Agriculture reports acreages ranging from 236,709 in 1987 to 198,230 in 1997. Increases in farmland acreages can be attributed primarily to the development of small farm enterprises. Table 7-1 lists the value of most of the County’s crops as of 1999.

Lands devoted to grazing are a large proportion of land in Mariposa County. Sources vary in accounting for and reporting of the totals. According to the California Department of Conservation, Division of Land Resource Protection, 408,330 acres were devoted to grazing in 1998. By 2001, this had increased to 459,000 acres, or about half of the 935,597 acres in the County. The grazing lands are concentrated in the southern part of the county, including much of the land between Merced and its proposed University of California campus, and the community of Mariposa.

7.1.01 AGRICULTURAL PRODUCTION

There are many forms of agricultural production in the County. While most agricultural production involves ranching and livestock, there are a number of timber operations and small orchards, vineyards, nurseries, and other crop operations contributing to County agriculture. Table 7-1 lists the various crops in the County, along with their comparative

1999 and 2000 values. As shown in the table, cattle ranching is the most numerous and valuable agricultural product.

The 2000 value shows an overall decrease of 1.6% from the 1999 value, with agricultural production representing a decrease of 0.4%. Categories showing a decrease in value included fruit and nut crops, livestock and poultry, and forest products. Categories on the plus side were field crops, livestock and poultry products, apiary products, and nursery stock. Forest production value declined by 22%. Wine grapes increased by 50% in production value due to higher yields and prices --- particularly for red wine varieties. Livestock production values decreased due to lower numbers marketed and lighter weights than in previous years.

Table 7-1: 1999 and 2000 Production by Crop Value

Crop	1999 Value		2000 Value	
	Number	Percent	Number	Percent
Cattle and Calves	\$9,448,000	48%	\$9,346,000	49%
Rangeland	\$4,949,000	25%	\$5,058,000	26%
Misc. Livestock & Poultry Products	\$1,638,000	8%	\$1,844,000	10%
Forest Products	\$1,106,000	6%	\$863,000	4%
All Poultry (Turkeys, pullets, chickens, ducks, exotic poultry, and rabbits)	\$1,017,000	5%	\$1,069,000	6%
Miscellaneous Fruits and Nuts	\$473,000	2%	\$147,000	<1%
Apples	\$262,000	1%	\$124,000	<1%
Sheep and Lambs	\$209,000	1%	\$230,000	>1%
Nursery Stock	\$136,000	<1%	\$152,000	<1%
Miscellaneous Livestock	\$135,000	<1%	\$143,000	<1%
Wine Grapes, all	\$106,000	<1%	\$159,000	<1%
Honey	\$91,900	<1%	\$116,000	<1%
Total Agricultural plus Forest Products	\$19,795,400	99%	\$19,484,960	100%

Source: 1999 and 2000 Agricultural Crop Report for Mariposa County.

The 1997 Census of Agriculture (Table 7-2) has a summary of Mariposa County's agricultural highlights from 1992 through 1997.

Table 7-2: 1997 Census of Agriculture

Item	All Farms
Farms	284
Land in farms (acres)	219,133
Average size of farm (acres)	772
Value of land and buildings	
Average per farm (dollars)	\$1,058,436
Average per acre (dollars)	1,005
Estimated market value of all machinery and equipment	
Average per farm (dollars)	34,442

Table 7-2: 1997 Census of Agriculture

Item	All Farms
Farms by size:	
1 to 9 acres	22
10 to 49 acres	86
50 to 179 acres	73
180 to 499 acres	44
500 to 999 acres	23
1,000 acres or more	36
<hr/>	
Total cropland (farms)	105
(Acres)	12,753
<hr/>	
Harvested cropland (farms)	49
(Acres)	636
<hr/>	
Irrigated Land (farms)	60
(Acres)	1,541
<hr/>	
Market value of agricultural products sold \$1,000	6,285
<hr/>	
Average per farm (dollars)	\$22,130
<hr/>	
Crops, including nursery and greenhouse crops \$1,000	470
<hr/>	
Livestock, poultry and their products \$1,000	5,815
<hr/>	
Farms by value of sales:	
Less than \$2,500	144
\$2,500 to \$4,999	28
\$5,000 to \$9,999	38
\$10,000 to \$24,999	40
\$25,000 to \$49,999	11
\$50,000 to \$99,999	9
\$100,000 or more	14
<hr/>	
Total farm production expenses \$1,000	11,772
Average per farm (dollars)	41,894
<hr/>	
Operators by principal occupation:	
Farming	161
Other	123
<hr/>	
Operators by days worked off farm:	
Any	143
200 days or more	95
<hr/>	
Livestock and poultry:	
Cattle and calves inventory (farms)	182
Number	22,579
<hr/>	
Beef cows (farms)	154
Number	10,204
<hr/>	
Milk cows (farms)	7
Number	245
<hr/>	
Cattle and calves sold (farms)	142
Number	9,892
<hr/>	
Hogs and pigs inventory (farms)	5
Number	183
<hr/>	
Hogs and pigs sold (farms)	5
Number	419

Table 7-2: 1997 Census of Agriculture

Item	All Farms
Sheep and lambs inventory (farms)	28
Number	517
Layers and pullets 13 weeks old and older inventory (farms)	20
Number	551
Broiler and other meat-type chicken sold (farms)	0
Number	0
Selected crops harvested:	
Wheat for grain farms	0
Acres	0
Bushels	0
Barley for grain (farms)	0
Acres	0
Bushels	0
Rice farms	(D)
Acres	(D)
Cwt	0
Cotton farms	0
Acres	0
Bales	0
Half-alf, other, wild silage farms	13
Acres	453
Tons, dry	369
Vegetable harvested farms	10
Acres	7
Land Orchards farms	27
Acres	139

(D) Withheld to avoid disclosing data for individual farms.

Source: 1997 Census of Agriculture.

7.2 FARMLAND OF IMPORTANCE

The U.S. Department of Agriculture (USDA) has mapped most of the farmland in Mariposa County by its level of importance for agricultural production. The California Department of Conservation makes these Agricultural Soil Conservation Service maps available to the public. Farmlands are classified according to their level of potential productivity and importance. The classification system adopted by USDA is shown below in Table 7-3.

Table 7-3: Classification System for Agricultural Lands

Classification	Definition
Prime Farmland	Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. The land must have the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. Such farmlands are permeable to water and air. These lands are not excessively erodible or saturated with water for long periods of time, and they do not flood frequently or are protected from flooding.
Farmland of Statewide Importance	Land other than Prime Farmland that has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. Excluded are publicly owned lands for which there is an adopted policy preventing agricultural use. Farmlands of Statewide Importance have less restrictive requirements than prime farmland for water availability capacity, acid-alkali balance, soil sodium content, and erodibility. There are no restrictions regarding permeability or rooting depth.
Unique Farmland	Land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, but has been used for the production of specific high economic value crops at some time during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops include oranges, olives, avocados, rice, grapes, and cut flowers. Excluded are publicly owned lands for which there is an adopted policy preventing agricultural use. Land classified as “Unique Farmland” must have produced crops at some time during the two update cycles prior to the mapping date that qualified for the California Department of Food and Agriculture’s annual list of high-value crops.
Farmland of Local Importance	Land, other than land falling in one of the other three categories that currently produces crops, has the capability of production, or is used for the production of confined livestock. This category also includes land that qualifies for Prime Farmland or Farmland of Statewide Importance, but that are not generally cultivated or irrigated. Such land may also be important to the local economy due to its productivity or value. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use. The County Board of Supervisors have included in the definition of “Farmland of Local Importance” soils listed as Prime or Statewide that are not irrigated, and soils growing dryland crops—beans, grain, dryland walnuts, or dryland apricots.

Sources: USDA Natural Resource Conservation Service; California Department of Conservation.

The California Department of Conservation, Division of Land Resource Protection reports that Mariposa County has 272 acres of important farmland, of which 29 acres are prime farmland, 145 acres are unique, and 98 acres are of statewide importance. While the overwhelming majority of agricultural lands is suitable for grazing, small patches of more valuable farmland are scattered between Bridgeport and Darrah. According to maps provided by the Department of Conservation (2000), the 29 acres of prime farmland in Mariposa County are concentrated in one tract of land north of Ben Hur. There are three tracts of farmland of statewide importance between Bridgeport and Red Mountain, and two tracts of unique farmland between Darrah and Usona. All of these tracts are very small stretches of land, less than 100 acres each. There are no lands containing important farmland in the northern and western portions of the County.

Microclimates are diverse enough that a very wide variety of cultivated species may be and are grown. There are 12 vineyards, various herb farms, an iris garden in Catheys Valley,

hydroponic vegetable crops in Midpines, apples, olives and olive oil, pears, aquaculturally grown catfish, and many other types of agriculture in Mariposa County. (Table 7-4)

Table 7-4: Project Site Summary by Land Use Category

Land Use Category	Total Acreage Inventoried 1996	Total Acreage Inventoried 1998	Total Acreage Inventoried 2000	Total Acreage Changed 1998 - 2000
Prime Farmland	29	29	29	0
Farmland of Statewide Importance	98	98	98	0
Unique Farmland	131	131	145	14
Farmland of Local Importance	0	0	0	0
Important Farmland Subtotal	258	258	272	14
Grazing Land	408,200	408,330	408,308	<22>
Agricultural Land Subtotal	408,458	408,588	408,580	<8>
Urban and Built-Up Land	2,162	2,226	2,227	1
Other Land	71,779	71,585	71,592	7
Water Area	6,047	6,047	6,047	0
Total Area Inventories	488,446	488,446	488,446	0

Source: USDA Natural Resource Conservation Service; California Department of Conservation.

Land use conversion from agricultural to other uses from 1998 to 2000 (Table 7-5) totaled 65 acres. Grazing land experienced the greatest loss at 33 acres. This included 14 acres to unique farmland; 6 acres to urban and built-up land; and 13 acres to other land use. Urban and built-up land use lost a total of 14 acres to grazing and other land uses, at 2 and 12 acres respectively. The Other land use category lost 9 acres to grazing and 9 acres to urban and built-up use.

Table 7-5: Land Use Conversion from 1998 to 2000

Land Use Category	Total Acreage Converted to:				Total Acreage Converted 1998-2000
	Unique Farmland	Grazing Land	Urban and Built-up	Other Land Uses	
Prime Farmland	0	0	0	0	0
Farmland of Statewide Importance	0	0	0	0	0
Unique Farmland	0	0	0	0	0
Farmland of Local Importance	-	0	0	0	0
Grazing Land	14	-	6	13	33
Urban and Built-Up Land	0	2	-	12	14
Other Land	0	9	9	-	18
Water Area	0	0	0	0	0
Total Area Inventories	14	11	15	25	65

Source: California Department of Conservation, Division of Land Resource Protection, Table A-13 - Mariposa County, 1998-2000 Land Use Conversion.

7.3 WILLIAMSON ACT LANDS

7.3.01 GENERAL PROVISIONS

The California Land Conservation Act of 1965 (California Government Code, Title 5, Division 1, Part 1, Chapter 7) authorizes cities and counties to establish agricultural preserves and enter into contracts with property owners restricting the use of property within those preserves to agriculture and compatible uses. Also known as the “Williamson Act,” this provision of California law has been used by many jurisdictions throughout California to preserve agricultural lands facing development pressures due to urban growth. Property restricted by a Williamson Act contract is taxed at its current use value rather than its highest and best use value. The substantial savings in property taxes encourages the owner to maintain the properties in agricultural use longer than might be the case if the land were tax based on its urban development value.

The amount of Williamson Act land (Table 7-6) has increased from 197,866 acres in 1999 to 198,948 acres in 2001, with corresponding increase in value from \$22,582,206 to \$25,004,813. This represents an increase of 0.54 percent in total Williamson Act acreage, and a 10.72 percent increase in total value over the 1999 to 2001 period.

Table 7-6: Mariposa County Williamson Act Land Acreage and Value
 (1999, 2000, and 2001)

Williamson Act Land	1999	2000	2001
Acreage	197,866	198,061	198,948
Value	\$22,582,206	\$24,132,524	\$25,004,813

Source: 2000 Agricultural Crop Report, Mariposa County

Under the Williamson Act, contracted land must be restricted for an initial term of at least ten years, although cities and counties may offer longer initial terms to property owners. On the contract anniversary date, one year is automatically added to the contract term unless either party provides a written notice in advance of its intention not to renew the contract. Accordingly, contracted land always remains restricted to agricultural uses for at least ten years, so long as either party does not submit a notice of its intent not to renew the contract. If either party does submit such a notice prior to the contract anniversary date, the land remains restricted for the remaining nine years of the contract.

Uses of contracted land must be consistent with three principles of compatibility contained in the Act:

- The use will not significantly compromise the long-term productive agricultural capability of the subject-contracted parcel;
- The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject agricultural preserves; and
- The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use.

7.3.02 CANCELLATION OF WILLIAMSON ACT CONTRACTS

A property owner of restricted land may petition the local jurisdiction for cancellation of a Williamson Act contract prior to the expiration of the remaining term (Government Code Sections 51280-51287). The governing body may grant tentative approval for cancellation only if makes one of the following findings:

- The cancellation is consistent with the purposes of the Williamson Act; or
- Cancellation is in the public interest.

To make a consistency determination, the governing body must find:

- A notice of non-renewal has been filed;
- Cancellation would not likely result in the removal of adjacent lands from agricultural use;
- Cancellation would result in an alternative use that is consistent with provisions of the applicable General Plan;
- Discontinuous patterns of urban development would not result from cancellation; and
- There is no proximate non-contracted land that is available and suitable for the proposed use, or that development of contracted land would provide more contiguous patterns of urban development.

To determine that cancellation is in the public interest, the governing body must find that:

- Public concerns substantially outweigh Williamson Act objectives; and
- There is no proximate non-contracted land that is available and suitable for the proposed use, or that development of contracted land would provide more contiguous patterns of urban development.

7.3.03 PUBLIC ACQUISITION OR USE OF CONTRACTED LAND

The Williamson Act provides for public acquisition of title, easement, or interest in contracted property for public facilities and uses. (Government Code Sections 51290-51295). These provisions generally discourage a local agency from acquiring contracted land or an interest in contracted land, particularly for public improvements that may be incompatible with surrounding agriculture, unless there is no reasonable alternative. For the purposes of the Act, the Legislature has determined that flood control facilities, public works required for fish and wildlife enhancement and preservation, and improvements for the primary benefit of lands within the preserve are compatible with agriculture.

The Act requires a local agency to notify the California Department of Conservation prior to acquiring land, or an interest in land, for public improvements. At the time a public agency considers locating a public improvement within an agricultural preserve, it must send a notice to the Director of Conservation and the local governing body responsible for administering the Williamson Act contract. The notification and accompanying documentation must include:

- The number of acres under contract to be acquired (including easements/partial interests);
- The number of acquired/affected acres mapped by the state as prime farmland;
- The purpose of the acquisition;
- The reason for selecting the contracted land;
- The location of the proposed acquisition and public improvements;
- The characteristics of adjacent land;
- Copies of affected Williamson Act contracts; and
- An explanation of findings.

A public agency may not locate a public improvement within an agricultural preserve unless the following findings are made:

- The selection of a location is not based primarily on the lower cost of acquiring land in an agricultural preserve; and
- If the land is prime farmland covered under a contract pursuant to Article 6 of the Act, there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

7.3.04 FARMLAND SECURITY ZONES

The Williamson Act also allows preservation contracts with minimum terms of 20 years, called “farmland security zones” (Government Code Section 51296). At the request of a property owner, a local legislative body may designate land as a farmland security zone and enter into 20-year contracts with restrictions similar to those under traditional 10-year Williamson Act contracts. The purposes of this recent amendment to the Williamson Act (added in 1998) are to provide more flexibility to cities and counties for creating long-term agricultural preservation and to encourage them to use longer-term preservation contracts.

This section of the Act also restricts the annexation of lands placed in farmland security zones to:

- properties located within a designated area approved by local voters as the limit for existing and future urban facilities, utilities, and services;
- situations in which the annexation of land is necessary for the location of a public improvement; and
- properties whose owners consent to the annexation.

This section places additional conditions on annexation of lands in farmland security zones to special districts for the purpose of providing services and public facilities.

7.3.05 PROJECT AREA PROPERTIES IN WILLIAMSON ACT CONTRACTS

Much of the land devoted to agriculture, a total of 197,866 acres, is also covered by contracts under the Williamson Act; is concentrated in the south and west portions of the County; and is punctuated with scattered pockets of non-agricultural lands that might be used for private

development. Figure 7-1 illustrates the location of land in agricultural preserves under Williamson Act contracts. The largest of these non-agricultural pockets is located northwesterly of Route 140 at the County border with Merced and covers approximately 5,500 acres. Since a 10 to 20-year advance notice is required to release lands from these contracts prior to their expiration, few lands under Williamson Act contract will be available during the planning horizon as long as land values for urban uses do not exceed the costs of releasing the lands from these contracts. Thus, it is likely that any development that occurs in the western area of the County will occur in these relatively small pockets of non-agricultural land.

Figure 7-1: Williamson Act Properties

Do to the size of this image; Figure 7-1 has been created as a separate file

7.4 IMPEDIMENTS TO AGRICULTURAL PRODUCTION

There are several impediments to further development of agriculture. Groundwater is found in pockets throughout the County, but not reliably available to all small farming parcels. The majority of the surface water in the Merced River is committed to the Merced Irrigation District, and is not considered an adequate source of water for the Mariposa County agricultural community. The size and type of agricultural operations are likely to be limited by the difficulty of securing an adequate labor supply. With few other entry-level employment opportunities, workers are not attracted to the area to support labor-intense farming activities. In addition, wage rates are comparable to public assistance payment levels, making such labor-intense employment opportunities less desirable (Agricultural Commission, personal communication, 2001).

7.5 EFFECTS OF AGRICULTURAL PRODUCTION

Grazing can negatively impact water quality. The non-point sources of pollution caused by the manure and herbicides are becoming an increasing problem for surface water supplies in the County. The Resource Conservation District has established an educational program to teach ranchers how to properly establish feed routes to discourage livestock from gathering, eating, and producing waste near surface water sources, which leads to contamination. Many ranchers have chosen to participate in this program to keep water contamination under control rather than face future penalties.

Agricultural production is impacting the County by consuming native ground cover and creating opportunities for exotic species such as the Yellow Starthistle (*centaurea solstitialis*) to thrive in some areas. The areas affected are being treated with herbicides applied, in part, by air. Selective grazing, biological control, weed whackers, and other non-chemical methods are also being employed to keep Yellow Starthistle under control.