
4. AGRICULTURE RESOURCES

The City of Manteca is located in an area of rich agricultural resources, including orchards, dairies, vineyards, row crops, and pasture land. Due to excellent soil, great climate, and access to clean water, Manteca was predominantly an agricultural area for much of the early 20th century.

4.1 EXISTING CONDITIONS

4.1.1 Soils Suitable for Agriculture

San Joaquin County includes some of the best agriculture resources in the world.

Suitability for agricultural use is evaluated using the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. The model considers six factors in determining the level of significance of potential impacts of converting agriculture use to urban use. These include:

- Natural Resources Conservation Service (NRCS) Land Capability Classification
- Storie Index
- Project Size Rating
- Water Resources Availability Rating
- Surrounding Agriculture Rating
- Surrounding Protected Resources Rating

The General Plan encompasses such a large area of similar land uses that the project size, water resources availability, surrounding agriculture and surrounding protected resources would be comparable for all areas of the Study Area. The significant factors are the Land Capability Classification and the Storie Index. Both the Storie Index and the Land Capability Classification are provided in the Soil Survey of San Joaquin County, California, USDA Soil Conservation Service (now Natural Resources Conservation Service). (1)

The Storie Index expresses numerically the relative degree of suitability of a soil for general intensive agricultural uses. Four general factors are used in determining the index rating, which ranges from 1-100: (A) permeability, available water capacity, and depth of the soil; (B) texture of surface soil; (C) dominant slope of soils body; and (X) other conditions more readily subject to management or modification by land user. The Storie Index is incorporated into the farmland category systems discussed below under Important Farmland Inventory, and Farmland Mapping and Monitoring Program.

Land Capability Classification Systems

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) is a primary source of information concerning the suitability of soils for agricultural use. The NRCS Land Capability Classification System organizes soils into eight categories designated by Roman numerals (Class I-VIII). Generally, soils receiving a Class I or II rating are designated Prime Farmland. The eight categories are defined as:

- Class I Soils have few limitations that restrict their use.
- Class II Soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
- Class III Soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.
- Class IV Soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.
- Class V Soils are not likely to erode but have other limitations, impractical to remove, that limit their use.
- Class VI Soils have severe limitations that make them generally unsuitable for cultivation.
- Class VII Soils have very severe limitations that make them unsuitable for cultivation.

Table 4-1 shows the Study Area soils Land Capability Classifications. One (1) Study Area soil series, the Honcut series, is a Class I soil (few limitations), and is considered prime farmland where irrigated. Nine (9) of the Study Area Soil Series are Class II soils (moderate limitations), and are considered prime farmland where irrigated. The remainder of the soils in the Study Area are Class III soils where irrigated (severe limitations, and are not considered prime farmland).

**Table 4-1
Study Area Soils**

Soil (Map Symbol & Series)	Prime Farmland	Land Capability Classification	Expansive (Shrink Swell Potential)
108 Arents	No	III irrigated; IV non-irrigated	Information not available.
109 Bisgani	No	III irrigated; IV non-irrigated	low
130 Columbia	Yes (where irrigated)	II irrigated; IV non-irrigated	low
131 Columbia	Yes (where irrigated)	II irrigated; IV non-irrigated	low
141 Delhi	No	III irrigated; IV non-irrigated	low
142 Delhi	No	III irrigated; IV non-irrigated	low
143 Delhi-Urban	No	III irrigated; IV non-irrigated	low
144 Dello	No	III irrigated; IV non-irrigated	low
145 Dello	No	III irrigated; IV non-irrigated	low
152 Egbert	Yes (where irrigated)	II irrigated; IV non-irrigated	moderate-high
153 Egbert	Yes (where irrigated)	II irrigated; IV non-irrigated	moderate-high
160 Galt	No	III irrigated; IV non-irrigated	high
166 Grangeville	Yes (where irrigated)	II irrigated; IV non-irrigated	low
169 Guard	Yes (where irrigated)	II irrigated; IV non-irrigated	moderate
175 Honcut	Yes (where irrigated)	I irrigated; IV non-irrigated	low
196 Manteca	No	III irrigated; IV non-irrigated	low
197 Merritt	Yes (where irrigated)	II irrigated; IV non-irrigated	low
254 Timor	No	III irrigated; IV non-irrigated	low
255 Tinnin	No	III irrigated; IV non-irrigated	low
260 Urban Land	-	-	-
265 Veritas	Yes (where irrigated)	II irrigated; IV non-irrigated	low
266 Veritas	Yes (where irrigated)	II irrigated; IV non-irrigated	low

Source: Extracted from Soil Survey of San Joaquin County, California. October 1992. U.S. Department of Agriculture, Soil Conservation Service.

Important Farmland Inventory

The NRCS also implements another soils classification system: the “Important Farmland Inventory” (IFI). The program provides a source of information for state and local agencies concerned with agricultural land conversion. The IFI identifies four farmland categories: Prime Land, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance.

Farmland Mapping and Monitoring Program

The California Department of Conservation, Office of Land Conservation, utilizing NRCS data discussed above, has developed a Farmland Mapping and Monitoring Program (FMMP). The FMMP maps agricultural products, as well as acreage statistics from the Farmland Conversion Report. These maps are used for many projects associated with assessment of agricultural land resources. Prime Farmland qualifications include a requirement that the area must have been in production of irrigated crops at some time during the four years prior to the Important Farmland Map date. In addition, the soil must meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the NRCS. As discussed above, the NRCS compiles lists of which soils in each survey area meet the quality criteria.

Table 4-2 defines the farmland categories applied in the Farmland Mapping and Monitoring Program.

Table 4-2**Important Farmland Inventory Definitions**

Category	Definition
Prime Farmland (P)	Farmland with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the four years prior to the mapping date.
Farmland of Statewide Importance (S)	Farmland 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 production of irrigated crops at some time during the four years prior to the mapping date.
Unique Farmland (U)	Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
Farmland of Local Importance (L)	Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.
Grazing Land (G)	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 (D)	Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
Other Land (X)	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; vacant and nonagricultural land surrounded on all sides by urban development; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres.
Water (W)	Perennial water bodies with an extent of at least 40 acres.

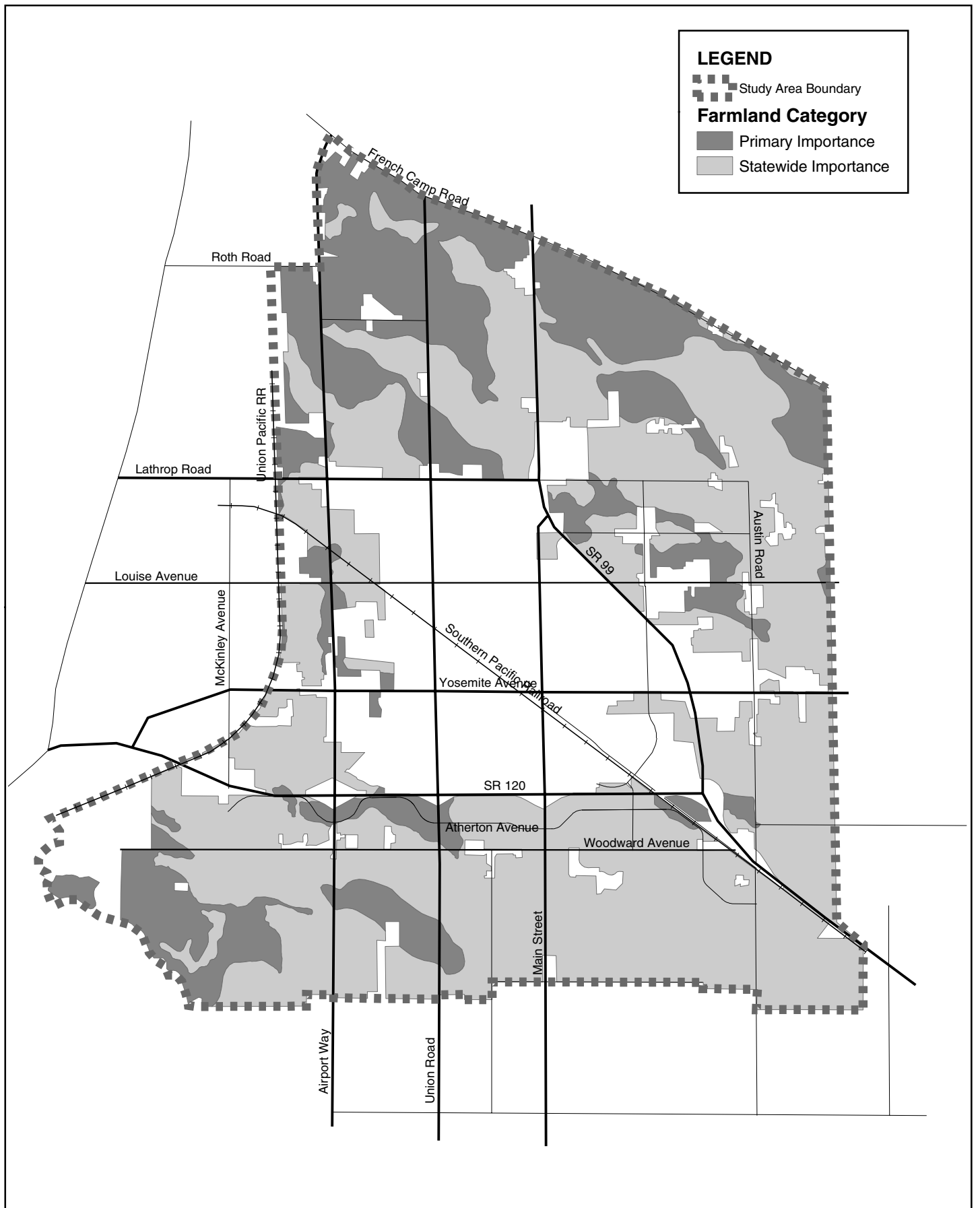
Source: California Department of Conservation, Office of Land Conservation. Farmland Mapping and Monitoring Program. www.conservation.ca.gov. April 2003.

Table 4-3 summarizes the prime farmlands in San Joaquin County and in the General Plan Study Area. Figure 4-1 shows the distribution of these farmland categories within the County, and Figure 4-2 shows the distribution of these farmland categories within the Manteca General Plan 2023 Study Area. Table 4-4 summarizes the conversion of important farmlands to urban uses in San Joaquin County from 1992 to 2000.

Table 4-3**Summary of Prime Farmlands in San Joaquin County and the Study Area**

Land Use Category	San Joaquin County	Percent of San Joaquin County as of 2002	Total Study Area As of 2002	Percent of Total Study Area as of 2002
	Acres	Percent	Acres	Percent
D Developed	74,148.7	8.1%	7,556.3	29.1%
G Grazing	150,332.1	16.5%	0.0	0.0%
L Farmland of Local Importance	56,008.8	6.1%	273.5	1.1%
P Prime Farmland	423,158.4	46.4%	5,265.1	20.2%
S Farmland of Statewide Importance	93,846.2	10.3%	11,863.2	45.6%
U Unique Farmland	57,977.4	6.4%	0.0	0.0%
W Water	11,648.2	1.3%	51.8	0.2%
X Other Land	45,479.9	5.0%	998.9	3.8%
Total	912,599.8	100.0%	26,008.8	100.0%

Source: California Department of Conservation, Office of Land Conservation. Farmland Mapping and Monitoring Program. www.conservation.ca.gov. April 2003.



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Table 4-4
San Joaquin County Land Use Conversion

Land Use Category	1992	1994	1996	1998	2000	Net Change
Prime Farmland	436,003	434,328	433,134	429,168	429,179	-6,824
Farmland of Statewide Importance	99,548	33,132	98,163	96,795	96,800	-2,748
Unique Farmland	47,084	47,202	48,759	52,715	52,719	+5,635
Farmland of Local Importance	53,020	54,252	53,479	53,682	53,677	+657
IMP. FARMLAND SUBTOTAL	635,655	634,914	633,535	632,360	632,369	-3,286
Grazing Land	157,708	157,391	156,185	152,699	152,699	-5,009
AG. LAND SUBTOTAL	793,363	792,305	789,720	785,059	785,068	-8,295
Urban and Built-up Land	66,297	67,621	69,739	71,596	71,595	+5,298
Other Land	42,509	42,243	42,905	44,297	44,289	+1,780
Water Area	10,159	10,159	10,236	11,648	11,648	+1,489
TOTAL AREA INVENTORIED	912,328	912,328	912,600	912,600	912,600	+272

Source: California Department of Conservation, Office of Land Conservation. Farmland Conversion Reports. www.conservation.ca.gov. April 2003.

4.1.2 Land Conservation Act (Williamson Act)

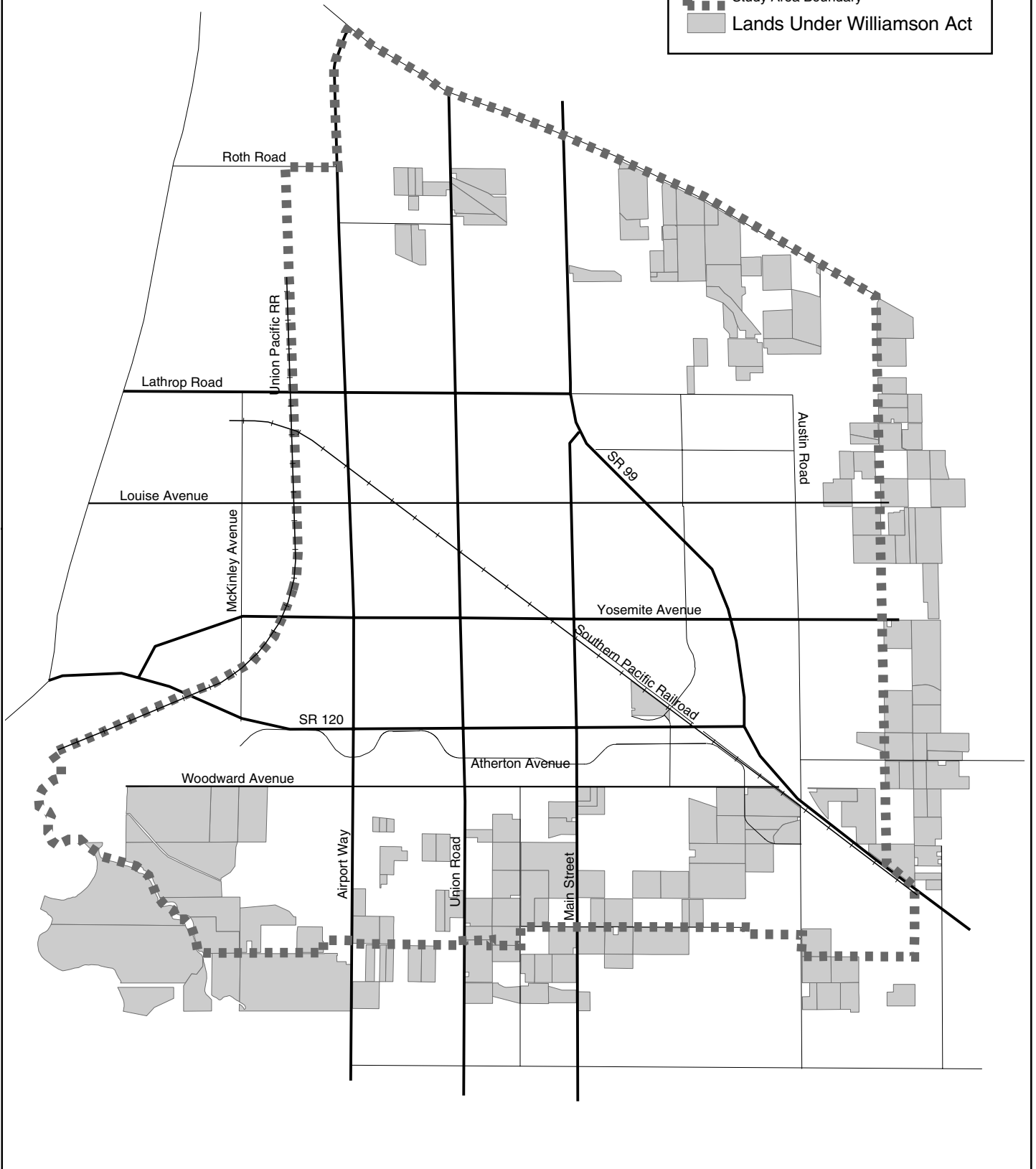
More than 16 million of the State's 30 million acres of farm and ranch land are currently protected under the Williamson Act.

Under a Williamson Act contract, the property owner is guaranteed that the property will be taxed according to its potential agricultural income, as opposed to the maximum valued use of the property. Contracts have a 10-year term that is renewed annually. Contracts can be terminated by cancellation or nonrenewal.

A local government, or landowner, can initiate the non-renewal process to terminate the Williamson Act contract. A "notice of non-renewal" starts the nine-year non-renewal period. During the non-renewal process, the annual tax assessment gradually increases and the property continues to be limited to Williamson Act allowed uses. At the end of the nine-year non-renewal period, the contract is terminated.

LEGEND

- Study Area Boundary
- Lands Under Williamson Act



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The precise number of acres subject to a Williamson Act varies from year-to-year as individual contracts are added or removed through the non-renewal process. As of the end of 2002, there were approximately 3,861 acres subject to Williamson Act contracts within the Study Area. An undetermined number of the contracts had filed for non-renewal. Figure 4-3 illustrates the location of the lands under contract in 2002.

4.2 REGULATORY SETTING

4.2.1 Applicable Federal Regulation

U.S. Land Evaluation and Site Assessment (LESA) System

The Land Evaluation and Site Assessment (LESA) system ranks lands for suitability and inclusion in the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) Farmland Protection Program (FPP). The FPP is a voluntary program aimed at keeping productive farmland in agricultural uses. LESA evaluates several factors that are used to numerically rank the suitability of parcels based on local resource evaluation and site considerations. These factors include soils potential for agricultural use, location, market access, and adjacent land use.

4.2.2 Applicable State Regulation

California Land Evaluation and Site Assessment (LESA)

The California Land Evaluation and Site Assessment (LESA) model was based on the U.S. LESA system, and can be used to rank the relative importance of farmland, including the potential significance of its conversion on a site-by-site basis. The evaluation factors are discussed above in Subsection 4.1.1.

Farmland Mapping and Monitoring Program (FMMP)

The California Department of Conservation began the Farmland Mapping and Monitoring Program (FMMP) in 1980 to document how much agricultural land in the State was being converted to nonagricultural land or transferred into Williamson Act contracts. The requirements to be shown on the FMMP Important Farmland Maps as Prime Farmland or Farmland of Statewide Importance are discussed above in Subsection 4.1.1.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act (Williamson Act), California Government Code Sections 51290 et seq., encourages the conservation of agricultural lands by providing tax incentives to

land owners who contract with the County to restrict land uses to agriculture and compatible uses. Although most Williamson Act contracts protect land in agricultural production, the Act also provides for contracts to preserve open space areas (recreational, scenic, and natural resources).

The vehicle for Williamson Act agreements is a rolling term ten-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than their potential market value. An agricultural preserve, consisting of no less than 100 acres, defines the boundary of an area within which a city or county will enter into contracts with landowners. Only land located within an agricultural preserve is eligible for a Williamson Act contract. Preserves are regulated by rules and restrictions designated in the resolution to ensure that the land within the preserve is maintained for agricultural or open space use.

Although the State Department of Conservation coordinates and monitors implementation of the Williamson Act, each county regulates the criteria for participation and administers the program.

4.2.3 San Joaquin County

San Joaquin County Zoning

The General Plan Study Area surrounding the City of Manteca to the north, east and south is within the unincorporated area of San Joaquin County, and is subject to the County General Plan and zoning. Agriculture 40-acre minimum parcel area (AG-40) is the predominant County zone in the Study Area, and accounts for 11,667 acres. Agriculture Urban (AU-20), 20-acre minimum, accounts for 2,930 acres. The AU-20 zone designation is found adjacent to the existing City boundary east of SR 99, north of Lathrop Road, and along the south side of SR 120.

4.2.4 City of Manteca Right to Farm Ordinance

Chapter 8.24 of the Manteca Municipal Code is a "Right to Farm" Ordinance intended to protect agricultural productivity in the City. The Ordinance states:

"It is the policy of this City to preserve, protect and encourage the use of viable agricultural lands for the production of food and other agricultural products. When nonagricultural land-uses extend into or approach agricultural areas, conflicts often arise between such land-uses and agricultural operations. Such conflicts often result in the involuntary curtailment or cessation of agricultural operations, and discourage investment in such operations. This chapter is intended to reduce the occurrence of conflicts between nonagricultural and agricultural land uses within the City."

4.2.5 City of Manteca 1988 General Plan

The Natural Resources Element (Section VI) of the existing 1988 General Plan includes the following goal, policies, and implementation measure to protect agricultural resources in the City of Manteca:

- Goal B To promote the continuation of agricultural uses in the Manteca area and to discourage the premature conversion of agricultural land to nonagricultural uses, while providing for the urban development needs of Manteca.
- Policy B-1 The City shall support the continuation of agricultural uses on lands designated for urban uses until urban development is imminent.
- Policy B-2 The City shall discourage the cancellation of Williamson Act contracts within the Primary Urban Service Boundary line until it is demonstrated that the lands with such contracts will be needed for urban development in the immediate future.
- Policy B-3 The City shall endeavor to ensure, in approving urban development near existing agricultural lands, that such development will not unnecessarily constrain agricultural practices or adversely affect the economic viability of nearby agricultural operations.

4.3 IMPACT EVALUATION CRITERIA

In accordance with CEQA Guidelines, Appendix G, the proposed project would have a significant adverse impact on the environment if the project would:

1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, 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 environmental which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

4.4 IMPACTS AND MITIGATION

POTENTIAL IMPACT AG-1: Implementation of the City of Manteca General Plan 2023 (Project) will result in conversion of Prime Farmland, Farmland of Statewide Importance, and

Farmland of Local Importance to non-agricultural use.

Table 4-5 summarizes the potential conversion of important farmland to urban use at full development of the land uses within the Primary Urban Services Area boundary.

Table 4-5

Summary of Farmland Conversion in the Primary Service Area

	Land Use Category	Agricultural Lands in the Study Area as of 2002	Agricultural Lands as a Percent of Study Area (26,008.8 ac) as of 2002	Acres <u>Converted</u> in the General Plan Proposed Growth Area	Agricultural Lands <u>Remaining</u> at Full Development of the General Plan
		Acres	Percent	Acres	Acres
L	Farmland of Local Importance	273.5	1.1%	79.7	193.8
P	Prime Farmland	5,265.1	20.2%	1,052.2	4,212.9
S	Farmland of Statewide Importance	11,863.2	45.6%	4,780.9	7,082.3
U	Unique Farmland	0.0	0.0%	0.0	0.0
	TOTAL	17,401.8	66.9%	5,912.8	11,489.0

Source: Wade Associates, May 2003

As shown in Table 4-5, a total of 5,912.8 acres (34%) of the total 17,401.8 acres of important farmland existing in 2002 would be converted to nonagricultural uses at full buildout of the General Plan 2023. A total of 11,489.0 acres (66%) of existing important farmland would remain in agricultural use.

Level of Significance: Potentially Significant

Mitigation Measures:

AG-1.1: The Land Use Element of the proposed General Plan 2023 provides the following policy (P) and implementation measure (I) intended to protect important farmland within the Study Area:

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- LU-P-41 The City shall encourage the continuation of agricultural uses on lands within the Primary and Secondary Urban Services Boundary lines pending their development as urban uses consistent with the General Plan.
- LU-I-1: The City shall maintain a growth management system that provides a mechanism for the annual allocation of the amount of residential, commercial, and industrial development that may occur. The growth management system shall have the following objectives:
- Conserve viable agricultural and open space lands.

The Resource Conservation Element of the proposed General Plan 2023 provides the following goal and policies (P) intended to conserve agricultural resources within the Study Area:




- Goal RC-9 To promote the continuation of agricultural uses in the Manteca area and to discourage the premature conversion of agricultural land to nonagricultural uses, while providing for the urban development needs of Manteca.
- RC-P-18 The City shall support the continuation of agricultural uses on lands designated for urban use, until urban development is imminent.
- RC-P-19 The City shall provide an orderly and phased development pattern so that farmland is not subjected to premature development pressure.

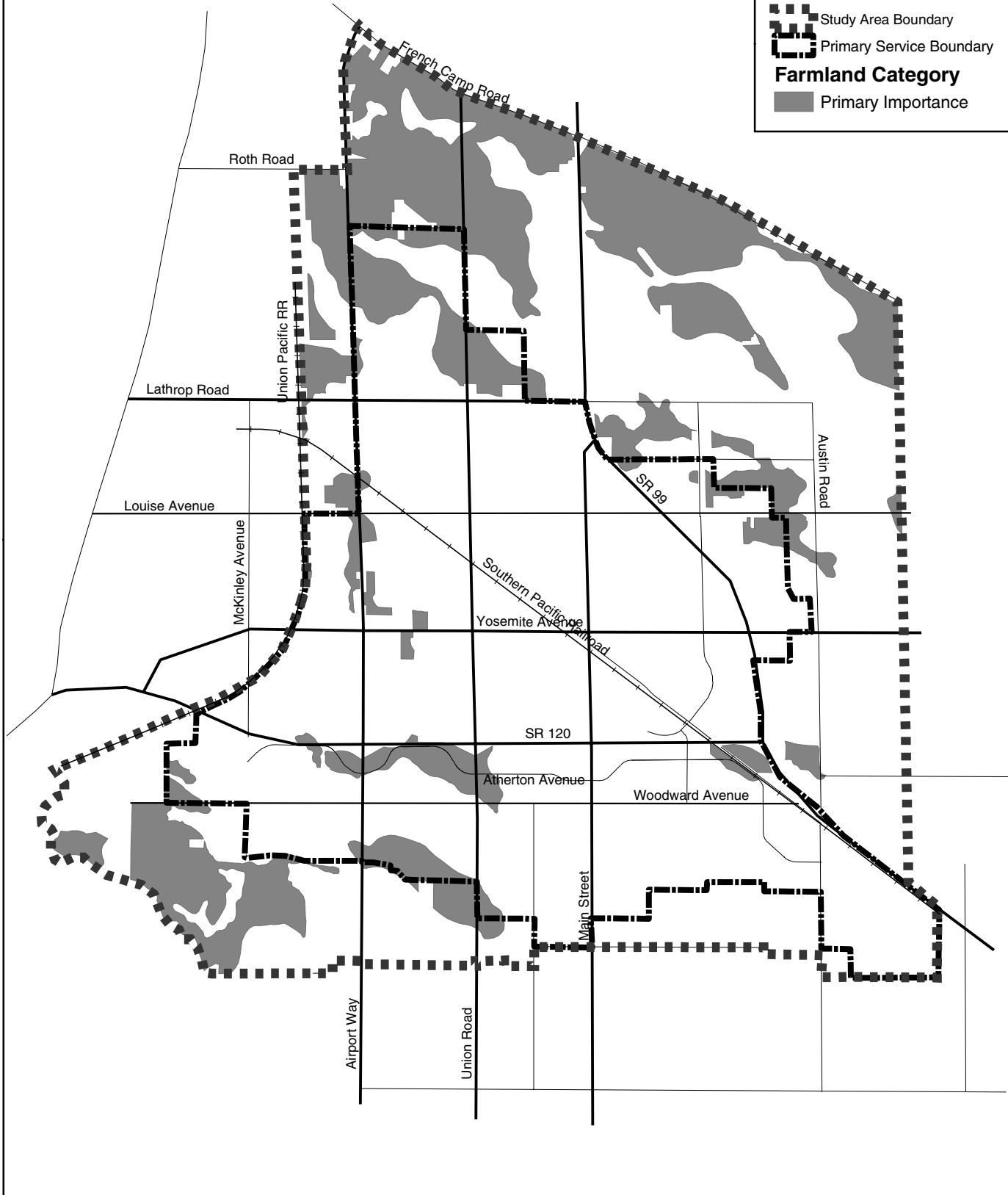
AG-1.2: The Land Use Element of the proposed General Plan 2023 directs the major growth area, as defined by the Primary Urban Service boundary, in a manner that avoids Prime Farmlands where feasible. Some areas of Prime Farmlands are within existing urban areas. Figure 4-4 illustrates the location of Prime Farmlands relative to the Primary Urban Service boundary.

Residual Level of Significance: Significant and Unavoidable

Although conformance with the goal, policies, and implementation measures identified above will lessen the conversion of the agricultural resources to some extent, the impact will remain significant.

LEGEND

-  Study Area Boundary
-  Primary Service Boundary
- Farmland Category**
-  Primary Importance



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POTENTIAL IMPACT AG-2: Implementation of the General Plan 2023 will cause a conflict with existing zoning for agricultural use, or a Williamson Act contract.

The precise number of acres subject to a Williamson Act varies from year-to-year as individual contracts are added or removed through the non-renewal process. As of the end of 2002, there were approximately 3,861 acres subject to Williamson Act contracts within the Study Area. An undetermined number of the contracts had filed for non-renewal.

Level of Significance: Potentially Significant

Mitigation Measures:

AG-2.1: The Resource Conservation Element of the proposed General Plan 2023 provides the following policies (P) and implementation (I) measures intended to conserve agricultural zoning within the Study Area:

RC-P-22 Protect designated agricultural lands, without placing an undue burden on agricultural landowners.

RC-P-26 The City shall discourage the cancellation of Williamson Act contracts outside the Primary Urban Service Boundary line. The City will not accept for processing any application for annexation of land under Williamson Act contract when there is more than two years remaining on the contract term.

RC-I-31 Work with San Joaquin County on the following issues:
Support the continuation of County agricultural zoning in areas designated for agricultural land use in the Area Plan.

Residual Level of Significance: Significant and Unavoidable

Although conformance with the policies and implementation measure identified above will lessen the conflicts with existing agricultural zoning within the Primary Urban Service Boundary, the impact will remain significant within the Study Area.

POTENTIAL IMPACT AG-3: The location or nature of some proposed General Plan 2023 changes could result in the conversion of farmland to non-agricultural use.

Level of Significance: Potentially Significant

Mitigation Measures:

AG-3.1: The Resource Conservation Element of the proposed General Plan 2023 provides the following policies (P) and implementation measures (I) intended to maintain agricultural use within the Study Area:

- RC-P-20 In approving urban development near existing agricultural lands, the City shall act so that such development will not unnecessarily constrain agricultural practices or adversely affect the viability of nearby agricultural operations.
- RC-P-23 Provide buffers at the interface of urban development and farmland in order to minimize conflicts between these uses.
- RC-P-24 The City shall ~~endeavor to~~ ensure, in approving urban development near existing agricultural lands, that such development will not unnecessarily constrain agricultural practices or adversely affect the economic viability of nearby agricultural operations.
- RC-P-25 The City shall restrict the fragmentation of agricultural land parcels into small rural residential parcels except in areas designated for estate type development in the General Plan Land Use Diagram.
- RC-P-27 The City shall not extend water and sewer lines to premature urban development that would adversely affect agricultural operations.
- RC-I-30 Apply the following conditions of approval where urban development occurs next to farmland:
- Require notifications in urban property deeds that agricultural operations are in the vicinity, in keeping with the City's right-to-farm ordinance.
 - Require adequate and secure fencing at the interface of urban and agricultural use.

- Require phasing of new residential subdivisions so as to include an interim buffer between residential and agricultural use.

Residual Level of Significance: Less than Significant With Mitigation

The level of significance will be mitigated to less than significant if the above policies and implementation measures are implemented to maintain agricultural use adjacent to nonagricultural uses.

References:

- (1) U.S. Department of Agriculture, Soil Conservation Service. Soil Survey of San Joaquin County, California, October 1992.

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