

**SOUTH SAN JOAQUIN COUNTY
FARMLAND CONVERSION FEE**
Nexus Study

Prepared for:
Cities of Manteca, Tracy and Lathrop

July 18, 2005

Prepared by:
ESA

8950 Cal Center Drive
Building 3, Suite 300
Sacramento, CA 95826
916.564.4500
www.esassoc.com

Clearwater

Los Angeles

Oakland

Orlando

San Francisco

Santa Fe

Seattle

205182

I. Introduction

The Cities of Manteca, Tracy and Lathrop (“Cities”) propose to adopt and implement a Farmland Conversion Fee. The adoption of this fee was agreed to by the Cities pursuant to the Settlement Agreement and Release of Claims for the South County Water Supply Project.¹ Each city is responsible for adoption of the fee, consistent with the Mitigation Fee Act (California Government Code §66000, et seq.). While each will adopt the fee individually by ordinance, this study shall provide the necessary basis for each city to establish and impose the fee, as required by the Mitigation Fee Act.

The purpose of the Farmland Conversion Fee, and the uses to which the collected fees shall be put, is described in this study. This study also explains the nexus between the fee and the type of development subject to the fee, and how the amount of the fee is reasonably related to its purpose.

II. Purpose and Use of the Fee

The purpose of the Farmland Conversion Fee is to provide partial mitigation for the loss of important farmland in south San Joaquin County through conversion to private urban uses, including residential, commercial and industrial development.

For the purpose of the Farmland Conversion Fee, “important farmland” means prime farmland, farmland of statewide importance, or unique farmland, as defined by the California Department of Conservation’s Farmland Monitoring and Mapping Program (FMMP) and as shown on the most recent available FMMP map of San Joaquin County. This definition is consistent with the purpose of the Fee, and with the definition of “agricultural land” found in the California Environmental Quality Act (Public Resources Code Section 21060.1).²

The Farmland Conversion Fee shall be used by the Cities and/or a qualifying land trust (as defined below) to purchase agricultural mitigation land. “Agricultural mitigation land” means an easement or fee interest in property that restricts the primary use of the land to agricultural production in perpetuity.

Agricultural Conservation Easements

An agricultural conservation easement (ACE) is a voluntary, recorded agreement between a landowner and a holder of the easement that preserves the land for agriculture. The ACE places legally enforceable restrictions on the land. The exact terms of the ACE may vary, but restricted activities will include subdivision of the property, non-farm development, and other uses that are inconsistent with agricultural production. Some easements may allow construction of dwellings for family members (“homesteading”) and structures related to agricultural production. An ACE is permanent, unless otherwise specified, and runs with the land.³

¹ The approval of the project by the South San Joaquin Irrigation District, and certification of the project EIR, was challenged in San Joaquin County Superior Court, Case No. CV 011090.

² The definition is also consistent with the terms of the above referenced Settlement Agreement.

³ Owners of land subject to an easement may sell or lease their land, but the terms of the easement remain in effect with all subsequent owners or tenants.

Land Purchase

In addition to purchasing ACEs, funds collected through the Farmland Conversion Fee may be used to purchase agricultural land (a fee interest). Such lands may not be used for any purpose inconsistent with agricultural production, including subdivision or non-farm development. If the land is purchased by a city, which subsequently disposes of its interest in the land, it shall first grant an ACE over the property, as described above.

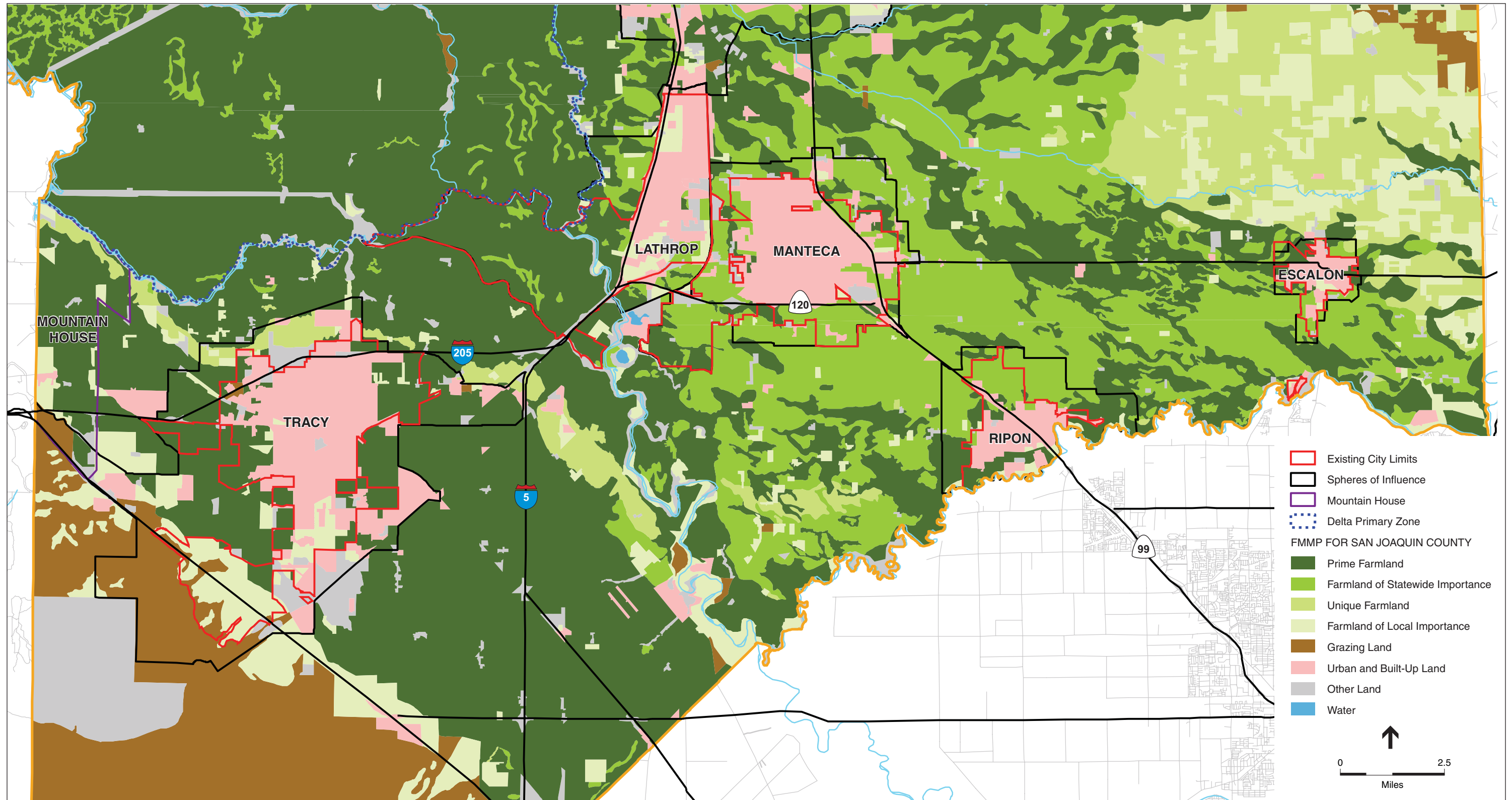
Holders of Agricultural Mitigation Land

Agricultural mitigation land, whether an ACE or fee interest, may be held by either a qualifying land trust, or the city that collected the fee. A qualifying land trust is a nonprofit public benefit 501(c)3 corporation operating in San Joaquin County for the purpose of conserving and protecting farmland and open space, and which administers contributions from public agencies and private persons for such purposes and prepares audited financial statements for public review on an annual basis.

Applicability of Fee and Geographic Scope

The Farmland Conversion Fee will apply to all forms of private urban development located on important farmland, and under the jurisdiction of the Cities of Manteca, Lathrop and Tracy. Private urban development includes residential, commercial, and industrial uses not related to agricultural production. Uses and activities related to agriculture and permitted or conditionally permitted on land zoned for agricultural use by San Joaquin County or the City approving the development are not subject to the Farmland Conversion Fee. The Farmland Conversion Fee applies to all private urban development projects approved by the Cities. The fees are payable prior to the issuance of any building permit by the Cities.

Projects subject to the fee include private development projects under the jurisdiction of the Cities of Manteca, Lathrop or Tracy. Such projects must be within the existing city limits or annexed by the City prior to the issuance of building permits. Annexation areas must be within the sphere of influence of the city. Figure 1 shows existing city limits in south San Joaquin County, as well as spheres of influence, and the location of important farmland. Paragraph 3D of the agreement lists certain specific projects that are excluded from the Farmland Conversion Fee requirements of the agreement.



SOURCE: Department of Conservation; FMMP, 2001; San Joaquin County; and ESA, 2005

San Joaquin County Farmland Conversion Fee Study . 205182

Figure 1
Important Farmland

Agricultural mitigation land is to be acquired within the borders of San Joaquin County, in the vicinity of the city contributing the fee. The location of agricultural mitigation land should further the goals of the Cities to maintain open space between the Cities, reinforce the urban development boundaries described in the Cities' general plans, and to maintain viable agricultural operations in south San Joaquin County. Agricultural mitigation land shall not be acquired within the sphere of influence of another city without that City's approval.

III. Nexus

The relationship, or nexus, between the Farmland Conversion Fee and the type of development subject to the fee, is described below.

As discussed in this section, there is a relationship, or nexus, between the purpose of the Agricultural Conservation Fee, and the types of development projects that will be subject to the fee. Private urban development, including residential, commercial, and industrial development, results in both direct and indirect impacts to agricultural land. The direct impact is the conversion of the land itself: suitable soils become unavailable for agricultural use as urban development occurs. Indirect impacts stem from incompatibility issues between active agricultural production and urban land uses, and the subsequent economic pressure placed on adjoining farms to abandon agriculture and make the land available for development.

Incompatibility issues include pesticide spraying, both aerial and land applications; dust and noise from agricultural equipment; flies and other insects; light and glare from nighttime harvesting; trespass and damage to crops; vandalism and theft of agricultural property; invasive plants from urban landscaping; and damage to livestock and crops from residential pets, such as dogs (Sokolow, 2004).

The conservation of agricultural land from these impacts is a legitimate government interest, as further described below.

Economic Value

The conversion of important farmland to non-agricultural uses threatens an important part of the local economy. San Joaquin County is the sixth-ranked agricultural county in the state, by total production value, with a 2001 total commodity value of \$1,389,877,000.⁴ The top ten commodities in the County are milk products, grapes, cherries, tomatoes, walnuts, almonds, hay, asparagus, woody ornamentals (nursery products), and apples. San Joaquin is the state's leading producer of walnuts, cherries, apples, asparagus, and grain corn. It is the state's second leading producer of fresh market tomatoes, potatoes, dry beans, and cucumbers. California is the nation's leading producer and exporter of agricultural commodities.

Agriculture employs 8% of the County's work force. At 15,700 employees, agriculture is the sixth largest employer among industry sectors.⁵ However, this accounts only for only direct farm

⁴ All agricultural production values are from the California Department of Food and Agriculture Resource Directory 2002.

⁵ Employment data is for 2001. Source: Labor Market Information Division, California Employment Development Department, *County Snapshots*, 2003.

jobs, such as crop and soil preparation, animal services, farm labor and management . Farming also creates indirect jobs, such as in the food processing farming supplies and farm equipment industries. Through this “multiplier effect,” agriculture accounts for one third of all jobs in the Central Valley.⁶

Ongoing Farmland Conversion

San Joaquin County has some of the most productive agricultural lands in the state. The California Department of Conservation’s Farmland Mapping and Monitoring Program is responsible for tracking farmland in the state. In 1990, San Joaquin had 437,859 acres of prime farmland. By 2002, this number was 415,527 acres. This is a net loss of 22,332 acres, more than 1800 acres per year. Farmland of statewide importance showed a similar decline, from 100,277 acres to 92,521. Unique farmland showed a slight increase in acreage, from 46,863 acres to 61,849 acres⁷. This increase in unique farmland is most likely due to the conversion of unirrigated lands to vineyards. However, the net loss among all types of agricultural land (including grazing land) was 20,904 acres during this period. The most serious loss is prime farmland—the most productive category of farmland.

TABLE 1
POPULATION FORECASTS²

	1990 ¹	2000	2010	2020
San Joaquin County	477,700	633,348	700,095	821,851
Lathrop	6,841	9,975	15,546	20,627
Manteca	40,773	49,500	64,248	77,699
Tracy	33,558	54,200	87,456	117,788

¹ Department of Finance, Demographic Research Unit

² Forecasts represent estimates and local growth policies will influence actual levels of development.

SOURCE: San Joaquin Council of Governments; California Department of Finance

The main cause of farmland conversion is urban development, which showed a net increase of 16,583 acres during the same time period. As shown in Table 1, above, development pressures will continue in the future, as the population of San Joaquin County increases and the communities attempt to provide housing, jobs, and services for new residents.

⁶ Agriculture-related employment accounted for 36% of jobs in 1998. Source: Nicolai V. Kuminoff and Daniel A. Sumner with George Goldman, *The Measure of California Agriculture 2000*, University of California Agricultural Issues Center, November 2000.

⁷ Conversion numbers are from the 2002 Farmland Mapping and Monitoring data, available online at http://www.consrv.ca.gov/DLRP/fmmp/stats_reports/conversion_tables_historic.htm.

General Plan Policies

Each city and county is required by law to adopt, maintain, and implement a valid general plan for the future development of the community. The General Plans of Manteca, Tracy, and Lathrop contain policies supporting the conservation of agricultural land. The Farmland Conversion Fee, by preserving agricultural land, would implement the general plan policies of the Cities. Pertinent goals and policies from each plan are listed below.

City of Manteca General Plan 2023 Policy Document

Land Use Element

Goal LU-6 Provide open space as a framework for the city, and meet the active and passive recreational needs of the community.

Policies:

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-P-42 The City will encourage the continuation of small, specialty agricultural operations and demonstration or educational agricultural operations that are compatible with the adjacent urban uses.

LU-P-43 The City shall promote the provision of both public and private open space within urbanized Manteca to provide visual contrast with the built-environment and to provide for the recreational needs of Manteca residents. Private open space shall not be considered for public use, other than as visual open space, and shall not be constrained from other uses as identified in the General Plan, unless as provided for by agreement with the land owner.

Implementation:

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:

- Maintain, and where necessary enhance, the community's current public services and facilities;
- Protect against the construction of development projects which will require sewage treatment capacity in excess of that determined available by the City Council;
- Preserve and protect the environment;

- Preserve and protect the quality of life and character of the community; Provide for the orderly and adequate expansion of the City’s housing stock in order to advance housing opportunities and to accommodate a reasonable share of expected regional growth;
- Provide for the adequate and orderly expansion of the City’s commercial and employment development base in balance with the city’s housing stock;
- Provide for a balance between multi-family and single family residential development;
- Conserve viable agricultural and open space lands; and
- Encourage and facilitate development proposals that accomplish the goals, policies, and programs of the General Plan through development innovations that cannot be accomplished by conventional zoning.

Community Design Element

- Goal CD-11 To the extent possible, new development shall retain or incorporate visual reminders of the agricultural heritage of the community.
- CD-P-48 Allow pockets of agricultural activity to remain within the urban areas of the city where such uses are compatible with the surrounding urban use.
- CD-P-49 Allow use of small under-utilized parcels or undeveloped portions of parcels for temporary, seasonal agricultural activity, such as truck farms, strawberries, and small orchards.

Resource Conservation Element

- 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.

Policies:

- RC-P-19 The City shall support the continuation of agricultural uses on lands designated for urban use, until urban development is imminent.
- RC-P-20 The City shall provide an orderly and phased development pattern so that farmland is not subjected to premature development pressure.
- RC-P-21 In approving urban development near existing agricultural lands, the City shall take actions so that such development will not unnecessarily constrain agricultural operations.
- RC-P-22 Nonagricultural uses in areas designated for agriculture should be redirected to urban areas.

-
- RC-P-23 Protect designated agricultural lands, without placing an undue burden on agricultural landowners.
- RC-P-24 Provide buffers at the interface of urban development and farmland; in order to minimize conflicts between these uses.
- RC-P-25 The City shall 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-26 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 discourage the cancellation of Williamson Act contracts outside the Primary Urban Service Boundary line.
- RC-P-28 The City shall not extend water and sewer lines to premature urban development that would adversely affect agricultural operations.
- RC-P-29 The City shall encourage Manteca Unified School District and the Delta Community College District to maintain the school farm facilities and associated education programs in the City.
- RC-P-30 The City of Manteca will participate in a county-wide program to mitigate the conversion of Prime Farmland and Farmlands of Statewide Importance to urban uses.

Implementation:

- 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.
- RC-I-31 Work with San Joaquin County on the following issues:
- Pesticide application and types of agricultural operations adjacent to urban uses.

-
- Support the continuation of County agricultural zoning in areas designated for agricultural land use in the Area Plan.

City of Tracy General Plan Update 2004

Land Use Element

Goal LU-7 No urbanization in unincorporated County areas outside the Sphere of Influence.

Objective:

LU-7.1 Participate proactively in land use decision making within Tracy's Planning Area.

Policies

- P1 The City shall not support development within the Sphere of Influence until it is annexed.
- P2 The City shall not make new commitments to provide water and wastewater services to areas outside the City limit.
- P3 The City shall support San Joaquin County land use designations in the Planning Area and discourage changes that result in increased urbanization.
- P4 The City shall support the County in maintaining low densities and minimum lot size requirements for undeveloped areas not planned for urbanization.
- P5 The City shall encourage the County to preserve significant agricultural lands outside of Tracy's Sphere of Influence.

Open Space and Conservation Element

Goal OSC-2 Identification, preservation and protection of significant agricultural resources.

Objective:

OSC-2.1 Support San Joaquin County efforts to preserve existing agricultural lands in the Planning Area and outside of the Sphere of Influence.

Policies

- P1. The City shall support San Joaquin County's efforts to preserve agricultural uses in the Tracy Planning Area.
- P2. The City shall support San Joaquin County policies and zoning actions that maintain agricultural lands in viable farming units for those areas not currently designated for urban uses.

-
- P3. The City shall support the preservation of Williamson Act lands and Farmland Security Zone lands within the Tracy Planning Area.
 - P4. The City shall encourage the continued agricultural use of land within the Planning Area and outside the Sphere of Influence that is currently being farmed.
 - P5. The City shall work cooperatively with non-profit organizations, such as land trusts, to preserve agricultural land in the Planning Area.

Objective:

- OSC-2.2 Minimize conflicts between agricultural and urban uses.

Policies

- P1 Development projects shall have buffer zones, such as roads, setbacks and other physical boundaries, between agricultural uses and urban development. These buffer zones shall be of sufficient size to protect the agriculture operations from the impacts of incompatible development and shall be established based on the proposed land use, site conditions and anticipated agricultural practices. Buffers shall be located on the land where the use is being changed, and shall not become the maintenance responsibility of the City.
- P2 Land uses allowed near agricultural operations should be limited to those not negatively impacted by dust, noise and odors.
- P3 The City shall maintain a Right-to-Farm Ordinance.

Objective:

- OSC-4.4 To the extent possible, prevent undeveloped lands within the Planning Area but outside of the Sphere of Influence from developing.

Policies

- P1 The City of Tracy shall oppose urbanization in lands outside of the Sphere of Influence, with particular emphasis on the preservation of undeveloped lands between the City of Tracy and the adjacent communities of Mountain House and Lathrop.
- P2 The City shall encourage the San Joaquin Council of Governments to preserve and protect undeveloped lands outside of the City's SOI and within the Planning Area through the implementation and management of the San Joaquin Multi-Species Habitat Conservation and Open Space Plan and any future Habitat Conservation Plans.
- P3 The City shall be assertive in forming partnerships with San Joaquin County to preserve open space.

Actions

- A1 Prepare a comprehensive plan for areas outside of the City that identifies important areas for non-urban uses, analyzes appropriate methods of preserving agricultural and nonurbanized lands, develops funding mechanisms for the purchase of land or agricultural easements and identifies methods of administration. This study should shall include, but is not limited to, the following:
- An analysis of the impact that open space programs would have on the cost of housing.
 - The feasibility and advisability of the Holly Sugar property forming the base for an open space program and/or be part of such a program.
 - The identification of alternate funding tools for open space.
 - An evaluation of alternate methods of preserving open space, such as the purchase of property or development rights, buying the first rights of refusal in the event of a potential sale or developer dedication.
 - Development of specific policies guiding the purchase of undeveloped lands including only purchasing land from willing land owners, respecting the rights of property owners when seeking to purchase open spaces for the public good and paying fair market value based on third-party appraisals of land.
 - A survey to determine the public's interest in open space programs and preferred methods for paying for the purchase and maintenance of open space. Specific information on the public's desire to increase sales, property and parcel taxes or issue General Obligation bonds to pay for the acquisition and maintenance of open space lands should be included in the study.
 - An analysis of an open space dedication requirement for all new residential development projects.
- A2 Partner with non-profit organizations, such as the Central Valley Farmland Trust, to identify and purchase land and easements within the Planning Area.
- A3 Pursue a cooperative effort with the City of Lathrop and San Joaquin County to implement an open space community separator program.

Community Character Element

Goal CC-4 A distinct City image and identity.

Objective:

CC-4.1 Prevent undeveloped lands outside of the Sphere of Influence from developing with particular emphasis on the preservation of undeveloped lands between the City of Tracy and the adjacent communities of Mountain House and Lathrop.

Policies

P1 The City of Tracy shall oppose urbanization in lands outside of the Sphere of Influence and the existing limits of Mountain House and Sphere of Influence of the City of Lathrop.

P2 The City shall encourage the San Joaquin Council of Governments to preserve and protect undeveloped lands outside of the City's SOI and within the Planning Area through the implementation and management of the San Joaquin Multi-Species Habitat Conservation and Open Space Plan and any future Habitat Conservation Plans.

Actions:

A3 Partner with non-profit organizations, such as land trusts, to identify and purchase land and easements within the Planning Area.

Goal CC-5 An enhanced identity through appropriate transitions between urban development and non-urban areas.

Objective:

CC-5.1 Create appropriate edges to the urbanized area.

Policies:

P1 Development at the edges of Tracy shall have "hard" and "soft" edges in the locations shown in Figure 3-3. A "soft edge" is defined as a gradual or smooth transition between urban and rural uses. A "hard edge" is clearly defined or abrupt transition between urban and rural uses.

P2 To the extent feasible, the City shall use land use designations and open space preservation techniques to create a soft edge to the city. A variety of techniques, which are shown in Figures 3-4A and 3-4B, can be used to create the soft or hard edges to the City including the following:

P3 In select locations within the Sphere of Influence, new development shall have a "hard edge," which is a clearly defined transition between urban and rural uses. Approximate locations for hard edges are shown in Figure 3-4B. Hard edges shall be accomplished with a narrow landscaped or open space buffer. Areas where a hard edge shall be created generally include parcels separating industrial or commercial development from agriculture and open spaces and along freeways.

City of Lathrop General Plan

(Last Amended November 2004)

Resource Management Element

Agricultural Land Policies:

1. The extent of urbanization proposed within the three Sub-Plan Areas is based on the principle that the capacity to accommodate population and economic growth is dictated by the need to preserve environmental qualities rather than the potential of Lathrop to grow beyond its planning area boundaries. If future conditions indicate a potential for further urbanization greater than that encouraged by the General Plan west and south of the planning area, such potential is to be satisfied within the sphere of influence of local governments other than Lathrop.
2. Exclusive agricultural zoning shall be continued on agricultural lands outside the boundaries of the three sub-plan areas.
3. The protection of agricultural lands outside of the three sub-plan areas shall be reinforced by firm policies of the City to not permit the extension of sewerage and water service to such lands.
4. The City, the County and affected landowners should develop a comprehensive approach to the cancellation of Williamson Act contracts on lands needed for early phases of urban development. Projects that are intended to take more than five years to complete shall be phased to allow agricultural operations to continue as long as feasible on lands to be developed after five years.

Loss of Environmental and Aesthetic Resources

The combination of soil type, location, weather, and water availability makes farmland an important environmental resource. This resource has economic value to the community, as discussed above. In addition to the economic benefits and the preservation of important soil resources, farmland has other environmental benefits, including aesthetic, biological, and hydrological benefits. Agricultural land is a form of open space that has inherent aesthetic value as part of the rural landscape. Open space separation between communities is a recognized benefit in distinguishing communities and reinforcing their identity. From a biological perspective, agriculture may providing foraging habitat for several species of wildlife, including special status birds such as Swainson's Hawk. Agricultural land also can act as a transitional buffer between natural areas and more intense urban land uses. The conversion of agricultural land has hydrological implications, as loss of open space changes the existing watershed and may reduce groundwater recharge areas (as opposed to urban development which creates large areas of impermeable surfaces).

Environmental Mitigation

The California Environmental Quality Act requires an analysis of impacts to important agricultural resources. The loss of important farmland is a potentially significant environmental effect, per the CEQA Guidelines Appendix G (California Code of Regulations, Title 14, Section 15000 *et seq.*). Acquisition of agricultural mitigation lands can help mitigate the indirect effects of farmland conversion described above. In addition, an agricultural mitigation program can create areas of protected land which can affect urban development patterns by maintaining open space between urban areas and reinforcing urban development boundaries.

Subdivision Map Act

The Subdivision Map Act requires that a subdivision must be consistent with the general plan (Section 66473.5 and 66474[a]). As discussed above, the general plans of the Cities include policies that support the conservation of agricultural resources. The Farmland Conversion Fee is therefore reasonably related to developments requiring approval of a tentative subdivision or parcel map.

State Policy

The conservation of agricultural land is supported by state policy. Three important laws which relate to land use, the Williamson Act, the Cortese-Knox-Hertzberg Act (Government Code § 56000, *et seq.*), and AB 857 (Government Code § 51200, *et seq.*), all include declarations of the state's intent to preserve agricultural lands as a matter of public interest.

The California Land Conservation Act, better known as the Williamson Act, has been the state's premier agricultural land protection program since its enactment in 1965. The California Legislature passed the Williamson Act in order to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses and providing tax incentives encouraging preservation of agricultural land. The Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open-space uses. In the Williamson Act, the Legislature makes several policy declarations (Government Code § 51220), including the following statements regarding the preservation of agricultural land:

- (a) That the preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful and nutritious food for future residents of this state and nation.
- (c) That the discouragement of premature and unnecessary conversion of agricultural land to urban uses is a matter of public interest and will be of benefit to urban dwellers themselves in that it will discourage discontinuous urban development patterns which unnecessarily increase the costs of community services to community residents.

-
- (d) That in a rapidly urbanizing society agricultural lands have a definite public value as open space, and the preservation in agricultural production of such lands, the use of which may be limited under the provisions of this chapter, constitutes an important physical, social, esthetic and economic asset to existing or pending urban or metropolitan developments.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code § 56001) sets forth the rules for establishing and revising local agency boundaries. One of the objectives of this law is to protect agricultural land from urban sprawl, as stated here:

The Legislature finds and declares that it is the policy of the state to encourage orderly growth and development which are essential to the social, fiscal, and economic well-being of the state. The Legislature recognizes that the logical formation and determination of local agency boundaries is an important factor in promoting orderly development and in balancing that development with sometimes competing state interests of discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services.

AB 857, signed into law in 2002, established three planning priorities for the State (Government Code Section 65041.1) One of these priorities includes the preservation of agricultural resources and working landscapes:

- (b) To protect environmental and agricultural resources by protecting, preserving, and enhancing the state's most valuable natural resources, including working landscapes such as farm, range, and forest lands, natural lands such as wetlands, watersheds, wildlife habitats, and other wildlands, recreation lands such as parks, trails, greenbelts, and other open space, and landscapes with locally unique features and areas identified by the state as deserving special protection.

Although not directly binding on local governments, this statute further establishes the state's intent to preserve agricultural land.

IV. Fee Structure

The proposed Farmland Conversion Fee shall be a minimum of \$2000 dollars per acre of important farmland converted to private urban uses. As described above, the fee is collected for all applicable projects prior to the issuance of building permits. The Cities may adjust the Farmland Conversion Fee annually for inflation according to the following formula:

On March 1st of each year, commencing on March 1, 2005, the Fee in effect for the following year shall be equal to the Farmland Conversion Fee in effect the immediately preceding year multiplied by a fraction, the numerator of which shall be equal to the "Index," as defined below, as of the expiration of the prior calendar year (although published after such expiration) and the denominator of which shall be equal to the Index available as of the commencement of the prior calendar year (although published after such commencement). "Index" shall be the Consumer Price Index (CPI) for All Urban Consumers, San Francisco

Oakland San Jose area, All Items, as published by the United States Department of Labor, Bureau of Labor Statistics, or the equivalent successor index thereto.

The Farmland Conversion Fee shall be spent according to the following formula:

- The first \$1000 of the per acre Fee shall be paid to a qualified land trust and shall be used in good faith by that trust to purchase agricultural land in the vicinity of the city which contributed the fee and which furthers the goals of the city collecting the Fee.
- The second \$1000 of the per acre Fee shall be used by the collecting city as follows: \$250 for the purchase of agricultural mitigation land, which may not be used for the disposal of wastewater effluent, to be held by the city or qualifying land trust; the remaining \$750 for the purchase of agricultural mitigation land, which may be used for the disposal of wastewater effluent.

The Cities may authorize a higher Farmland Conversion Fee, based on the results of the cost analysis in Section V, below. Any fees collected above the minimum per acre amount \$2000 shall be used for purchase of agricultural mitigation lands, as described in this study. However, such additional fees are not subject to the formula described above, and would be used according to the discretion of the collecting city.

V. Cost Analysis

This section analyzes the potential costs of acquiring agricultural mitigation lands. The emphasis of this analysis is on the purchase of agricultural conservation easements. However, Farmland Conversion Fee funding can be used to acquire actual title to the property (fee simple). While the up-front purchase price would be higher, in some cases this practice may offer some economic advantages to the Cities.⁸

Potential Agricultural Mitigation Lands

A key factor in determining the cost of acquiring agricultural mitigation lands will be the type of properties targeted for this program. The following section identifies the key property characteristics as they relate to agricultural conservation easement purchases.

Land Type

As discussed in Section II, potential agricultural mitigation lands must consist of “important farmland.” Important farmland means prime farmland, farmland of statewide importance, or unique farmland, as defined by the California Department of Conservation’s Farmland Monitoring and Mapping Program (FMMP) and as shown on the most recent available FMMP map of San Joaquin County. Marginal farmlands (perhaps due to poorer soil quality or potential water supply limitations) will not be considered for purchase of agricultural conservation

⁸ When the easement purchase price represents a high percentage of the total property value, it may be more cost effective to purchase the land, and resell it with an agricultural conservation easement in place.

easements – despite the fact that their limited economic viability might make them more willing sellers of their development easements.

The type of agricultural production should also affect the selection of candidate easement properties. Irrigated farmlands generally would be the minimum requirement for consideration. Due to the previous investment necessary for establishing permanent crops, land prices for these properties will be higher than for row crops and, all else being equal, such lands may be expected to face lesser future development pressure. However, given the high development land price premium in the South San Joaquin County, both permanent and row crop properties will likely continue to be vulnerable to future development.

Farm size may also be considered as a factor in conservation easement selection process. In addition to the benefits of greater flexibility that larger farms may have in their long term future operations, given the often considerable transaction costs for successful easements sales, significant per acre cost savings may be gained from larger acreages.

Location

As discussed in Section II, agricultural mitigation lands shall be acquired within the borders of San Joaquin County, in the vicinity of the Cities. The location of agricultural mitigation land should further the goals of the Cities to maintain open space between the Cities, reinforce the urban development boundaries described in the Cities’ general plans, and to maintain viable agricultural operations in south San Joaquin County.

Lands within a city’s sphere of influence may generally be expected to be developed in the future and as a result, land prices will tend to be significantly higher as land owners anticipate that their property will be able to be sold for residential or commercial development in the future. In many cases, these properties and others in the near vicinity of the sphere of influence boundary (i.e. within a mile) may have been optioned for future sale and development by developers or investors. Therefore, there will likely be a high land price premium for any such properties. The American Farmland Trust’s recent land value studies for the Northern San Joaquin Valley (which specifically included analysis of Tracy) concluded that:

“Land values drop precipitously one to two miles outside of a community’s ultimate sphere-of-influence boundary. Examining land sales around the six study communities indicated little speculative activity beyond the sphere-of-influence and other planning boundaries on land zoned for agricultural use.” (AFT, 2001)

In 2001, AFT concluded that many Valley cities have sufficient development capacity to accommodate growth for 25 years or more. Urban development is typically characterized by growth in narrow vectors or hot spots within communities (AFT, 2001). Rapid land sales price increases were found by AFT’s study to occur in “limited areas adjacent to current development where builders have had commercial success.” Outside these growth areas, the study observed that prices for land designated for future development were often only slightly higher than for surrounding agricultural land. Therefore, properties outside the cities’ sphere-of-influence boundaries are unlikely to face significant short-term development potential unless they are adjacent to areas of the “development vector.”

Several of the appraisers and land trust experts interviewed reported that identifying of the prevailing “development vector” and trends are important for determining likely land owner expectations and easement prices (King, 2005). Determining when and where future development will occur is difficult and dependent on numerous other external factors and market forces, and therefore recent development activity will be important indicators of land price effects.

Infrastructure

A property’s development potential will also be related to its proximity to key support infrastructure. In many cases, such infrastructure will tend to be located within a city’s sphere-of-influence. However, in some cases infrastructure may extend beyond the city’s planning zone and within the sphere-of-influence. The presence of such infrastructure may be expected to influence future development. The availability of water is a particularly significant factor in determining a property’s future agricultural sustainability and will also be a key factor influencing the site’s development potential.

Agricultural Conservation Easement Prices

Valuing Conservation Easements

Full ownership of a piece of land (i.e. fee title) generally gives its owner complete rights over the land’s present and future uses (subject to any governmental regulations and restrictions). The value of the land ownership will be determined by its fair market value – i.e. the price that may be expected to sell for on the open market between a willing seller and buyer adequately informed on the property’s attributes. Land appraisals seek to estimate this value by assessing the property’s desirability and the general real estate market to predict its likely sale price.

In considering the land’s value, useful distinctions can be made between its production value, consumptive value and speculative value. The land’s production value recognizes its ability to generate income for its owner e.g. from the crops that can be grown, timber harvest or extractable minerals. The land’s consumptive value (also sometimes called amenity value) represents more intrinsic enjoyment or benefits received from the land’s location or other qualities such as aesthetics. Speculative value reflects the economic returns to the owner from potential future sale for development (Stewart, 2004).

For agricultural lands, the value of the land’s farming use (productive value) and its development rights (speculative value) are generally most important and quantifiable. The value of the land’s farming use is primarily related to the income generating potential from future agricultural use of the land i.e. the annual net income that may be expected from farming. As such, the productive value can be more readily quantified and estimated. The annual net income will likely be close to the property’s lease or rental rates (with some adjustments for the farming enterprise’s risk, investment and operating costs). Local climate, soil quality and water availability are generally key property attributes affecting the land’s farming use value.

The land’s development rights recognize the potential economic value to its owner that could be gained by development of the property (e.g. subdividing the property for residential development). The value of a specific property’s development rights are ultimately determined by

the real estate market (i.e. what potential buyers are willing to pay for the site) and will be based on the property's land attributes and location. However, due to the uncertainties associated with the nature and timing of the land's future development, determining a property's speculative value (and distinguishing possible consumptive values) is difficult. Generally, the land development rights will vary depending on several factors:

- Physical attributes of the land determining its development potential (e.g. topography, soil stability).
- Location factors such as the proximity to utilities (water, sewage and electricity), other infrastructure (such as road access) and existing urban development.
- Extent and type of future property development permitted under its land use zoning restrictions.

In addition, agricultural land can also have consumptive or amenity value. These can be seen in cases where farmers gain quality of life benefits (e.g. from their lifestyle of living off the land) or other values (such as maintaining their family's farming tradition into the future). Amenity values will explain why some farmers (especially rangeland livestock farmers) may continue to farm under conditions that otherwise are inadequately rewarding financially. Amenity values may also be represented when farmers will pay price premiums for neighboring land parcels. While in some cases there may be efficiency gains for their operations, local real estate experts report that farmers frequently pay above market values to buy specific properties for non-economic or sentimental reasons (e.g. to regain former family holdings or own adequate land to pass on to future family members).

Amenity values can also extend beyond the landowner. Open space, scenic and wildlife benefits may be associated with the property that may also provide wider societal values than for the rest of the community. There can also be cumulative type effects where agricultural use benefits other nearby farmers by contributing to preserving the critical mass of farming within the community necessary to maintain the area's character, culture and infrastructure (e.g. farming supply business and experience workers).

Estimating Fair Market Land Values

Traditional Appraisal Approaches

Land appraisals are the process used to estimate a property's expected fair market value. Traditional appraisal methodology will determine a property's sales price using three generally accepted approaches: Sales Comparison approach, Cost approach and Income approach.

The Sales Comparison approach is typically the most important method when adequate appropriate comparable sales exist. Under this approach, a property's value is estimated based on the past sales of similar property with adjustments added to account for specific differences between the properties being evaluated (e.g. their acreage, soil quality, farm buildings and improvements).

The Income approach bases its fair market estimates on the net returns that the property may be expected to generate for the future land owner (i.e. adjusting to account for production costs etc). The annual net income is then divided by a capitalization rate that is based on considerations of the risk and costs (e.g. interest rates and necessary rate of return on investment) associated with generating that income. A higher capitalization rate (i.e. from a risky business or high interest rates) will decrease the land's value since it is more costly to earn the returns. Small variations in the capitalization rate can result in major changes in the associated property valuation. The income approach basically determines the net present value of the land's future income stream (i.e. how much an investor would pay today for the expected stream of future income payments) while also acknowledging that future payments will have a reduced (discounted) value to the present land owner. The Income approach may also fail to account for a potential "premium value" that some buyers associate with scenic, recreational or secluded farm properties (Colorado Coalition of Land Trust, 2004).

The Cost approach is more applicable for improved properties as it uses construction or replacement cost estimates to determine a property's worth. As a result, it is rarely used in farmland appraisals.

Under a standard traditional appraisal process, an appraiser will use all three approaches and then, also guided by their professional judgment and assessment of the property, the appraiser determines a single appraised value to estimate the property's expected fair market value.

Easement Appraisals

Valuing agricultural and other similar easements (such as conservation or open space easements) poses additional challenges to appraisers. As discussed above, the cost approach is generally not applicable for most undeveloped properties such as farm lands.

Use of the Sales Comparison approach for easements is also generally difficult due to the limited number of such sales typically occurring in an area. Appraisers, Land Trust experts and realtors familiar with South San Joaquin County and the greater region all mentioned a limited number of farm land sales in general—let alone farm land easement sales. In such cases, easements are valued through a "before and after" process in which the appraiser determines fair market values for the property both with and without the proposed easement restrictions (CCLT, 2004). Due the limited number of comparable easements, appraisers will typically rely on their professional judgment and experience as well as comparable properties from outside the immediate market area to determine valuations for the easement-encumbered properties. Often, remote agricultural properties are used (i.e. where no development pressure on the land's price is expected) to estimate the land's value without development rights.

In recent years, use of the Income approach has become more challenging and less reliable as many appraisers note the difficulty of determining an appropriate capitalization rate. Traditionally based on the risk and interest rates, in the past capitalization rates for agricultural land sales have tended to vary between 4% and 8%. Property valuations using the income approach are very sensitive to the capitalization rate as a small variance in the selected rate will lead to large differences in the subsequent valuation. Several of the interviewed appraisers suggested that 2% to 6% capitalization rates are more applicable, while some maintained that 2% or 3% were more

realistic to recognize the speculation premium that many buyers and investors are now willing to accept in their land purchases within parts of the South San Joaquin area. Some other appraisers reported that the Income approach is inappropriate for potential easement properties in south San Joaquin County, since the land values have become so closely tied to speculative values, rather than future farming income (Correia, 2005).

Several appraisers and land trust experts also commented that current federal legislation and new easement appraisal procedures currently being developed by the main appraiser professional associations may be expected to change soon with the intent to better define the future easement valuation process.

Recent South San Joaquin Residential Real Estate Trends

Over the last ten years, San Joaquin County has been increasingly developing new urban and residential areas as support services and residential centers for the greater Bay Area and Sacramento area. The cities of Tracy, Manteca and Lathrop are rapidly changing from solely agricultural centers and economies to quasi-commercial centers and bed-room communities (Grubb & Ellis, 2004).

As the Bay Area has built out most of its developable land base, the Central Valley has become an increasingly important location for new development. As a result, for many years South San Joaquin County's housing market has been growing strongly - between 1998 and 2005 the median price of existing detached homes rose from approximately \$100,000 to \$350,000. Between January 2004 and 2005, the median home price for Manteca and Tracy increased by 33.4% and 37.7% respectively (California Association of Realtors, 2005). New and planned housing construction on former farmlands in and around the cities of Tracy, Manteca, Stockton and Lathrop has been a primary contributor to this real estate appreciation. This housing demand has lifted local land values to record levels – in some cases as high as \$300,000 to \$400,000 per acre for mapped projects (CB Richard Ellis, 2005).

In addition to the influence of large housing developments, local land experts also identified the increasing popularity and construction of new “rural home sites” on 20 or 40 acre agricultural lots. In many cases, these ranches are being built on large acreage subdivisions of much larger farms with suitable zoning permission. While in many cases, new owners may lease their lands to local farmers who will continue agricultural production of the lands, subdivision of larger farms and decreases in owner-operator farms may contribute to reducing the long term sustainability of local farming.

As a result, property speculation and land optioning within south San Joaquin County continues to be pursued aggressively by developers and property investors. According to local land appraisers and realtors, this has dramatically increased land prices for properties both within the local city's “sphere of influence” and adjoining areas that are expected to be absorbed by any future sphere of influence expansion. This is resulting in land values far exceeding the value associated with the properties' agricultural productivity. According to local experts, properties that otherwise might be expected to sell for \$5,000 to \$10,000 an acre are in many cases instead selling for \$20,000 to \$50,000 an acre (and in some cases even higher prices). This is occurring

with properties that may still require re-zoning and/or significant supporting infrastructure development before any development can occur.

Agricultural Land Prices in South San Joaquin County

For agricultural properties outside the areas of significant development pressure and land speculation, agricultural land prices have been fairly stable with generally limited appreciation in value (see Table 2). The property values reported by Edwards & Lien (collected as part of the California Chapter of the American Society of Farm Managers and Rural Appraisers annual land trends report) represent base agricultural land prices. As such, these land prices represent the low prices for properties with little development pressure. More “transitional” agricultural properties facing significant development pressure will have significantly higher lease prices representing the speculative value associated with the specific property.

According to local appraisers and realtors, property sales within south San Joaquin County are generally limited in number, averaging approximately a dozen sales per year. Farmland properties are typically on the market between six months and a year before finding an appropriate buyer. For croplands within the south central and the western regions of San Joaquin County, the American Society of Farm Managers and Rural Appraisers (ASFMRA) reports that recent sales activity has been limited but the few sales that have occurred indicate a general strengthening in land prices. Within the south central region, primary buyer motivations have been for either development of almond orchards or urban development. South central San Joaquin is generally considered a prime area for almond production. As a result of significant increase in almond crop prices in recent years, properties suitable for almond orchards have been appreciating in value. In the western region, demand has been mostly driven by dairy farmers as little development of permanent crops (such as tree crops and vineyards) has occurred due to poor market demand. However, after several years of poor demand for wine grapes, since 2003 the conditions have improved noticeably resulting in greater demand for vineyard properties within the County. Cherries are a major crop and while there have been very few cherry orchard sales, the few that have occurred suggest some increases to local land values (ASFMRA, 2005).

American Farmland Trust conducted an agricultural land market analysis for its report “Winning the Development Lottery.” The report’s land market analysis of local property sales data from Metrosan within the Northern San Joaquin Valley found irrigated field cropland prices varying between approximately \$2,250 and \$6,800 per acre for base agricultural values (i.e. land with negligible development potential).⁹ For permanent cropland, the comparable land prices were found to be \$5,650 to \$12,400 per acre. For transitional lands (i.e. properties in the near vicinity of areas with some development designation) land values ranged from \$5,650 to \$22,600 per acre. The study found that land prices increase most markedly in the vicinity of recent urban development where the higher priced sales were clustered around the vector of growth. The land prices for “development” land sales ranged from \$20,340 to \$45,000 per acre. However, most of the sales ranged between \$26,000 and \$34,000 per acre (with the average price of approximately \$28,250 per acre). While classified “development lands” these properties generally still face several years of permit and entitlement process necessary before actual development could occur. In contrast the analysis also identified properties. More readily developable properties were found

⁹ Adjusted in 2005 dollars based on the Consumer Price Index for All Urban Consumers.

with sales value from \$50,000 to \$81,000 per acre (AFT, 2001). While these prices have been adjusted for inflation, according to most of the local farmland experts, the dramatic appreciation in residential real estate prices has also affected farmlands – especially smaller 20, 40 and 80 acre parcels that are attractive as rural home sites. As a result, the AFT land price estimates represent minimum estimates of current local land prices.

AFT staff estimates that irrigated cropland would sell for \$10,000 to \$11,000 per area while permanent cropland would sell for \$14,000 to \$20,000 per acre (Miller, 2005). Other interviewed experts suggested that irrigated cropland would likely sell for \$7,000 to \$8,000 per acre but most acknowledged that such prices would be for less developable properties that were being purchased primarily for their farming production capabilities. For properties with greater development potential (i.e. typically near or with the sphere-of-influence of city) prices would rapidly increase up to \$75,000 or more per acre for readily developable lands.

**TABLE 2
AVERAGE AGRICULTURAL LAND SALE PRICES
SOUTH SAN JOAQUIN (2000-2004)¹**

Agricultural Type	Location		2000		2001		2002		2003		2004	
			Low	High	Low	High	Low	High	Low	High	Low	High
Irrigated Cropland	Manteca, Ripon Escalon, Colleeville, Farmington Tracy	2004	\$7,000	\$9,000	\$7,000	\$9,000	\$7,000	\$10,000	\$7,000	\$10,000	\$8,000	\$11,000
		2004	\$5,000	\$6,500	\$5,000	\$6,500	\$5,000	\$7,000	\$5,500	\$8,000	\$5,500	\$8,000
		2004	\$5,000	\$9,500	\$5,000	\$9,500	\$5,000	\$9,500	\$5,000	\$9,500	\$5,000	\$9,500
Permanent Plantings												
Almonds	Manteca, Ripon and Escalon	2004	\$8,500	\$14,000	\$8,500	\$14,000	\$8,500	\$14,000	\$12,000	\$16,000	\$12,000	\$16,000
Almonds	Tracy, Vernalis	2004	\$5,000	\$8,000	\$5,000	\$8,000	\$5,000	\$7,000	\$5,000	\$7,000	\$7,000	\$9,000
Cherries	Escalon	2004	\$9,000	\$18,000	\$9,000	\$18,000	\$12,500	\$20,000	\$12,500	\$20,000	\$12,500	\$20,000
Walnuts	Escalon	2004	\$8,000	\$10,000	\$7,500	\$10,000	\$7,000	\$10,500	\$7,000	\$10,500	\$7,000	\$12,000
Wine Grapes	Manteca	2004	\$8,500	\$15,500	\$8,500	\$15,500	\$9,000	\$12,500	\$9,000	\$12,500	\$9,000	\$15,000

¹ Land Prices are per acre.
Source: "Northern San Joaquin Valley Agricultural Land Sales Activity" Edwards & Lien, 2005

**TABLE 3
CALIFORNIA FARMLAND CONSERVATION PROGRAM FUNDED EASEMENTS IN N. CALIFORNIA (1997-2005)¹**

County	Grant Recipient	Easement Record Date	Agricultural Use Acres		CFCP Easement Grant	Easement Match	Total Easement Value / Acre	
							(nominal \$)	(2005 \$)
Alameda	Tri-Valley Conservancy	2001	Vineyards	100	\$733,333	\$866,667	\$16,000	\$17,581
Alameda	Tri-Valley Conservancy	2004	Vineyards	100	\$750,000	\$1,750,000	\$25,000	\$25,754
Fresno	American Farmland Trust	1999	tree crops	93	\$700,000	\$1,094,000	\$19,290	\$22,532
Madera	American Farmland Trust	2001	row crops	117	\$380,000	\$514,000	\$7,641	\$8,396
Madera	American Farmland Trust	2002	vines, row crops	328	\$2,161,064	\$2,435,936	\$14,015	\$15,160
Merced	American Farmland Trust	1999	tree crops	74	\$184,000	\$184,000	\$4,973	\$5,809
Merced	Nature Conservancy	2000	row crops	615	\$464,000	\$31,000	\$805	\$910
Merced	American Farmland Trust	2002	tree, row crops	102	\$331,750	\$163,250	\$4,853	\$5,249
Merced	Central Valley Farmland Trust	2005	tree crops	263	\$795,000	\$265,000	\$4,030	\$4,030
Sacramento	Nature Conservancy	2000	irrigated pasture	473	\$638,500	\$71,000	\$1,500	\$1,623
Sacramento	Nature Conservancy	2003	Vineyards	221	\$459,000	\$336,000	\$3,597	\$3,805
San Joaquin	City of Escalon	2002	tree crops	62	\$204,000	\$204,000	\$6,581	\$7,118
Santa Clara	Land Trust for Santa Clara Cty	2004	row crops	165	\$515,000	\$515,000	\$6,242	\$6,431
Santa Clara	Land Trust for Santa Clara Cty	2004	row crops	282	\$994,700	\$426,300	\$5,039	\$5,191
Solano ²	Solano Land Trust	1998	tree crops	52	\$14,002	\$207,000	\$4,250	\$5,074
Solano	Solano Land Trust	2000	tree crops	94	\$265,000	\$15,000	\$2,979	\$3,222
Solano	Solano Land Trust	2001	row crops, vines	66	\$225,000	\$21,000	\$3,727	\$4,096
Solano	Solano Land Trust	2005	row, tree crops	535	\$425,000	\$425,000	\$1,589	\$1,589
Sutter	Ducks Unlimited	2002	Rice	983	\$1,000,000	\$622,000	\$1,650	\$1,785
Sutter	Ducks Unlimited	2002	Rice	746	\$622,100	\$316,900	\$1,259	\$1,362
Yolo	Yolo Land Trust	1997	row crops	216	\$120,000	\$150,000	\$1,250	\$1,516
Yolo	Yolo Land Trust	1998	row crops	780	\$400,000	\$770,000	\$1,500	\$1,791
Yolo	Yolo Land Trust	1999	row crops	1,925	\$1,443,750	\$489,612	\$1,004	\$1,173
Yolo	Yolo Land Trust	2000	row crops	70	\$50,328	\$59,992	\$1,576	\$1,705
Yolo	Yolo Land Trust	2000	tree crops	114	\$75,000	\$75,000	\$1,316	\$1,423
Yolo	Yolo Land Trust	2002	row crops	76	\$77,000	\$93,000	\$2,237	\$2,420
Yolo	Yolo Land Trust	2004	row crops	77	\$292,500	\$32,500	\$4,221	\$4,348
TOTAL				8,729			\$3,297	

¹ Excludes rangeland, dryland farming and easements in Monterey, San Diego, San Luis Obispo, Santa Barbara & Santa Cruz Counties

² Easement purchase for \$0. The \$14,000 was for associated costs.

Source: California Farmland Conservancy Program

Conservation Easement Land Prices

Table 3 shows all the comparable past conservation easement projects funded by the Division of Land Resource Protection's California Farm Conservancy Program (CFCP). While another 26 projects have also been funded by CFCP, however many of these projects were for grazing land projects or were located in Monterey County or other more southern counties and therefore are likely to be less comparable to southern San Joaquin County. As can be seen from Table 3, only one CFCP conservation easement transaction has occurred in San Joaquin. While other farm land conservation easement sales have occurred within the Central Valley without CFCP assistance, according to the numerous experts contacted, no other conservation sales in San Joaquin have been completed yet. The lack of previous agricultural easements in the area necessitates the use of out of area comparables to estimate expected future agricultural easement prices.

According to Chuck Tyson of the CFCP, a key factor influencing easement prices is the stringency of the local planning authorities. Yolo County's relatively low easement prices in reflect the high degree of certainty amongst local land owners that the current city and sphere-of-influence boundaries will remain unchanged. As a result, property speculation impacts are minimized (Tyson, 2005). Even so, the most recent easement was sold for approximately \$4,350 per acre. Mr. Tyson also reported that current Stanislaus County easements negotiations for properties comparable to South San Joaquin are expected to be \$8,000 to \$10,000 per acre. Therefore, while the weighted average of the past program easements is approximately \$3,300 per acre, this figure is not directly applicable to South San Joaquin's real estate market. As a result, this average easement price under-represents the actual likely sales price for future agricultural easements due to: (1) major variances in the circumstances of the different CFCP funded easement sales, and (2) the major proportion of sales occurring before the recent Central Valley real estate development boom fully emerged in 2000.

A 2001 economic analysis by AFT of agricultural conservation easements in the Northern San Joaquin Valley estimated typical per acre easement values of \$2,000 (low), \$4,500 (medium) and \$7,000 (high) (AFT, 2001). Adjusting into 2005 dollar terms using the consumer price index for all urban consumers, these values would be equivalent to \$2,260 (low), \$5,585 (medium) and \$7,910 (high). As a representative example of an agricultural conservation easement valuation, the report estimated that a medium easement value of \$4,500 (in 2000) would be associated with a property value of \$12,500 (in 2000) which represents a 36% of its full fair market value. However, that land analysis and sale price estimates were made in 2001, before the recent real estate boom had fully materialized and therefore may be recognized as underestimation of the likely cost for agricultural easements.

According to Holly King of the Great Valley Center, recent agricultural easement appraisals she has seen for comparable areas within Stanislaus County were for \$8,900 and \$12,800 per acre. Ms. King also estimated that while some development rights might approximately be 50% of the property's fair market value, under other circumstances that could vary by as much as 5% to 95% in extreme cases (King, 2005).

From interviews with local appraisers and land trust experts, many gave their opinion that development rights for “transitional” farmlands (i.e. properties with some longer term development potential) would be between 30% and 60% of their appraised fair market value. Others, such as John Miller of AFT suggested that 25% to 50% would be an appropriate conservation easement price estimate. While Chuck Tyson of California Farmland Conservation Program acknowledges that most conservation easements within the Central Valley have been in a 35% to 65% land value range, he warns that using such guidelines for conservation easement estimates or appraisal can be misleading. For example, in Monterey County, due to the considerable income potential of farmland, development rights represent a very minor proportion of land values. Several other appraisers also agreed that use of such proportional estimates of easement values are highly problematic when property characteristics and development pressures can vary so widely as they do in South San Joaquin County (Correia, 2005).

While the actual price would also be dependent on the restrictions that an easement might place on future farming practices and on-site development of farm building, Randy Edwards of Edwards and Lien appraisers estimated that \$8,000 to \$10,000 per acre would be likely be a realistic price for an average agricultural easements in South San Joaquin County. Tom Scharffenberger (planning consultant for Central Valley Land Trust) reported that conservation easements in Merced were generally \$4,000 to \$6,000 per acre and \$6,000 to \$9,000 in Stanislaus County. Since south San Joaquin County has considerable development pressure, in his opinion south San Joaquin easement prices would likely tend be in the upper range of those for Stanislaus County.

The San Joaquin Council of Governments (SJCOG) is currently in the process of revising its current habitat conservation mitigation fees. Currently, SJCOG has a \$1,819 per acre assessment fee for its habitat easement program. This fee is supposed to cover all costs with acquiring and maintaining habitat easements within San Joaquin.¹⁰ SJCOG has so far been unable to acquire any easements even when they have been raising their purchasing price to \$4,000 per acre for easement rights central San Joaquin. According to Steve Mayo of SJCOG, in his opinion \$8,000 to \$9,000 per acre acquisition prices are probably more realistic with additional funding necessary for the transaction costs and future stewardship of the property.

Transaction Costs

The direct transaction costs associated with easement sales represent a significant additional cost for land trusts. Under the California Farmland Conservation Program’s grant funding, the State will cover transaction costs for conservation easement purchases equal to up to 10% of the total easement purchase price. The transaction cost for easement purchases may vary significantly, partly due to the size of the land purchase. Since many of the transaction costs are relatively fixed (e.g. appraisals and title searches) they represent a greater proportion of the total cost for smaller easement properties.

¹⁰ Recent comparative analysis of other current and proposed habitation conservation fees by SJCOG ranged as high as \$24,000 per acre. Although specifically for habitat easements, these land use impact fees do indicate the high costs that other planning agencies are finding for mitigation easements.

According to the Central Valley Farmland Trust, it is estimated that 3% to 5% transaction costs for future easement purchases should be reasonable in the future although currently they operate at a higher proportion due to the limited in-house staff that this relatively new land trust has at this point.

In Yolo County, their conservation mitigation fee has decreased the proportion of non-acquisition costs from 40% to 28.5%. Nonetheless, the analysis estimated average transaction costs of 7.5% with additional 3% contingency and 3% administrative costs (EPS, 2004).¹¹

Tom Scharffenberger estimates that the transaction costs for most easements vary between \$25,000 and \$35,000 per acquisition (Scharffenberger, 2005).

Based on the numerous opinions and data collected from the realtors, appraisers and land trust experts, it is estimated that, in addition to the easement cost itself, transactional costs for the easement purchase will average about 5% of the total easement cost (with a minimum cost of \$25,000 per acquisition). Since most transaction costs are fixed costs (although complex properties will have higher transaction costs) for larger acquisitions the transactional cost will be a smaller percentage of the easement purchase price.

Stewardship Costs

Most of the land trust experts interviewed emphasized the importance of adequate stewardship funding for agricultural easements. Since future land management of the properties is entrusted to the non-profit organizations, it is considered important that the organizations have an adequate permanent funding or endowment to ensure that they will be able to fulfill their long term monitoring commitments and enforcement responsibilities. The stewardship costs are distinct from the organization's administrative costs which, while also necessary for maintaining the trust long term sustainability, are generally considered to be independent of the direct land management costs.

Steve Mayo of SJCOG estimates that stewardship costs of \$400 to \$500 per acre would likely be necessary to ensure adequate permanent conservation easements (Mayo, 2005). EPS in its recent analysis for Yolo County projected a future monitoring cost of approximately 14% of the easement acquisition base cost (not including transaction and other associated costs) estimated at \$490 per acre.

For Central Valley Land Trust's easement program, Bill Martin estimates that future stewardship and monitoring cost for their agricultural conservation easements will be approximately 5% of their agricultural easement costs which given his estimated typical easement costs of \$7,000 to \$9,000 per acre would represent \$350 to \$450 per acre.

¹¹ The administrative cost would also partly relate to the easement's future stewardship costs.

Based on these numerous opinions and data collected from the realtors, appraisers and land trust experts, we estimate that the expected stewardship costs for agricultural easements for the South San Joaquin will likely average about \$450 per acre.

Conclusion

Based on the previous analysis it is clear that the proposed \$2,000 per acre Farmland Conversion Fee is clearly reasonable *in that it is not an excessive mitigation charge* for partial mitigation for the loss of important farmland.

VI. Preparers

Brian Grattidge, ESA

Nik Carlson, ESA

VII. References

Brumley, Phil, San Joaquin Farm Bureau, Telephone Interview, May 2005.

CB Richard Ellis, *Central Valley Region Market Outlook*, 2005.

California Chapter of the American Society of Farm Managers and Rural Appraisers, *2005 Trends in Agricultural Land and Lease Values*, 2005.

California Department of Conservation, Farmland Mapping and Monitoring Program, http://www.consrv.ca.gov/DLRP/fmmp/stats_reports/conversion_tables_historic.htm, 2002.

California Department of Food and Agriculture, *Resource Directory*, 2002.

California Employment Development Department, Labor Market Information Division, *County Snapshots*, 2003.

Colorado Coalition of Land Trusts, *A Conservation Appraisal Guide: A Brief Overview of Easement Valuation in Colorado*, June 2004.

Correia, Tony, Correia – Xavier Inc., Telephone Interview, June 2005.

Edwards, Randy, Edwards & Lien Appraisers, Telephone Interview, June 2005.

-
- Ely, Chris, American Farmland Trust, Telephone Interview, June 2005.
- EPS, *Technical Memorandum to Yolo County HCP/NCCP Joint Powers Agency*, April 2004.
- Grubb & Ellis, *2004 Real Estate Forecast, Northern California/Reno*, 2004.
- Johnson, Jack, Johnson Realty, Telephone Interview, May 2005.
- Johnson, Scott, American Real Estate Solutions, Telephone Interview, May 2005
- King, Holly, Great Valley Center, Telephone Interview, June 2005.
- Kraft, Steven et al. "Why Landowners Participate in CRP and Other Federal Conservation Programs: Insights from Recent Surveys" *Compensating Landowners for Conserving Agricultural Land*, UC Davis, 2003.
- Kuminoff, Nicolai V. and Daniel A. Sumner with George Goldman, *The Measure of California Agriculture 2000*, University of California Agricultural Issues Center, November 2000.
- Martin, Bill, Central Valley Land Trust, Telephone Interview, June 2005.
- Mayo, Steven, San Joaquin Council of Governments, Telephone Interview, June 2005.
- Miller, John, American Farmland Trust, Telephone Interview, June 2005.
- Scharffenberger, Tom, Scharffenberger Land Planning and Design, Telephone Interview, June 2005.
- Sokolow, Alvin, "California's Edge Problem: Urban Impacts on Agriculture," *California Agriculture: Dimensions and Issues*, Jerry Siebert, editor, 2004.
- Sokolow, Alvin, UC Davis, Telephone Interview, June 2005.
- Stewart, Patrick and Lawrence Libby, *Determinants of Farmland Value*, Center for Agriculture in the Environment, 2004.
- Tyson, Chuck, California Farmland Conservancy Program, Telephone Interview, June 2005.