Agricultural Land Conversion Study
Kings County, California

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SECTION 1: SETTING

1.1 - INTRODUCTION AND STUDY PURPOSE

Agriculture in the United States has been historically beset with many challenges such as weather, pests, and disease, as well as fluctuating markets, the need for capital investments, and rapidly advancing technology. However, in recent decades, the pressures for growth of this country have lead to the significant conversion of farmland to non-farm use. Clearly, the loss of finite farmland resources and the land use conflicts that have arisen as a result of non farm growth, have been a legitimate cause for concern. The loss of agricultural lands affects many local economies, threatens the way of life for many farmers, and calls into question the ability of this rapidly-developing world to provide food for this population growth.

These challenges are facing Kings County, California, which is located in one of the most productive agricultural areas in the world; the San Joaquin Valley (Valley). Our study area includes the portions of Kings County that will likely face the most intense growth pressures related to urbanization. While the Valley is such an important producer of agricultural products worldwide, it is also one of the areas of California that is projected to bear massive future growth as the State's population is expected to reach 50 million by 2050. Growth within the San Joaquin's farming counties is caused by growth restrictions and excessive cost of housing in coastal and urban counties, and relatively inexpensive land sold by willing farmers. This situation requires that land use regulating agencies across the Valley must act to manage future urban growth while preserving important agricultural lands for future use.

The purpose of this study is to provide a framework for conserving agricultural land in Kings County, California, while recognizing the need to provide for urban development. An approach is outlined that emphasizes careful analysis and policy development to ensure that appropriate strategies are set forth to preserve and mitigate loss of important farmland, while allowing the County to maintain its economic base and need for urban growth.

Kings County lies generally south of the Kings River. It is bounded on the southwest by the Coast Ranges and on the north, east, and south by the nation's number one, two, and three agricultural counties—Fresno, Tulare, and Kern Counties. Kings County also shares a boundary with Monterey and San Luis Obispo Counties (Exhibit 1). Kings County is composed of mainly level farmland crossed by the California Aqueduct and a number of other irrigation waterways. Agriculture and related industries dominate the County's economy, as they have since the County's formation in 1893 when Kings County separated from Tulare County (Exhibit 2).

Source: Kings County and CaSIL.

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NOT TO SCALE

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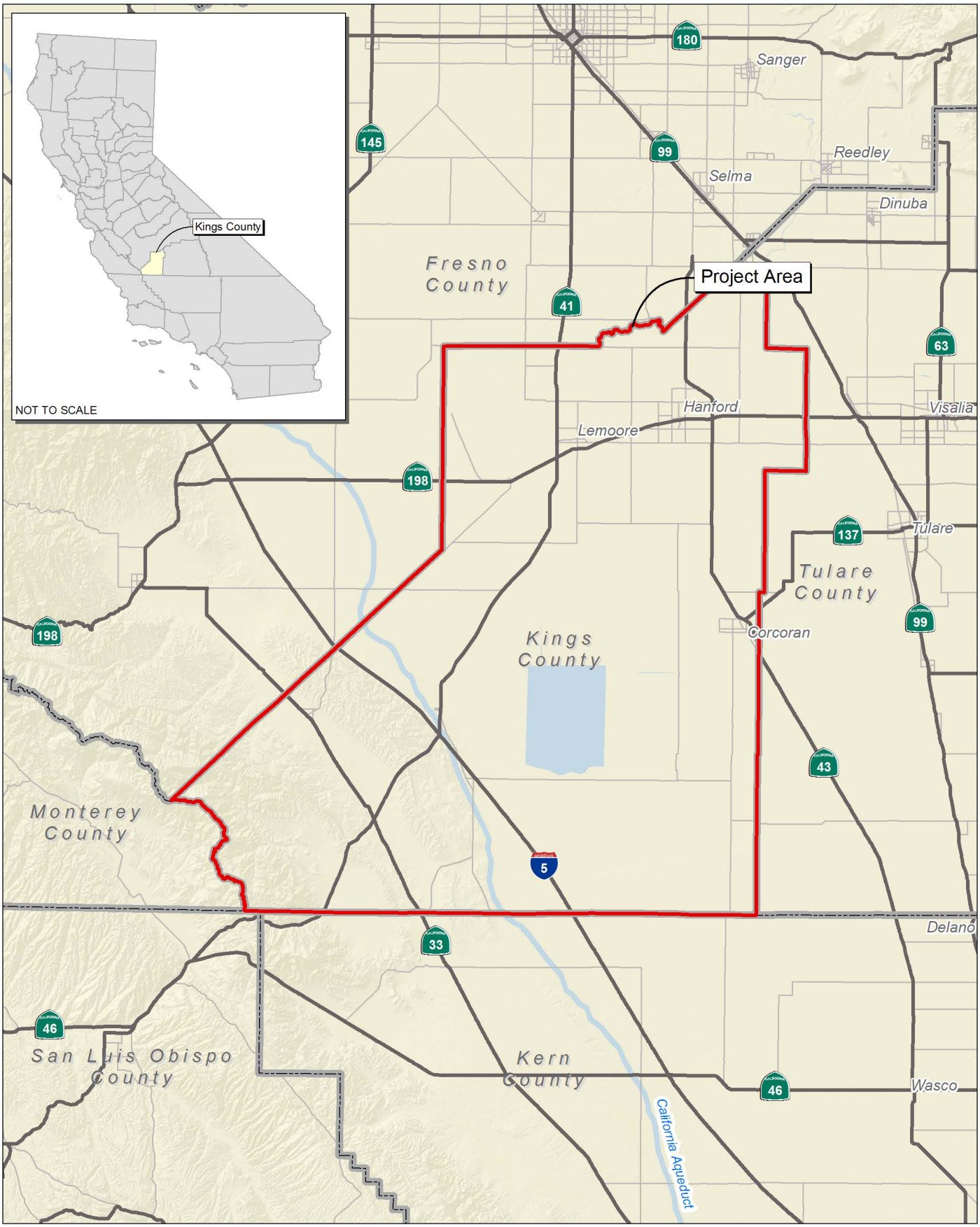
Exhibit 1
Kings County Location Map



Source: Census 2000 Data, The CaSIL, MBA GIS 2007.

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Exhibit 2
Kings County Regional Map

1.1.1 - Agriculture and Urban Growth Pressures

Few states in the U.S. face the intense growth pressures as does California. California is expected to see its population increase from 36 million to 50 million by 2050 (US Census Bureau 2008). Of these projected new Californians, a significant portion is expected to be located in the Central San Joaquin Valley. Much of the State's population increase is expected to come from increased birth rates and continued immigration from the Pacific Rim, Mexico, and Central and South America. However, the Valley also expects significant migration from coastal urban areas of California since housing in the Valley is relatively inexpensive by comparison. The California Department of Finance estimates that the Central Valley's current population of 5.4 million could rise to 15.6 million by 2040 (Great Valley Center 1998).

All of the eight Central Valley counties are among the top-twenty agriculture producing counties statewide. In addition, the Valley provides one quarter of the nation's food supply because it is the most productive and diverse agricultural area in the world. Yet the Valley will also be one of the most rapidly-developing areas of California in the next 20 to 30 years. Areas of the Valley are already converting productive farm lands to urban uses at a rate that is similar to or exceeds that of the Los Angeles County in the mid-twentieth century. For example, the largest agriculture-producing county in the Valley, Fresno County, recently experienced a greater rate of agricultural conversion than did Los Angeles County in 1960. Los Angeles County was the leading agriculture-producing county in the US from 1901 to 1949. The Great Valley Center predicted that from 2000 to 2040, Fresno County will experience a growth rate of 164 percent which translated into 234,000 acres of converted productive farmland (1998).

These trends in growth rates are fueled by simple economics. If row crop land in Fresno County has a value of approximately $1,000 per acre, but the same land located in a high-potential growth area (such as an urban area or transportation corridor) could sell for as much as $50,000 per acre, it may make economic sense for a farmer to sell his/her land for development. Subsequently, the agriculture areas adjacent and surrounding the new development may likely experience diminished value as agricultural uses, thus increasing the likelihood that these areas will also be sold for development. The diminished agricultural value from land use conflicts may result from (but not be limited to) the following factors:

- Restriction on the use of pesticides, fungicides, and herbicides;
- Restrictions on noise, burning, and dust;
- Vehicular emissions generated by the new development on adjacent roadways that may impact the health and survival of crops;
- Competition for and possible decrease of water supply resulting from new development;
- Increase land prices above the land's value for agricultural production;
- Increased roadway congestion that may cause safety issues related to moving crops and machinery;

- Increased roadway congestion leading to longer transport time of products thereby increasing costs;
- Loss of any existing value of food, water, and habitat for certain native animal and plant species;
- Vandalism from trespass, crop pilferage, and damage to irrigation and farming equipment.

Kings County has taken active steps in eliminating these effects through the adoption of the Kings County Right to Farm Ordinance, which was adopted on May 30, 1996. Kings County has determined that agricultural activities are a high priority and favored use of rural land, and farming activities will not be considered a nuisance for those inconveniences or discomforts arising from normal, usual, and customary agricultural operations. In addition, the Kings County General Plan designates Limited Agriculture (AL-10) to land surrounding all cities and communities in the County. The Limited Agriculture Zone District allows for limited agricultural activities to help prevent urban use and agricultural conflicts.

The factors contributing to rapid urban consumption of land would appear difficult to control, with the potential for damage to the prosperity of the Valley and the state a likely outcome of unmitigated conversion of agricultural land. Clearly, given the growth pressures in the Valley, careful planning must occur in order to preserve these valuable resources, while accommodating reasonable growth.

1.1.2 - Other Factors Leading to the Conversion of Agricultural Land

Transfer of Title Subdivisions and Farm Home Retention Parcels

The Kings County Zoning Ordinance currently permits the subdivision of land into parcels that are less than the minimum sizes normally permitted under a given agricultural zone district when such a subdivision is for the purpose of conveying land among family members. The Zoning Ordinance also provides for the creation of parcels less than the minimum lot size through "Farm Home Retention Parcels" (FHR) which may be created when a farmer sells off most of their land but retains a portion of their land holdings for their home site. Often the parcels created by these two practices are no longer dedicated to agriculture and they simply become large lot residential home sites that are scattered throughout farmland areas.

Both of these activities have, over time, reduced the amount of land devoted to agriculture in Kings County. According to Kings County staff (Source - Kings County Agricultural Land Divisions 1984-2007, 2008), 1,905 acres of land converted from agriculture uses to residential uses between 1984 and 2007 through these methods of land subdivision. In addition to the land that has been lost, the intermingling of these low-density residential parcels with continuing agricultural uses may result in land use compatibility problems that could further hamper future agricultural operations.

Voluntary Restrictions/Easements Limiting Agricultural Uses

In some instances in Kings County, agricultural landowners have voluntarily granted easements or entered into agreements that encumber the use of their land such that limitations are placed on

agriculture uses that would otherwise be allowed. In some instances, these limitations amount to the elimination of any viable agricultural uses on the property. For example, farmers may grant easements to federal or state agencies for the purpose of retaining or creating wildlife habitat/wetlands to support biological resources. Such easements have the potential to severely limit or restrict agricultural uses because they conflict with requirements for habitat/wetland areas. Therefore, imposition of such easements essentially results in the permanent conversion of land zoned for agriculture to a non-agriculture land use. Current regulations do not require County review/approval of such easements, so the amount of land that has been converted in the past is unknown.

1.2 - DESCRIPTION

1.2.1 - California Agriculture

Agriculture is a major industry in California with approximately 88,000 farms and ranches comprising nearly a $32 billion dollar industry that generates $100 billion in related economic activity (California Department of Food and Agriculture 2007). This enormous achievement is possible through a combination of tradition and innovation that has secured California's status as the most productive agricultural state for more than 50 years. To put this in perspective, California's cash receipts for agriculture in 2005 were nearly double those of the second-highest agriculture producing state (Texas), and more than both Texas and Iowa combined (second and third highest producing states, respectively). This is due in large part to California's favorable and yet diverse climate, fertile soils, available water, and cutting-edge technologies and advanced agricultural practices. The result is a highly adaptable and diverse industry encompassing more than 400 plant and animal commodities; many of which are produced only in California (California Department of Food and Agriculture 2007). Table 1 shows the top twenty agricultural commodities in terms of dollar value produced in California in 2005:

Table 1: California's Top 20 Agricultural Commodities

Rank	Commodity	Value ($1,000)
1	Milk and Cream	5,223,062
2	Grapes (All)	3,165,715
3	Nursery and Greenhouse Products	2,433,346
4	Almonds	2,337,140
5	Cattle	1,740,198
6	Lettuce (All)	1,687,733
7	Hay (All)	1,150,613
8	Strawberries (All)	1,110,174
9	Floriculture	983,768
10	Tomatoes (All)	941,928

Table 1 (Cont.): California's Top 20 Agricultural Commodities

Rank	Commodity	Value ($1,000)
11	Chickens (All)	714,788
12	Cotton (All)	633,695
13	Oranges (All)	603,594
14	Pistachios	577,320
15	Walnuts	539,600
16	Broccoli	513,758
17	Carrots (All)	455,207
18	Rice	407,778
19	Peaches (All)	279,987
20	Lemons (All)	277,991
Source: California Department of Food and Agriculture, California Agricultural Resource Directory 2006, 2007.		

In addition to being a leader in agriculture production in the United States, California's agricultural exports have been on the rise in recent years. In 2005, the state's agricultural exports totaled more than $9 billion, exporting to almost 150 countries. The top five importers of California agricultural commodities are: the European Union, Canada, Japan, Mexico, and China/Hong Kong. California accounts for 10.4 percent of the nation's export of animal products; 11.7 percent of field crops; 65.5 percent of fruits and nuts; 100 percent of tree nuts, and; 57 percent of vegetables exported from the United States (California Department of Food and Agriculture 2007). Table 2 shows the top exports from California:

Table 2: California's Share of US Agricultural Exports

Commodity	2005		2006	
	Export Value Total U.S. (Million $)	California Percent Share	Export Value Total U.S. (Million $)	California Percent Share
Animal Products	6,849	10.2	7,635	10.4
Dairy and Products	1,668	33.8	1,868	32.3
Beef and Products	2,381	4.2	3,168	4.8
Turkey	345	5.4	319	5.5
Eggs	249	4.0	258	3.6
Chickens	2,205	0.4	2,022	0.4
Field Crops	10,716	13.8	11,249	11.7
Cotton	3,920	17.8	4,501	12.3

Table 2 (Cont.): California's Share of US Agricultural Exports

Commodity	2005		2006	
	Export Value Total U.S. (Million $)	California Percent Share	Export Value Total U.S. (Million $)	California Percent Share
Tomatoes, Processed	286	92.1	306	93.5
Rice	1,300	24.6	1,298	20.7
Hay	508	22.1	519	22.6
Potatoes	110	32.3	134	31.0
Wheat	4,428	0.4	4,278	0.3
Sweet Potatoes	24	39.1	32	41.5
Cottonseed and Byproducts	118	5.2	154	7.9
Dry Beans	22	42.7	27	27.8
Fruits and Products	3,967	66.2	4,429	65.5
Wine	624	92.1	821	89.6
Table Grapes	544	99.2	503	99.3
Oranges and Products	535	68.3	565	63.6
Strawberries	249	93.7	292	93.6
Raisins	209	100.0	206	100.0
Dried Plums	108	100.0	133	100.0
Peaches and Nectarines	152	83.4	152	82.3
Lemons	102	85.3	118	86.5
Grapefruit	201	25.0	276	32.1
Plums	58	95.0	63	95.0
Cherries	221	20.6	222	22.2
Melons	120	35.6	119	35.3
Raspberries	42	67.4	56	72.0
Pears	128	19.0	147	19.5
Grape Juice	56	53.8	57	48.4
Apples	526	4.6	587	4.6
Kiwi	9	100.0	17	100.0
Dates	13	100.0	16	100.0
Olives	18	100.0	16	100.0
Tangerines and Mandarins	19	62.1	24	64.8
Figs	12	100.0	14	100.0

Table 2 (Cont.): California's Share of US Agricultural Exports

Commodity	2005		2006	
	Export Value Total U.S. (Million $)	California Percent Share	Export Value Total U.S. (Million $)	California Percent Share
Apricots	15	95.2	14	93.2
Avocados	3	90.7	12	89.1
Tree Nuts	2,459	100.0	2,551	100.0
Almonds	1,841	100.0	1,899	100.0
Walnuts	318	100.0	365	100.0
Pistachios	299	100.0	287	100.0
Vegetables	1,272	59.9	1,353	57.0
Lettuce	332	71.3	380	64.2
Broccoli	114	91.2	122	91.8
Carrots	106	77.5	114	76.4
Tomatoes, Fresh	166	33.0	173	35.7
Celery	55	96.0	58	94.0
Onions	187	24.2	212	25.2
Cauliflower	64	73.8	65	72.0
Garlic	24	100.0	26	100.0
Spinach	45	67.9	40	64.8
Bell and Chili Peppers	90	28.3	81	27.0
Cabbage	27	73.0	27	71.1
Asparagus	35	89.6	28	44.4
Artichokes	4	100.0	5	100.0
Mushrooms	21	10.8	23	9.9
Flowers and Nursery	302	14.0	331	15.3
Total Principal Commodities	25,565	31.5	27,549	30.4

Notes:
Source: University of California, Agricultural Issues Center. 2006

1.2.2 - Kings County Agriculture

Kings County is comprised of 1,396 square miles. Approximately 95 percent of Kings County land is privately owned, and about 88 percent of the acreage is devoted to agricultural uses. Agriculture production is a major component of Kings County's economy. Kings County agriculture ranked 11th in the state in 2007, producing $1.76 billion in revenue. Kings County also produces 39 crops or products each grossing over one million dollars per year including milk, cattle, and turkeys

(California Department of Food and Agriculture 2007). Table 3 below shows the top ten leading commodities in Kings County in 2007 based on dollar value. Kings County consistently ranks among the top counties in the state and the nation in the production of cotton, barley, and alfalfa seed (California Department of Food and Agriculture 2008).

Table 3: Kings County Top 10 Leading Commodities 2006

Crop	Dollar Value in 1,000'
Milk, Total	692,185.00
Cotton, Total	234,836.00
Cattle and Calves	161,296.00
Alfalfa	81,687.00
Almonds, Total	48,220.00
Peaches, Total	41,199.00
Corn Silage	49,273.00
Pistachios	78,810.00
Grapes, Total	20,077.00
Tomatoes, Processed	70,498.00
Total	1,478,081.00
Source: Agricultural Crop Report, Kings County, 2007.	

Kings County ranks in the top five counties statewide for thirteen commodities as shown in Table 4. Of particular note, the County is the leading producer of cottonseed and the second leading county in the production of cotton. The County also ranks third for the production of nectarines, garlic, and wheat. From 2002 to 2006, the County has seen the production of livestock and poultry products as well as fruits and nuts rise significantly in terms of overall value. Considering the value/ton for the top crops in the County as shown on Table 5, the reason for the increase in the gross value of fruits and nuts becomes apparent.

Table 4: Kings County Statewide Ranking by Gross Value of Agricultural Production 2005

Crop/Item	Rank	% Value
Milk and Cream	4	8.5
Cotton	2	28.6
Pistachios	4	11.8
Silage, All	4	11.9
Peaches	4	7.6
Nectarines	3	6.7

Table 4 (Cont.): Kings County Statewide Ranking by Gross Value of Agricultural Production 2005

Crop/Item	Rank	% Value
Plums	4	4.1
Turkeys	4	13.7
Garlic	3	2.9
Wheat	3	2.9
Cottonseed	1	32.2
Sugar beet	5	2.3
Apricots	5	6.8
Source: 2006 Crop/Economy Information California Department of Food and Agriculture - Resource Directory		

Table 5: Kings County Crop Values

Crop/Item	Tons/Acre	Value Per Ton ($1,000s)
Garlic Processed	7.87	220.00
Tomatoes Processed	45.12	60.00
Walnuts	1.92	2180.00
Corn Silage	26.96	33.00
Cotton Acala-Lint	3.47	355.00
Hay Alfalfa	7.45	179.00
Hay, Oat	3.17	130.00
Pistachios	1.98	2840.00
Sugar Beets*	30.92	35.00
Wheat Grain	2.00	161.00
Plums	7.87	900.00
Apricots Fresh	2.19	1360.00
Wine Varieties	8.16	230.00
Nectarines	8.93	910.00
Peaches Clings	20.29	290.00
Peaches Freestone	10.30	940.00
Peaches Freezer	22.11	270.00

Table 5 (Cont.): Kings County Crop Values

Crop/Item	Tons/Acre	Value Per Ton ($1,000s)
Melons, All	16.86	280.00
Sorghum Silage	19.24	29.00
"2007 Agricultural Report Kings County," California Department of Food and Agriculture, 2008. *- 2007 data not available; 2006 data used from: 2006 Crop/Economy Information California Department of Food and Agriculture - Resource Directory.		

Milk production has become a major agricultural industry in Kings County, representing about 31.8 percent of the gross value of agricultural crops produced. According to the "2007 Agricultural Crop Report, Kings County," dairy production has been the largest cash crop in Kings County in recent years (California Department of Food and Agriculture 2007). Kings County is ranked in the top fifteen milk producing counties in the nation. Kings County's adjoins the top four agricultural counties in California (Kings County 2004).

1.2.3 - Kings County Agriculture Land Use Designations

Agriculture Land is zoned in various locations within Kings County. Definitions of commercial agricultural use or agriculturally related uses are specified in Section III of the General Plan's Land Use Element (Kings County 2004).

There are three agricultural land use designations in the General Plan—Limited Agriculture, General Agriculture, and Exclusive Agriculture. These three designations directly correspond to the agricultural zone districts detailed in Section 1.2.4 below. The purposes of the three designations are to protect agriculture land from the encroachment of incompatible uses, to provide appropriate locations for agricultural support business, and to provide a safety and noise buffer around NAS Lemoore.

The major difference between the three designations relate to minimum parcel size, animal keeping, and agricultural service business.

Limited Agriculture Designation is applied around urban and rural community areas throughout the county to serve as a buffer between urban and intensive agricultural uses. Permitted activities in the Limited Agriculture areas include field crops, vines, pasture grazing, farm related homes, farm related shops, and uses that include the temporary or permanent keeping of animals such as kennels and veterinary hospitals; but exclude new livestock animal concentrations such as dairies, new intensive agri-service business of a permanent nature, such as cotton gins or other large produce processing activities, farm equipment sales, and service or repair establishments. However, existing agri-service

businesses that were established prior to November 16, 2000, may construct new accessory structures that are incidental to the existing use. The minimum parcel size is ten acres.

General Agriculture Designation is applied throughout the county beyond the Limited Agriculture and urban areas. Permitted activities in the General Agriculture designation are similar to the Limited Agriculture designation, but also include intensive uses such as additional animal concentrations and agri-service businesses. Minimum parcel sizes range from 20 to 40 acres. All land within this designation north of Kansas Avenue contains a 20 acre minimum parcel size, while all land south of Kansas Avenue contains a 40 acre minimum parcel size.

Exclusive Agriculture Designation is applied generally in a three-mile-wide band around NAS Lemoore. The minimum parcel size in the Exclusive Agriculture area is 40 acres. Additional lands located within NAS Lemoore's flight paths and noise contours, outside the three-mile band, are currently under consideration for inclusion into the Exclusive Agriculture land use designation by the 2009 Kings County General Plan Update.

1.2.4 - Zone District Classifications

In order to implement the land use designation the land must be in one of the Agricultural Zone Districts found in Article 4 of the Kings County Zoning Ordinance:

1. Limited Agriculture - 10, (AL-10)
2. General Agriculture - 20, (AG-20)
3. General Agriculture - 40, (AG-40)
4. Exclusive Agriculture, (AX)

The physical development of agriculture properties is regulated and implemented by the Zoning Ordinance, in which the same designation—Limited Agriculture (AL-10), General Agriculture (AG-20 and AG-40), and Exclusive Agriculture (AX)—will be used for mapping of agriculturally designated land.

1.2.5 - The Williamson Act and Farmland Security Zone

The California Land Conservation Act of 1965, (commonly referred to as the "Williamson" Act after the author of the Act, State Senator Jon C. Williamson) was promulgated by the State Legislature in order to protect agricultural, wetland, and scenic areas of the state from unnecessary or premature conversion to urban uses. In Kings County, the program is enforced through provisions of the California Land Conservation Act of 1965 found in Section 51200 et seq. of the State Government Code, the uniform rules for Agricultural Preserves in Kings County originally adopted in 1970 and last modified in 2005, and Sections 421 to 429 of the State Revenue and Taxation Code.

The California Land Conservation Act of 1965 is explicit in its pronouncement of the State's responsibility for protecting its agricultural industry from stagnation and recession. A major threat to agriculture in the State has resulted from:

1. Inharmonious or conflicting land use activities due to the population growth of the State;
2. Activities which disrupt the ecological balance of agricultural production; and
3. Property tax evaluation methods.

Essentially, these threats represent by-products of California's rapid urbanization and population growth.

The Act was drafted to reflect the principles that "first, it is in the public interest to guarantee the future agricultural use of our best agricultural land and second, that farmers who are willing to provide the public with such a guarantee are entitled to protection from forces that might otherwise drive them out of agriculture." The basis for preferential taxation is indeed justified since the farmer who chooses to enter the "Williamson" Act in fact guarantees to the people of the state the continual use of land for agricultural or open space activities.

The agricultural preserve contract states that a property owner will preserve farmland in Kings County. In return the owner receives a lower assessment on their property. Any questions regarding assessments and taxes should be directed to the Kings County Assessor's Office.

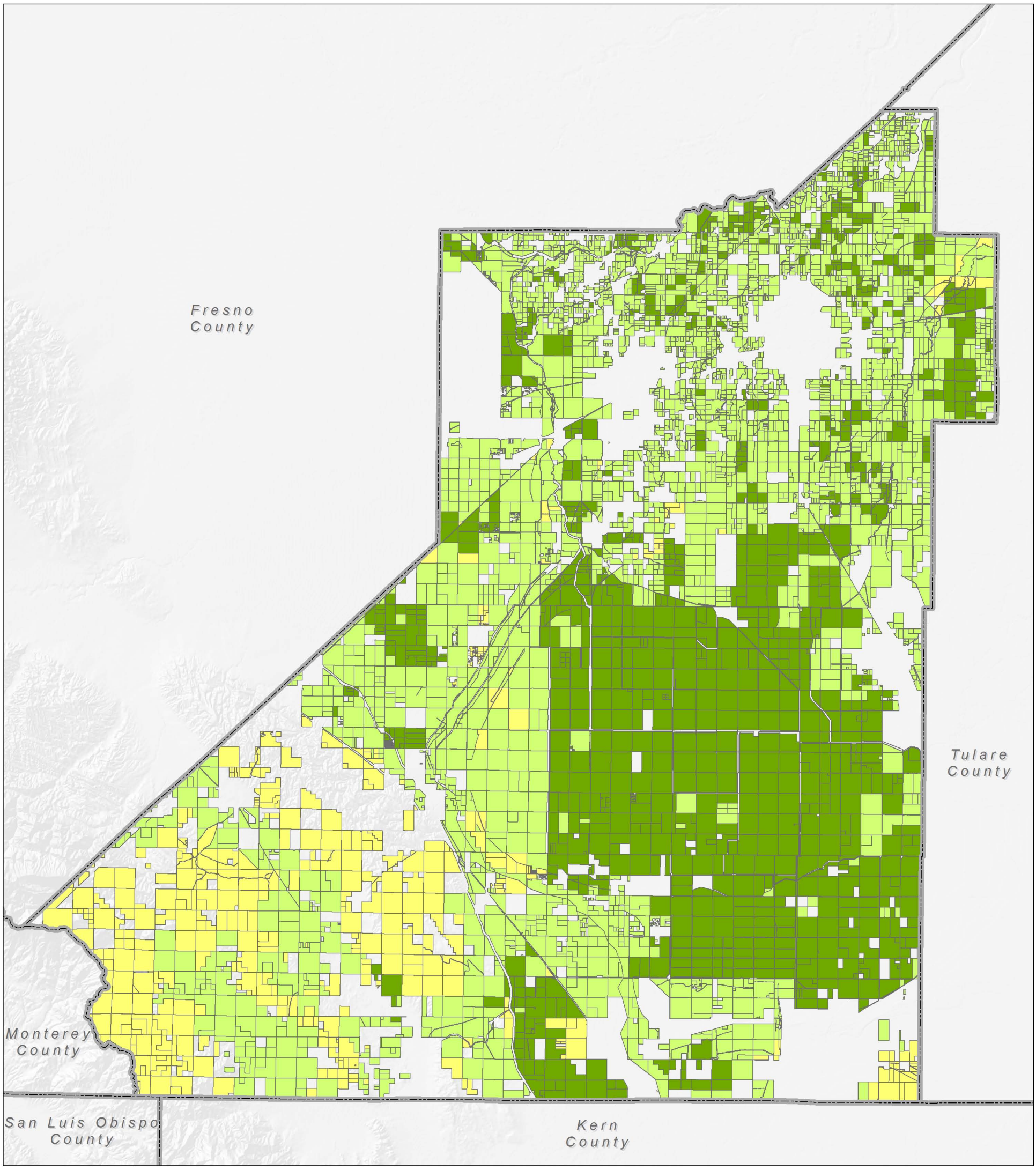
In general, each Land Conservation or Farmland Security Zone Contract provides that property in an Agricultural Preserve or Farmland Security Zone may not be used by the owner, or their successors, for any purpose other than the production of agricultural products for commercial purposes and those related uses established in the Uniform Rules of the Preserves in Kings County. In addition, the initial term of a Land Conservation Contract cannot be less than ten (10) years. Farmland Security Zone contracts cannot be less than twenty (20) years. Both types of contracts automatically renew for one additional year on the 1st of January of each year. The automatic renewal will continue indefinitely unless a notice of non-renewal is filed.

The agricultural preserve program was first implemented in Kings County in 1969. According to the Kings County GIS database (2004), the County has 352,742 acres of Prime Agricultural land and 95,148 acres of Non-prime Agricultural land in 10-year Williamson Act contracts and 237,713 acres in 20-year Farmland Security Zone contracts (Exhibit 3). These contracts have placed approximately 718,551 acres in some sort of ag-preserve status. Applications to place land in a Williamson Act contract or a Farmland Security Zone contract are accepted from August 1st to September 30th of each year. Applications for notice of non-renewal are accepted all year

1.2.6 - Trends in County-wide Agricultural Land Conversion

Farm and grazing lands in California decreased by nearly 267 square miles between 2002 and 2004 as documented by the Farmland Mapping and Monitoring Program (FMMP). Both higher urbanization and a larger share for urban lands for the inland counties are the main cause of this decrease. Urbanization in the San Joaquin Valley increased by 10 percent compared with the 2002 update. Housing is the largest component of new urban acreage, with developments ranging from small infill sites to planned community units of 600 acres or more. Commodity markets and other factors impact land management decisions, causing shifts both in and out of irrigated agricultural uses. Conversion from grasslands to orchards, vineyards, and specialty crops were frequent in the late 1990s and early 2000s, but slowed significantly between 2002 and 2004. Exhibit 4 shows land use change in Kings County from rural to urban between 1984 and 2004 as reported by the California Department of Conservation. The map shows a substantial amount of conversion to urban uses, especially in the areas surrounding Hanford, Lemoore, and Corcoran. The exhibit also shows the conversion of agricultural lands to "Ag Ponding Recharge" areas which are not considered urban use. In addition, the hatched areas on the map represent future growth areas and include the Primary Spheres and Urban Growth Boundaries. (Please see Section 1.3 for a detailed discussion of future growth areas.)

According to the California Department of Conservation Division of Land Resource Protection, farmland conversions in Kings County from 2004-2006 resulted in the net acre loss of Important Farmland totaling 12,677 acres. Of these acres lost, 681 acres were converted to Urban and Built-Up Land, and 2,306 acres were converted to Other Land. The loss of Important Farmland to Other Land was due primarily to more detailed delineation of portions of the Tule River Canal, Kings River Canal, and Middle Branch Cross Creek/Lewis Ditch.



Legend

- County Boundaries
- Williamson Act - Farmland Security Zone Agricultural 20 Year Contracted Land
- Williamson Act - Prime Agricultural 10 Year Contracted Land
- Williamson Act - Non-Prime Agricultural 10 Year Contracted Land

Source: Kings County GIS and Dept. of Conservation (2004).

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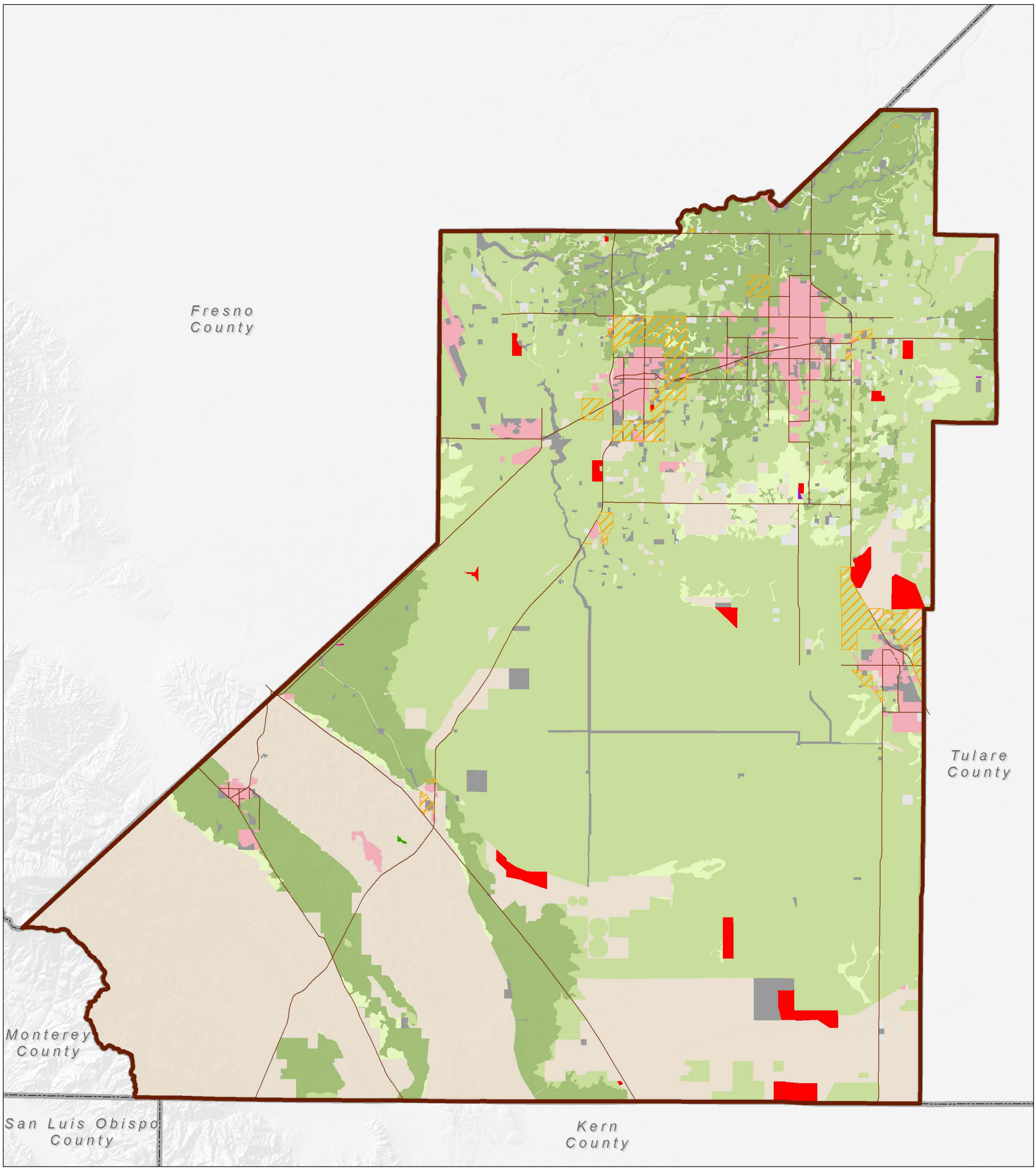
Exhibit 3
Williamson Act and Farmland Security Zone Contracts Map



Legend

- Kings County Boundary
- Urban Growth
- Major Roads and Highways
- Ag Business
- Ag Ponding Recharge
- Farm Employee Housing
- Fruit Packing Warehouse
- Grazing
- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land
- Urban and Built-Up Land
- Other Land
- Water

**Kings County Version of FMMP Urban Change Map.*

Source: Kings County GIS and Dept. of Conservation (2006).

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Exhibit 4
Kings County Urban Change Map

KINGS COUNTY AGRICULTURAL LAND CONVERSION STUDY

The majority of the loss of Important Farmland was through conversion to Grazing Land, 9,934 acres, and results from the land being left fallow for three or more update cycles. (California Department of Conservation 2006)

1.2.7 - Soils

The mean annual soil temperature ranges from 64 degrees to 67 degrees F. and the soil temperature is always above 47 degrees F. The soil between depths of 4 and 12 inches is dry in all parts from April through December and is not moist in some or all parts for as long as 90 consecutive days. The particle-size control section averages 18 to 35 percent clay. Less than 15 percent of the particles are fine sand or coarser, by weighted average, between depths of 10 to 40 inches. Electrical conductivity is 0 to 4.0 decisiemens per meter, and sodium adsorption ratio is 0 to 12. Calcium carbonate equivalent is 0 to 5 percent. Organic matter decreases irregularly with increasing depth.

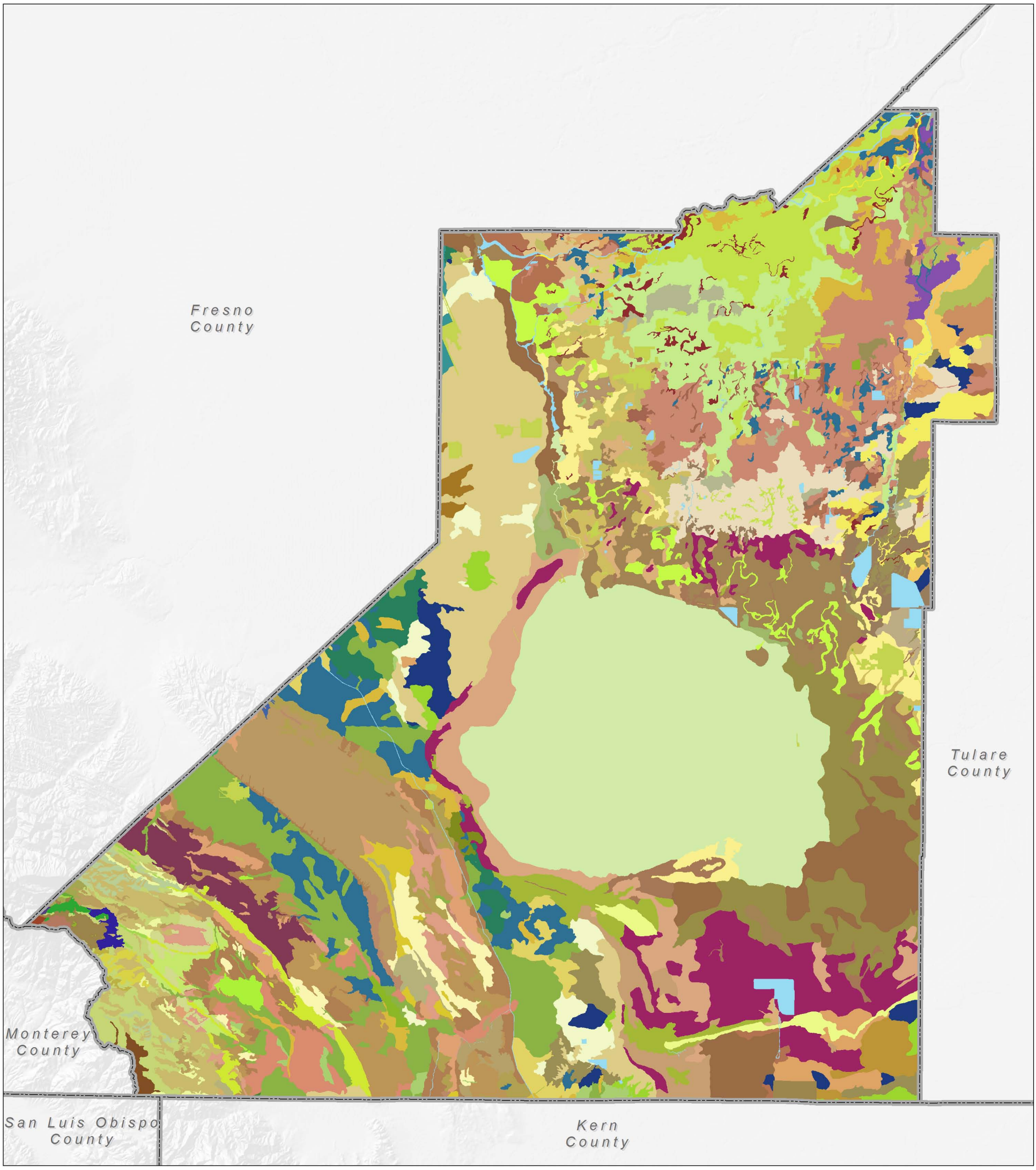
Soil types according to Soil Conservation Service Soil Survey of Kings County, California USDA, are described below and mapped on Exhibit 5, USDA Soils Map (1980).

Ap - 0 to 7 inches; light brownish gray (2.5Y 6/2) loam, dark grayish brown (2.5Y 4/2) moist; moderate coarse subangular blocky structure; slightly hard, very friable, moderately sticky and moderately plastic; common very fine and few fine roots; common very fine tubular and many very fine interstitial pores; slightly effervescent, carbonates disseminated; moderately alkaline (pH 8.0); abrupt smooth boundary. (7 to 14 inches thick)

Bw - 7 to 19 inches; light brownish gray (2.5Y 6/2) silt loam, dark grayish brown (2.5Y 4/2) moist; weak coarse subangular blocky structure; slightly hard, friable, moderately sticky and moderately plastic; few very fine, fine and medium roots; common very fine tubular and many very fine interstitial pores; slightly effervescent, carbonates disseminated; moderately alkaline (pH 8.1); clear wavy boundary. (9 to 15 inches thick)

Bk1 - 19 to 24 inches; light brownish gray (2.5Y 6/2) silty clay loam, with many discontinuous thin strata of silty clay and silt loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard, friable, moderately sticky and moderately plastic; few very fine, fine and medium roots; many very fine tubular and interstitial pores; strongly effervescent, carbonates disseminated and segregated as common fine irregularly shaped soft masses; moderately alkaline (pH 8.0); abrupt wavy boundary. (5 to 22 inches thick)

Bk2 - 24 to 29 inches; light brownish gray (2.5Y 6/2) silt loam, with many discontinuous thin strata of silty clay loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard, very friable, moderately sticky and moderately plastic; few fine roots; many very fine tubular and interstitial pores; strongly effervescent, carbonates disseminated and segregated as common fine irregularly shaped soft masses; common fine prominent dark yellowish brown (10YR 3/6) moist relict redoximorphic concentrations of iron; moderately alkaline (pH 8.1); gradual wavy boundary. (5 to 22 inches thick)



Legend

- 101 - Armona Loam, Partially Drained
- 101tw - Akers-akers, Saline-sodic, Complex, 0 To 2 Percent Slopes
- 102 - Avenal Loam, 0 To 5 Percent Slopes
- 103 - Boggs Sandy Loam, Partially Drained
- 104 - Cajon Sandy Loam
- 105 - Cantua Coarse Sandy Loam, 5 To 15 Percent Slopes
- 106 - Cantua Coarse Sandy Loam, 15 To 30 Percent Slopes
- 107 - Carollo Clay Loam, 5 To 20 Percent
- 108 - Corona Silt Loam
- 108tw - Colpien Loam, 0 To 2 Percent Slopes
- 109 - Delgado Sandy Loam, 5 To 15 Percent Slopes
- 110 - Delgado Sandy Loam, 15 To 30 Percent Slopes
- 111 - Delgado Gravelly Sandy Loam, 15 To 30 Percent Slopes
- 112 - Excelsior Sandy Loam
- 113 - Garces Loam
- 114 - Gaviota-rock Outcrop Complex, 50 To 75 Percent Slopes
- 115 - Gepford Clay, Partially Drained
- 116 - Gepford Clay, Sandy Substratum, Partially Drained
- 117 - Goldberg Loam, Drained
- 118 - Goldberg Loam, Partially Drained
- 119 - Grangeville Sandy Loam, Saline-alkali
- 120 - Grangeville Fine Sandy Loam, Partially Drained
- 121 - Grangeville Fine Sandy Loam, Saline-alkali, Partially D Rained
- 122 - Henneke Very Gravelly Clay Loam, 5 To 15 Percent Slopes
- 123 - Henneke Very Gravelly Clay Loam, 15 To 50 Percent Slope S
- 124 - Homeland Fine Sandy Loam, Partially Drained
- 125 - Houser Fine Sandy Loam, Drained
- 126 - Houser Clay, Partially Drained
- 127 - Kettleman Loam, 5 To 15 Percent Slopes
- 128 - Kettleman Loam, 15 To 30 Percent Slopes
- 129 - Kettleman-cantua Complex, 30 To 50 Percent Slopes
- 130 - Kimberlina Fine Sandy Loam, Saline-alkali
- 131 - Kimberlina Fine Sandy Loam, Sandy Substratum
- 132 - Kimberlina Saline Alkali-garces Complex
- 133 - Kreyenhagen Loam, 50 To 75 Percent Slopes
- 134 - Lakeside Loam, Partially Drained
- 134tw - Riverwash
- 135 - Lakeside Clay Loam, Drained
- 136 - Lakeside Clay, Partially Drained
- 137 - Lemoore Sandy Loam, Partially Drained
- 138 - Lethent Fine Sandy Loam
- 139 - Lethent Clay Loam
- 140 - Melga Silt Loam
- 141 - Mercey Loam, 5 To 15 Percent Slopes
- 142 - Mercey Loam, 15 To 30 Percent Slopes
- 143 - Mercey Loam, 30 To 50 Percent Slopes
- 144 - Milham Sandy Loam, Silty Substratum
- 145 - Millsholm Clay Loam, 15 To 50 Percent Slopes
- 146 - Millsholm Clay Loam, 50 To 75 Percent Slopes
- 147 - Nord Fine Sandy Loam
- 148 - Nord Fine Sandy Loam, Saline-alkali
- 149 - Nord Complex
- 150 - Panoche Loam
- 151 - Panoche Clay Loam, Saline-alkali
- 152 - Parkfield Variant Gravelly Clay Loam, 2 To 8 Percent Sl Opes
- 153 - Pitco Clay Partially Drained
- 154 - Pits And Dumps
- 155 - Rambla Loamy Sand, Drained
- 156 - Reefridge Clay, 5 To 15 Percent Slopes
- 157 - Reefridge Clay, 15 To 30 Percent Slopes
- 158 - Remnoy Very Fine Sandy Loam
- 159 - Rock Outcrop-dystric Lithic Xerochrepts Complex, 30 To 100 Percent Slopes
- 160 - Rock Outcrop-lithic Torriorthents Complex, 15 To 75 Per Cent Slopes
- 161 - Sagaser Loam, 50 To 75 Percent Slopes
- 162 - Sandridge Loamy Fine Sand
- 163 - Tulare Clay, Partially Drained
- 163nk - Hillbrick-rock Outcrop Complex, 50 To 75 Percent Slopes
- 164 - Tulare Variant Clay, Partially Drained
- 165 - Twisselman Silty Clay
- 166 - Twisselman Silty Clay, Saline-alkali
- 167 - Urban Land
- 168 - Vanguard Sandy Loam, Partially Drained
- 169 - Vaquero And Altamont Clays, 15 To 50 Percent Slopes
- 170 - Vaquero And Altamont Clays, 50 To 75 Percent Slopes
- 171 - Vaquero-altamont-millsholm Complex, 15 To 50 Percent Sl Opes
- 172 - Wadesprings Stony Loam, 15 To 50 Percent Slopes
- 173 - Wadesprings Stony Loam, 50 To 75 Percent Slopes
- 174 - Wasco Sandy Loam, 0 To 5 Percent Slopes
- 175 - Westcamp Loam, Partially Drained
- 176 - Westhaven Loam, 0 To 2 Percent Slopes
- 177 - Westhaven Loam, 2 To 5 Percent Slopes
- 178 - Westhaven Clay Loam, Saline-alkali, 0 To 2 Percent Slop Es
- 179 - Whitewolf Coarse Sandy Loam
- 180 - Youd Fine Sandy Loam
- 181 - Water
- 182 - Miscellaneous Water
- 212nk - Panoche Clay Loam, 2 To 5 Percent Slopes
- 404fw - Milham-guijarral Association, 5 To 15 Percent Slopes
- 434fw - Lethent Clay Loam, Wet, 0 To 1 Percent Slopes
- 480fw - Calflax Clay Loam, Saline-sodic, 0 To 2 Percent Slopes
- 489fw - Wasco Sandy Loam, 2 To 5 Percent Slopes
- 641fw - Mercey-delgado-kettleman Association, 5 To 15 Percent Slopes
- 643fw - Mercey-delgado-kettleman Association, 15 To 30 Percent Slopes
- 704fw - Franciscan Gravelly Sandy Loam, 30 To 50 Percent Slopes
- 705fw - Roacha Silty Clay Loam, 30 To 50 Percent Slopes
- 714fw - Gaviota-borreguero-rock Outcrop Complex, 40 To 75 Percent Slopes
- 773fw - Hentine-rock Outcrop Complex, 30 To 65 Percent Slopes

Source: Kings County GIS and U.S. Dept. of Agriculture.

NORTH

5 2.5 0 5 Miles

Michael Brandman Associates

Exhibit 5
USDA Soils Map

C1 - 29 to 45 inches; light brownish gray (2.5Y 6/2) silt loam, dark grayish brown (2.5Y 4/2) moist; massive; slightly hard; very friable, moderately sticky and moderately plastic; few very fine roots; many very fine tubular and interstitial pores; strongly effervescent, carbonates disseminated; moderately alkaline (pH 8.2); clear wavy boundary. (0 to 16 inches thick)

2C2 - 45 to 72 inches; light brownish gray (2.5Y 6/2) silty clay dark grayish brown (2.5Y 4/2) moist; massive, hard, friable, moderately sticky and very plastic; few very fine tubular pores; strongly effervescent, carbonates disseminated; moderately alkaline (pH 7.9); abrupt wavy boundary. (0 to 27 inches thick)

3C3 - 72 to 84 inches; light gray (2.5Y 7/2) loamy sand, dark grayish brown (2.5Y 4/2) moist; massive; loose; many very fine interstitial pores; slightly alkaline (pH 7.8).

Kings County Soil Structure

The A horizon has color of 10YR 5/3, 5/4, 6/2, 6/3, 6/4, 7/4; 2.5Y 6/2 or 6/4. Moist color is 10YR 3/2, 3/3, 4/3, 4/4; 2.5Y 4/2 or 4/3. Texture is fine sandy loam, sandy loam, silt loam, loam, or clay loam. It is non-effervescent to strongly effervescent. Reaction is slightly alkaline or moderately alkaline.

The Bw horizon has color of 10YR 5/3, 5/4, 6/3, 6/4, 7/2; 2.5Y 4/2, 5/2, 5/4, 6/2, 6/4 or 7/4. Moist color is 10YR 4/2, 4/3, 5/2, 5/3; 2.5Y 4/2, 4/3, 4/4, 5/2 or 5/4. Texture is fine sandy loam, silt loam, loam, silty clay loam or clay loam. It is very slightly effervescent to slightly effervescent. Reaction is slightly alkaline or moderately alkaline.

The Bk horizon has color of 10YR 5/3, 5/4, 6/3, 6/4, 7/2: 2.5Y 4/2, 5/2, 5/4, 6/2, 6/4, 7/2, or 7/4. Moist color is 10YR 4/2, 4/3, 5/2, 5/3; 2.5Y 4/2, 4/4, 5/2 or 5/4. It is stratified loamy sand, loamy fine sand, fine sandy loam, very fine sandy loam, silt loam, loam, sandy clay loam, silty clay loam, and clay loam. Texture is slightly effervescent to strongly effervescent. Carbonates are disseminated and segregated with common threads or soft masses.

The C horizon, when present, has color of 10YR 5/3, 5/4, 6/3, 6/4, 7/2; 2.5Y 4/2, 5/2, 5/4, 6/2, 6/4, 7/2 or 7/4. Moist color is 10YR 4/2, 4/3, 5/2, 5/3, 6/1; 2.5Y 4/2, 4/4, 5/2 or 5/4. Relict redoximorphic concentrations of iron occur in some pedons below a depth of 20 inches. Texture is loamy sand to clay below a depth of 40 inches. It is non-effervescent to strongly effervescent with disseminated carbonates. Reaction is slightly alkaline or moderately alkaline.

Kings County Soil

Portions of the irrigated land in Kings County are affected by salt, although the amount and type of salts varies depending on the type of soil and the amount of irrigation water used. The presence of salt in soil decreases the availability of water to a plant. Some plants can tolerate more salts that others. Knowledge of salt-tolerant plants is useful to match crops with growing conditions. Leaching

is probably the best method used to control salt. Other methods include crop rotation, subsurface drains, and soil amendments.

Wind erosion is a problem on the west side of the County. Loss of topsoil as dust blows into the air contributes to the loss of crops, damage to the public health including the dissemination of spores causing Valley fever, automobile accidents, and damage to public facilities. Most wind erosion occurs between March and June. Soil can be protected from wind erosion by maintaining adequate growing vegetation, depositing crop residues to cover the soil, and maintaining adequate soil moisture from irrigation and tillage to keep the soil stable (USDA 1980).

1.2.8 - Water

Water of generally good quality is provided by the county by rivers, creeks, reservoirs, an aqueduct, and canals. The natural source is runoff from the accumulation of rainfall and snowfall in the Sierra Nevada Mountain Range to the east. The rivers supply much of the surface water used for irrigation and much of the ground water pumped for irrigation and for domestic and industrial uses.

Some water is conveyed to the western part of Kings County through the California Aqueduct. Water is diverted from the aqueduct to the irrigation districts.

The construction of Pine Flat, Success, Terminus, and Isabella Dams have helped to control flooding. The dams also help regulate the use of surface water and ground water.

The most important element for the economic survival of Kings County is the availability, beneficial use, and conservation of its water. A major portion of Kings County has been identified by the California Department of Water Resources as having a critical groundwater overdraft condition. Approximately thirty-two percent of the 1.4 million acre feet of water used annually in Kings County for all purposes is obtained from groundwater. Groundwater is replenished from the natural precipitation, stream and creek flows, imported water, and underground flows which vary annually depending on hydrologic conditions. However, a significant portion of the County is underlain by the Corcoran Clay layer which limits and prevents the efficient recharge of groundwater in these areas. As a result, the County must rely on areas north and east of the County for recharge of the lower aquifers.

The “Natural Resource and Conservation” land use designation includes only that land which is environmentally sensitive due to the existence of natural watercourses, drainage basins, sloughs, vernal pools, alkali sinks, moist swales, springs, and other seasonal wetlands; or other natural lands containing water features. The designation provides permanent open space to protect these watercourses from the proliferation of growth, and thereby protect water quality. Its policies apply equally to lands under public and private ownership (USDA 1980).

1.2.9 - Climate

Kings County is characterized by a warm desert climate. Temperatures during the summer often exceed 100 degrees F, while temperatures during the winter are rarely less than 32 degrees F. The growing season is long and is characterized by very high midsummer temperatures lasting over 257 days per year (USDA 1980). Precipitation ranges from 6.2 to 8.1 inches in this part of the San Joaquin Valley, and it ranges from 6.2 to 18 inches in the hills and mountains. Most of the precipitation is received in winter. The amount of precipitation received in the county is small. The largest amounts occur in January, and about 90 percent of total rainfall is received between November and April. Rainfall is rare in the summer, and it is usually associated with tropical storms. Winds in the county are from a northwesterly direction, and they are generally less than 10 miles per hour.

1.3 - AREAS OF STUDY

For the purpose of this report, certain geographic areas of the County were identified as Study Areas. Each of these Study Areas was created because of their susceptibility for future non-agricultural growth. These specific areas generally surround existing or planned urban development and/or important transportation corridors. Additionally, each Study Area includes the territory within the Local Agency Formation Commission (LAFCO) Primary Sphere of influence (SOI) and the Urban Growth Boundary (UGB) developed the Kings County Association of Governments (KCAF) in their Blueprint Strategy for the County for each city or rural community within the County. Each SOI represents the planning boundary outside of a community or city boundary. The purposes of the SOI and the UGB are for the efficient provision of services and the discouragement of urban sprawl and pre-mature agricultural land conversion.

In Kings County, a SOI is categorized as either a Primary or Secondary Sphere. A Primary Sphere includes the existing city or community boundary in addition to land designated by the jurisdictions General Plan and is zoned for future planned urban uses. Kings County LAFCO Resolution No. 07-06 adopted on October 24, 2007 removed 10,723 acres of land from all eight of the County's cities and communities that was within the Primary SOI and was not designated for urban development. Land within the Secondary Sphere represents areas of common interest to both the County and City or Community District.

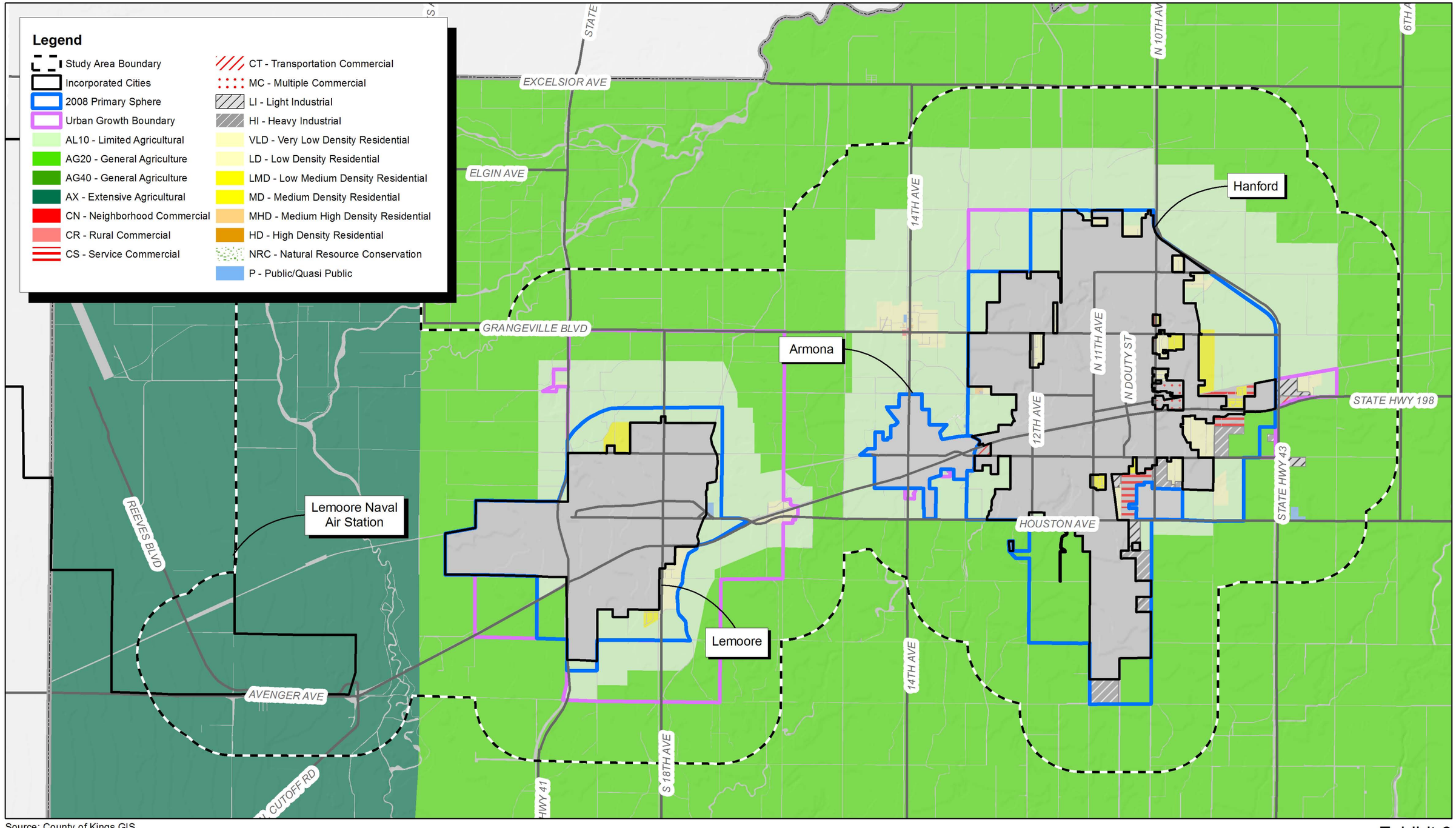
As discussed above, for the purposes of this report, Primary Spheres and UGB areas will be used for analysis. UGB areas are primarily zoned Limited Agriculture (AL-10) and are zoned as such to act as a temporary buffer between urban land uses and intensive agricultural uses. Additionally, AL-10 does not allow any major permanent urban land use or intensive agricultural operation.

1.3.1 - Hanford/Armona /Lemoore/LNAS

For this Study, the Cities of Hanford, Armona, and Lemoore were combined with the Lemoore Naval Air Station (LNAS) to define the County's most populated Study Area (Exhibit 6).

Legend

- Study Area Boundary
- Incorporated Cities
- 2008 Primary Sphere
- Urban Growth Boundary
- AL10 - Limited Agricultural
- AG20 - General Agriculture
- AG40 - General Agriculture
- AX - Extensive Agricultural
- CN - Neighborhood Commercial
- CR - Rural Commercial
- CS - Service Commercial
- CT - Transportation Commercial
- MC - Multiple Commercial
- LI - Light Industrial
- HI - Heavy Industrial
- VLD - Very Low Density Residential
- LD - Low Density Residential
- LMD - Low Medium Density Residential
- MD - Medium Density Residential
- MHD - Medium High Density Residential
- HD - High Density Residential
- NRC - Natural Resource Conservation
- P - Public/Quasi Public



Source: County of Kings GIS.

NORTH

1.5 0.75 0 1.5 Miles

Michael Brandman Associates

26870005 • 08/2008 | 6_hanford.mxd

Exhibit 6
Hanford, Armona, Lemoore
and LNAS Agricultural Study Area

KINGS COUNTY AGRICULTURAL LAND CONVERSION STUDY

According to the current Housing Element (which covers Kings County, the Cities of Avenal, Corcoran, Hanford, and Lemoore), the cities of Lemoore and Hanford were expected to account for a combined 87 percent of all County-wide job growth (Kings County 2002). Although each of the cities in the Study Area will be examined individually, it is appropriate to consider this Study Area as a whole. Examining this area in more of a regional context will ensure that areas that are outside of existing SOI and UGB, but may still have potential for urban development, will also be analyzed.

Potential for growth both within and without existing SOI and UGB in this area would result from the close proximity of these urban areas with each other and their connectivity both locally and regionally via State Route (SR) 198. SR-198 provides regional connectivity to the SR-99 Freeway and Interstate 5. The Area is also close to the Fresno metropolitan area (28 miles from Hanford) and the City of Visalia. According to a 2006 report compiled by the State of California Employment Development Department, Tulare and Fresno Counties respectively, provide the largest number of out-of-County workers to Kings County of any other county in the state. The LNAS, which is comprised of 18,784 acres located in the western portion of this Study Area, is the largest employer in Kings County. LNAS employs approximately 1,200 civilians and 5,000 military personnel (Kings County Association of Governments 2007). Therefore, the Lemoore/Hanford/LNAS/Armona Study Area represents the area of the County with the greatest potential for conversion of agricultural lands to urban uses, and it is important that the impacts of farmland conversion are examined for this area and its contiguous nature.

Within the Study Area, the primary agricultural commodities (as defined by Kings County GIS database, 2003) were as follows: cotton (32,747 acres); corn (20,627 acres); alfalfa (8,890 acres); walnuts (5,489 acres); grain and hay(4,762 acres); flax (2,134 acres); and peaches and nectarines (1,748 acres).

Lemoore

The City of Lemoore was incorporated in 1900 and is located 8 miles west of Hanford. It has served for many years as an agricultural service center for grapes, raisins, grains, cotton, and livestock. California Department of Finance estimates the population of Lemoore in 2008 was 24,502 (Kings County Economic Development Corporation 2008). In addition to the City's strong farming tradition, it has also attracted diverse manufacturing, commercial enterprises, and a Naval Air Station that supports approximately 5,000 armed service personnel and their families. The addition of an FA18 Squadron and infrastructure improvements to the Lemoore NAS will continue to enhance the economy of Lemoore well into the future (Kings County Association of Governments 2007). Land planned for urban development is 7,432 acres in the Primary Sphere and 7,514 acres in the UGB

Hanford

The City of Hanford was incorporated in 1891 and is the County seat (none). Hanford is an important commercial and cultural center in the south central San Joaquin Valley. It is the principal city of the Hanford-Corcoran, California Metropolitan Statistical Area. The 2008 Department of Finance estimate population is 51,965 people (California Department of Finance 2008). Hanford is situated in the south central portion of California's San Joaquin Valley, 33 miles south of the city of Fresno.

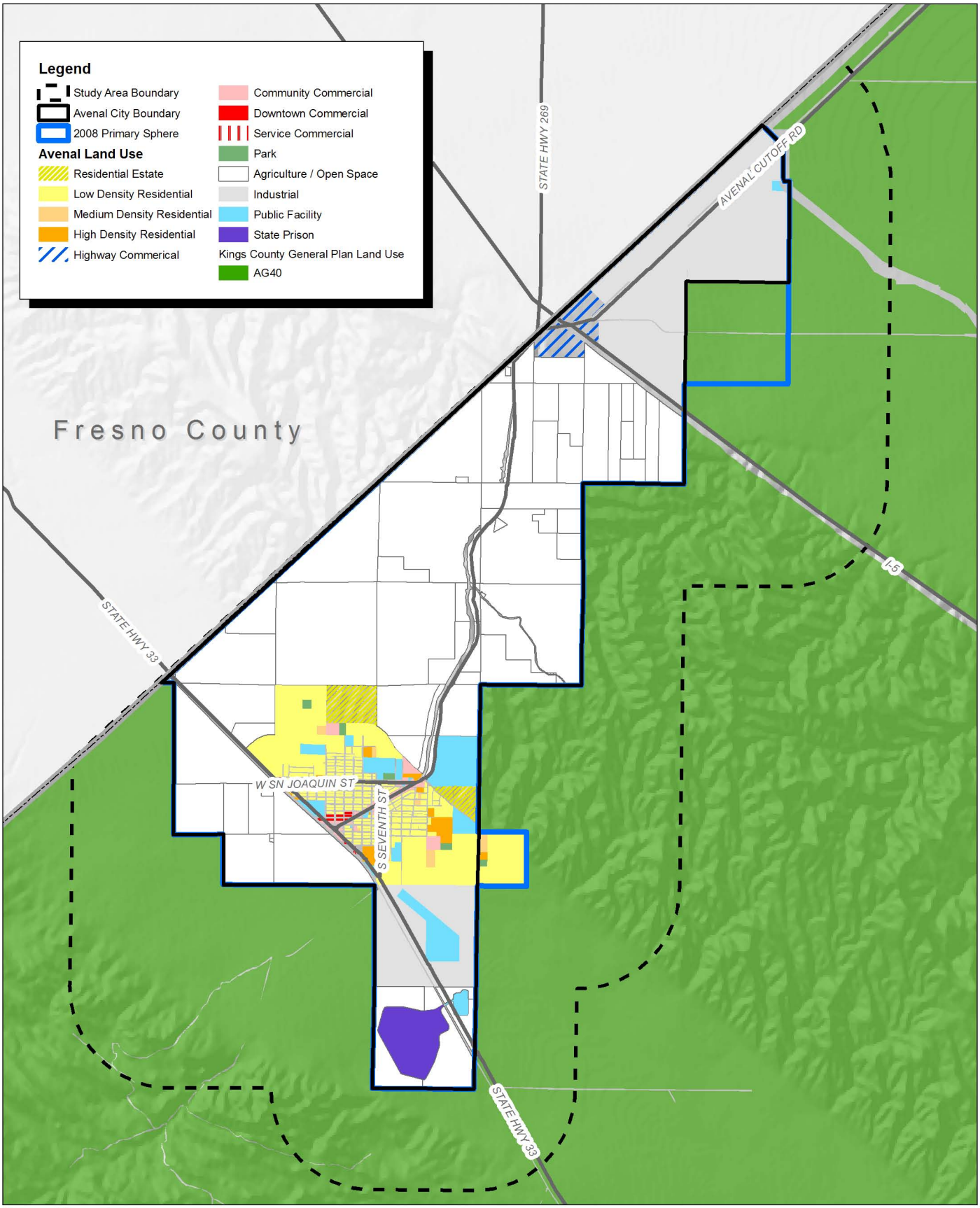
Hanford is a major trading center serving the surrounding agricultural area. According to the California Employment Development Department, as of January 2007, most residents of the Hanford area were employed in services including government and farming as well as in some manufacturing enterprises employees. Land planned for urban development is 16,771 acres in the Primary Sphere and 1,000 acres in the UGB

Armona

The unincorporated community of Armona is located between the incorporated cities of Hanford and Lemoore. Armona had a number of packaging sheds where fresh fruits were pressed for shipment to many parts of the United State. The Southern Pacific Railroad hauled water from the Armona to Coalinga for many years. The 2000 census estimated Armona's population to be 3,239 people (Kings County Association of Governments 2007). Land planned for urban development is 1,118 acres in the Primary Sphere and 27 acres in the UGB

1.3.2 - Avenal

Avenal is the smallest city in Kings County with approximately 16,737 people. It was incorporated on September 18, 1979, and is located 37 miles southwest of Hanford, 180 miles north of Los Angeles, 200 miles south of both San Francisco and Sacramento, and 60 miles south of Fresno (Kings County 2006). Avenal is situated at the junction of State Routes 33 and 269 and is adjacent to the Fresno County border (Exhibit 7).



Source: Kings County.

Michael Brandman Associates

NORTH

7,000 3,500 0 7,000

Feet

Exhibit 7
Avenal
Agricultural Study Area

Avenal owes its origin to the discovery of oil, in the Kettleman Hills, on October 4, 1928. Avenal was the site of a "tent city" as the boom started, but foresight made the boom orderly, so that by 1940 Avenal was the second largest town in Kings County with a population of 4,600. Growth in Avenal continues today to include a more diversified economy based on oil, agriculture, and the service industry. In 1978, Avenal citizens voted to incorporate and improve the quality of life for all Avenal residents (Kings County 2007). The presence of the Avenal State Prison, which housed 9,039 inmates according to the California Department of Finance 2008, population estimate, helps this rural community maintain economic stability by providing employment opportunities for over 1,000 people.

Land planned for urban development is 13,258 acres in the Primary Sphere and the UGB is not defined for this area. The primary crops grown within the Avenal Study Area (as defined by Kings County GIS database, 2003) are as follows: grain and hay (5,686 acres); field crops (3,252 acres), cotton (2,173 acres); tomatoes (1,197 acres); and almonds (539 acres).

1.3.3 - Corcoran

The City of Corcoran is located in eastern Kings County, approximately one mile west of the Tulare County border (Exhibit 8). It is located at the junction of State Routes 43 and 137. Corcoran has a 2008 population estimate of 26,047 people. Incorporated in 1914, Corcoran has been built on a strong agricultural base because it is located near one of the most remarkable geographic features in the San Joaquin Valley, the Tulare Lake Basin, which is considered to be among the most fertile regions in the world (City of Corcoran 2008).

One of Corcoran's industries is the state prison. Corcoran State Prison (Corcoran I), completed in 1989 is the state's largest prison. To date, the prison employs 1,900 individuals. California Substance Abuse Treatment Facility and State Prison (Corcoran II) completed in 1997 employs 1,745 individuals and has a 21-bed hospital wing addition. The Department of Finance 2008 estimated inmate population for the facilities is 12,914 (City of Corcoran 2008).

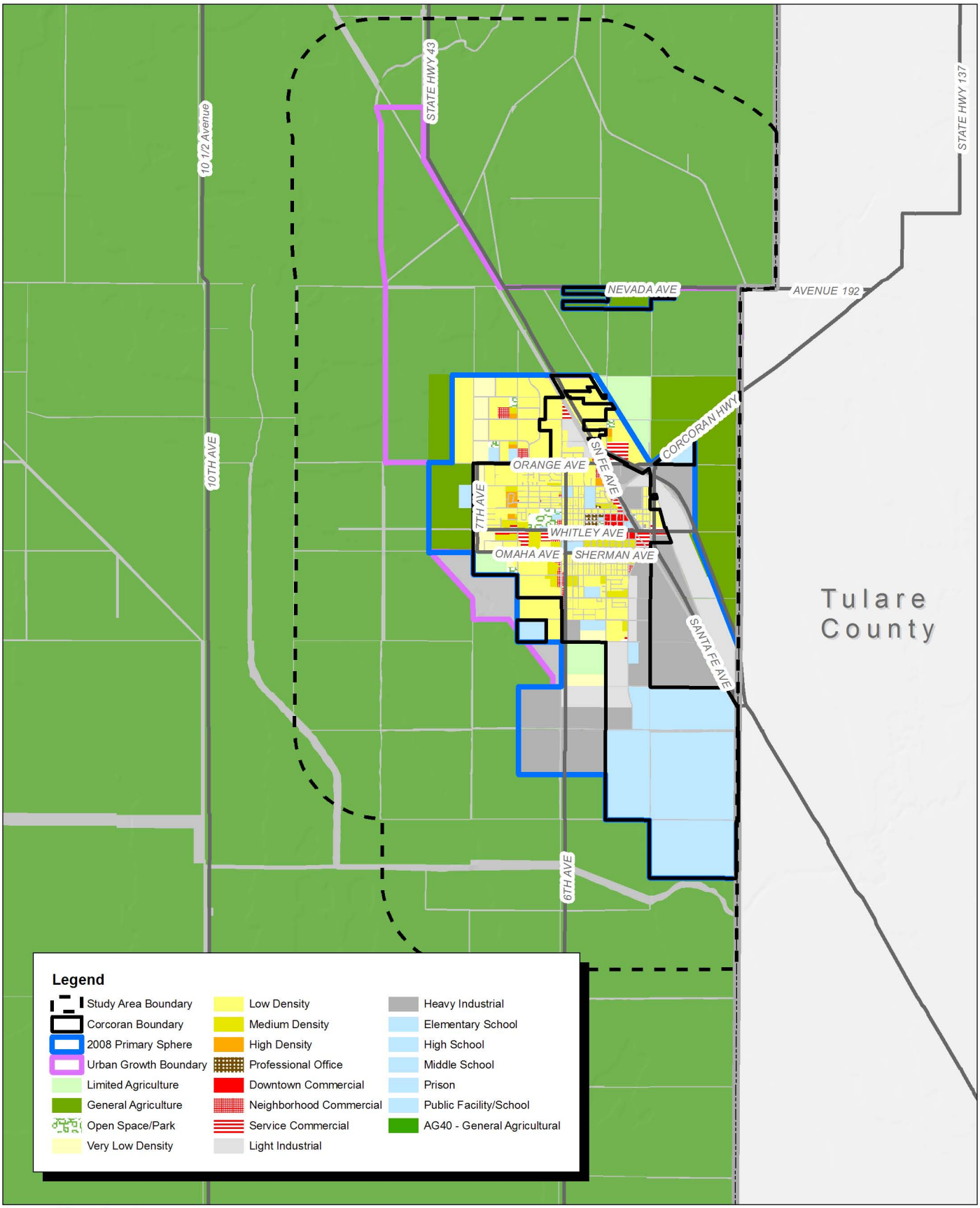
Land planned for urban development is 8,037 acres in the Primary Sphere and 5,466 acres in the UGB The primary crops grown in the Corcoran Study Areas (as defined by Kings County GIS database, 2003) are as follows: cotton (11,026 acres); grains and hay (3,191 acres); alfalfa (2,708 acres); corn (2,414 acres), and sudan (418 acres).

1.3.4 - Stratford

Stratford is a census-designated place (CDP) in Kings County, California. It is part of the Hanford - Corcoran Metropolitan Statistical Area. Stratford is located approximately 21 miles southwest of Hanford and 9.5 miles south of Lemoore (Exhibit 9). The population is approximately 1,264 people (US Census Bureau 2008). The town is located on Highway 41 between Lemoore and Kettleman City.

Stratford's origins date to the construction of the Southern Pacific Railroad line from Visalia to Coalinga. The railroad enabled the farmers to easily and economically transport their crops to market. It is still a farming community today, with a large grain storage complex and one of the largest farm equipment companies in Kings County (Kings County Association of Governments 2007).

Land planned for urban development is 461 acres in the Primary Sphere and 467 acres in the UGB. The primary crops grown in the Stratford Study Area (as defined by Kings County GIS database, 2003) include: cotton (4,291 acres); grain and hay (2,112 acres), and grain sorghum (437 acres).



Source: Kings County.

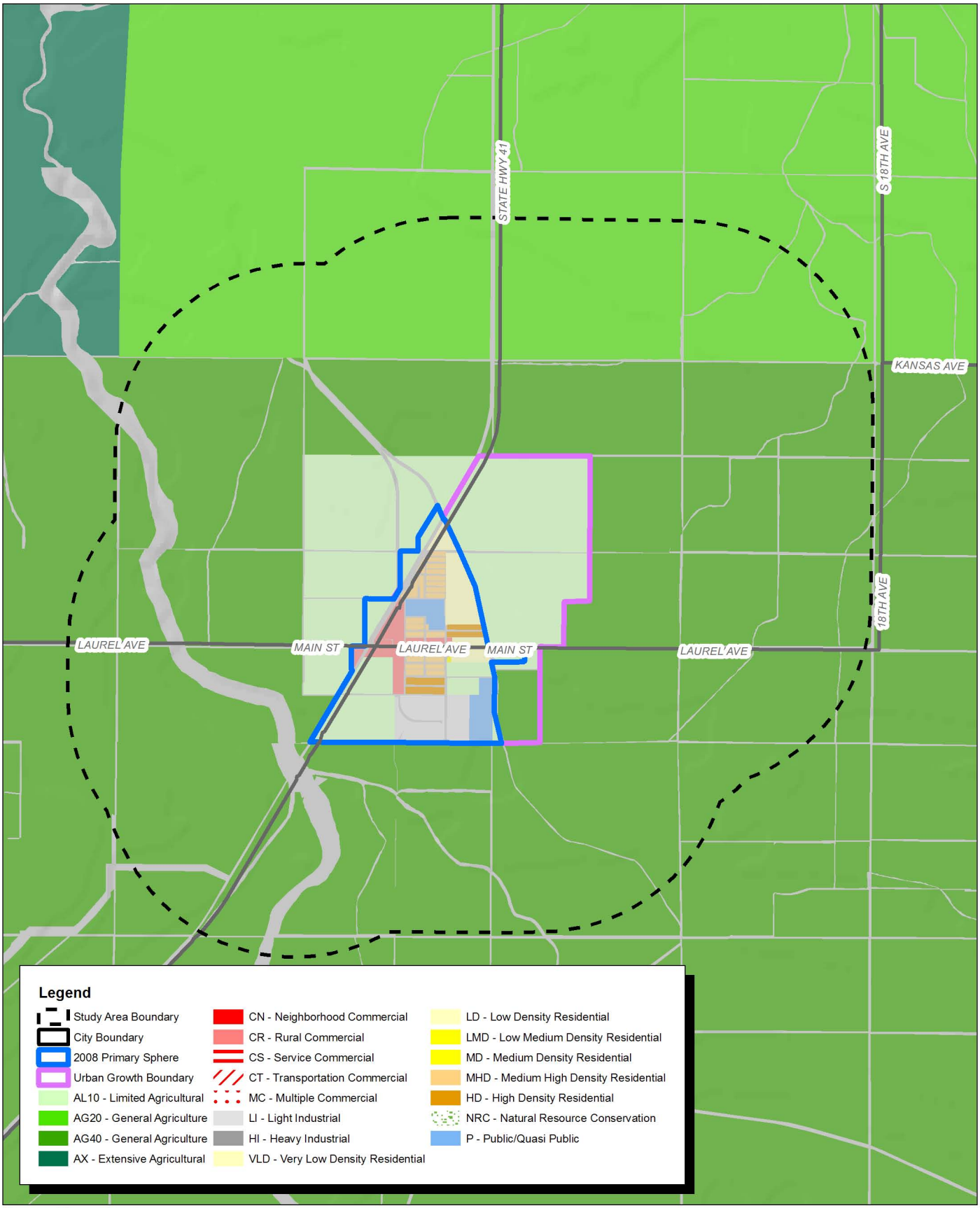
NORTH

8,000 4,000 0 8,000

Feet

Michael Brandman Associates

Exhibit 8
Corcoran
Agricultural Study Area



Source: Kings County.

NORTH

3,750 1,875 0 3,750

Feet

Exhibit 9
Stratford
Agricultural Study Area

Michael Brandman Associates

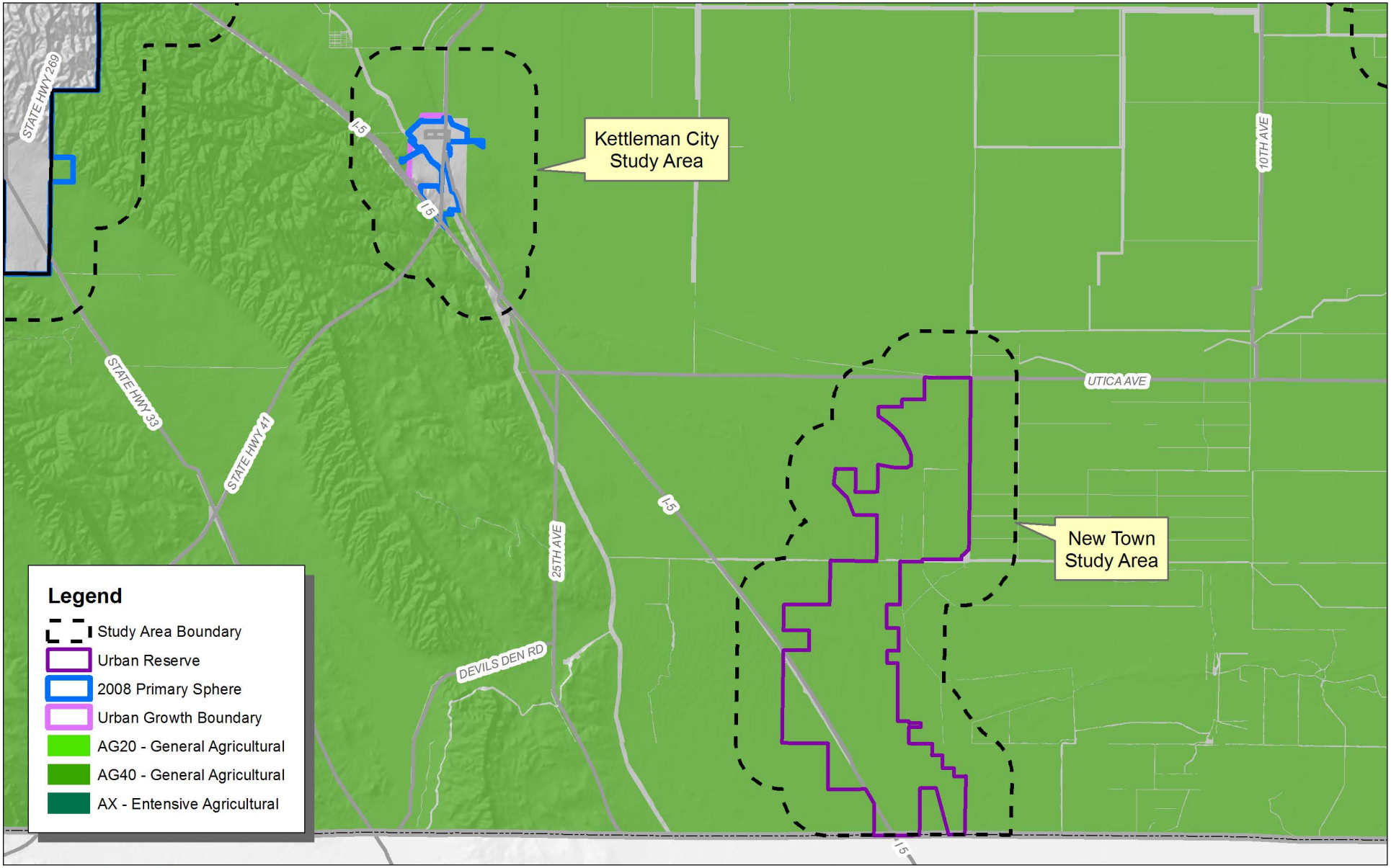
1.3.5 - Kettleman City/New Town

Kettleman City is a census-designated place (CDP) in Kings County, California. It is part of the Hanford - Corcoran Metropolitan Statistical Area (Exhibit 10). The population is approximately 1,499. It is near the halfway point between Los Angeles and San Francisco on Interstate 5 at Exit 309 (US Census Bureau 2008).

The early 1970s saw completion of two substantial projects that had significant impacts on the Kettleman City community. These included the completion of the California Aqueduct and the opening of Interstate 5. The community is located at the base of the Kettleman Hills near the historic shoreline of what used to be Tulare Lake. The hills around Kettleman City were used by sheep owners as grazing land for their flocks. State Route 41, from the Sierras to the Pacific, and Interstate 5, from San Francisco to Los Angles, intersect at Kettleman City, which now has motels, restaurants and service stations (Kings County Association of Governments 2007).

A "new town" has been proposed south of Kettleman City near the Kern County border. The County considers it too early in the planning review process to accurately discuss the project in this document. The General Plan will be amended at the appropriate time to include the project. The area will be generally described as a "New Town Reserve", and is referred to as "New Town" or Urban Reserve in the balance of this Study.

Land planned for urban development is 807 acres in the Primary Sphere and 358 acres in the UGB The primary crops grown in the Kettleman City/New Town Area (as defined by Kings County GIS database, 2003) include: cotton (4,614 acres); grain and hay (4,857 acres); field crops (3,641 acres); safflower (2,625 acres), corn (1,298 acres); pistachios (364 acres); and tomatoes (303 acres).



Source: Kings County GIS.

Exhibit 10
Kettleman City / Urban Reserve Agricultural Study Area

NORTH

Michael Brandman Associates

SECTION 2: IMPACTS OF FARMLAND CONVERSION

2.1 - METHODOLOGY

This report utilizes multiple factors in determining the impacts of farmland conversion in Kings County. These include General Plan policy factors set forth in the Kings County General Plan and the General Plans of the cities identified in each of the Study Areas, as appropriate. Further, the report examines the potential economic losses related to farmland conversion as well as numerous other important criteria that determine the relative value of farmland at its current use. Kings County has developed an "Agricultural Priority" map which ranks the importance of preserving land as: Very Low; Low; Low-Medium; Medium; Medium-High; and Highest. These "priorities" were developed based upon the following: Farmland Designation, Land Use Designation, availability of water, soil type and quality, proximal land uses, projected urban growth factors, and others. Each of these is discussed in detail below. These Agricultural Priorities are shown on each of the Study Area Maps in Section 2.5 that follows.

2.2 - KINGS COUNTY GENERAL PLAN POLICY FACTORS

Given the presence and importance of farming and agricultural-related industries in Kings County, the preservation of farmland is addressed in terms of land use policies in the various General Plans adopted within the County, including the County's own General Plan. However, the current Kings County General Plan does not set forth specific criteria for determining the appropriateness or mitigation of agriculture conversion. Kings County's General Plan update policies will address the need and purpose for conservation of agricultural land as well as means by which to do so. These encourage infill development in existing urban areas as well as interim land use designations regarding individual Spheres of Influence.

The purpose of this study is to set the evaluation factors and consider the impacts related to farmland conversion. The outcomes and findings of this report will help determine specific policies factors related to farmland conversion and appropriate mitigation strategies for inclusion into the 2009 Kings County General Plan update.

2.3 - DEPARTMENT OF CONSERVATION FARMLAND DESIGNATIONS

The California Department of Conservation (DOC) has developed its Farmland Mapping and Monitoring Program (FMMP) to rank the value or potential value of land for agricultural uses . The purpose of the FMMP is to provide impartial data to decision-makers to be used in land use decisions. The FMMP also produces "Important Farmland Maps" which utilize many of the same criteria for resource quality (i.e. soils) along with land use information. The following is a discussion of the farmland categories found on the "Important Farmlands Map."

Kings County is currently in disagreement with the DOC regarding the urbanization of Prime Farmland in certain areas throughout the County. The DOC has shown the conversion of Prime Farmland to urban uses in areas where the land is used for agricultural ponding basins or is part of the Santa Rosa Rancheria. Both of these uses do not constitute the urbanization of these lands in opinion of the County. See Exhibit 4 for the specific locations of these areas of disagreement.

Prime Farmland (P). Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance (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 irrigated agricultural production 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, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

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; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

2.4 - FACTORS IN DETERMINING THE APPROPRIATENESS OF FARMLAND CONVERSION

The following factors are important in determining where farmland conversion should be forestalled and where it would best occur as described below. Each of these factors were used together and evaluated by Kings County Planning Department in order to devise the Agricultural Priority Maps that follow on Section 2.5. These maps set forth a ranking on lands from Very Low to Highest in terms of the priority of preserving the land.

2.4.1 - Water Supply

The supply of water is an important component to crop production in Kings County. It has had a direct impact on yield increases in recent decades. Many water districts have specific limits on the amount of water that can be delivered for agricultural irrigation. Considering the state's current water crisis due to reduced precipitation/snowpack, limited storage capacity, ever increasing demand for greater supply, growing competition with other western states, and environmental concerns that have led to the lower water allocation, water supply will continue to be an important factor in the value of farmland. The availability of a reliable water source was a factor in the creation of the County Agricultural Priority Map. The future availability of water in California notwithstanding, the County's prioritization of agricultural lands was determined by whether a parcel was within a water or irrigation district, or within 100 feet of an existing waterway.

2.4.2 - Competition for Water

The competition for water between agricultural users and urban users is very important in areas where urban development and farming operations occur concurrently. Urban water users are typically charged more for their water than agricultural users. This is due to the relatively small amount required by individual urban users, especially residential use. Since most urban water costs represent a much smaller percentage of household expenditures than does farming, the higher costs are justified. Due to the higher rate commanded for urban use, farming operations may see their supply dwindle as water districts divert more water for urban uses and increase their revenues. Another potential problem may occur when more agricultural users are replaced with urban users and the fixed-costs of water delivery systems increases.

2.4.3 - Farmland Designation

Farmland Designations developed by the California Department of Conservation, as presented above in Section 2.3, were used as a factor in determining the Agricultural Priority Maps.

2.4.4 - Crop Valuation

Because of the tremendous economic impact that agricultural operations have on Kings County, the valuation of the types of crops historically and/or typically grown specific lands was taken into consideration in this study. However, since commodity prices fluctuate, this factor was not used in

the prioritizing of farmlands for preservation. This factor was used however, in the evaluation of impacts in the various scenarios. (See Section 3)

2.4.5 - Fallow Farmland

Active or inactive use of farmland was an important factor in determining the priority of agricultural land preservation. In this case, the threshold was whether or not a parcel had remained fallow for one year or more.

2.4.6 - Effects of Conversion on Surrounding Farmland

As discussed in Section 1.1.2 Agriculture and Urban Growth Pressures, conversion of farmland to urban uses causes potential impacts on the remaining farmland, such as: restriction of pesticide, fungicide, and herbicide use; restrictions on burning and the generation of noise and dust; crop loss from vandalism, pilferage, increased vehicle emissions; increased roadway congestion that effects safety and transportation costs; and the increase in the value of land based on its potential for urban uses. While this was not a factor in the Agricultural Priority development, it was an important factor in the evaluation of the various scenarios.

2.5 - FARMLAND PRESERVATION PRIORITIES

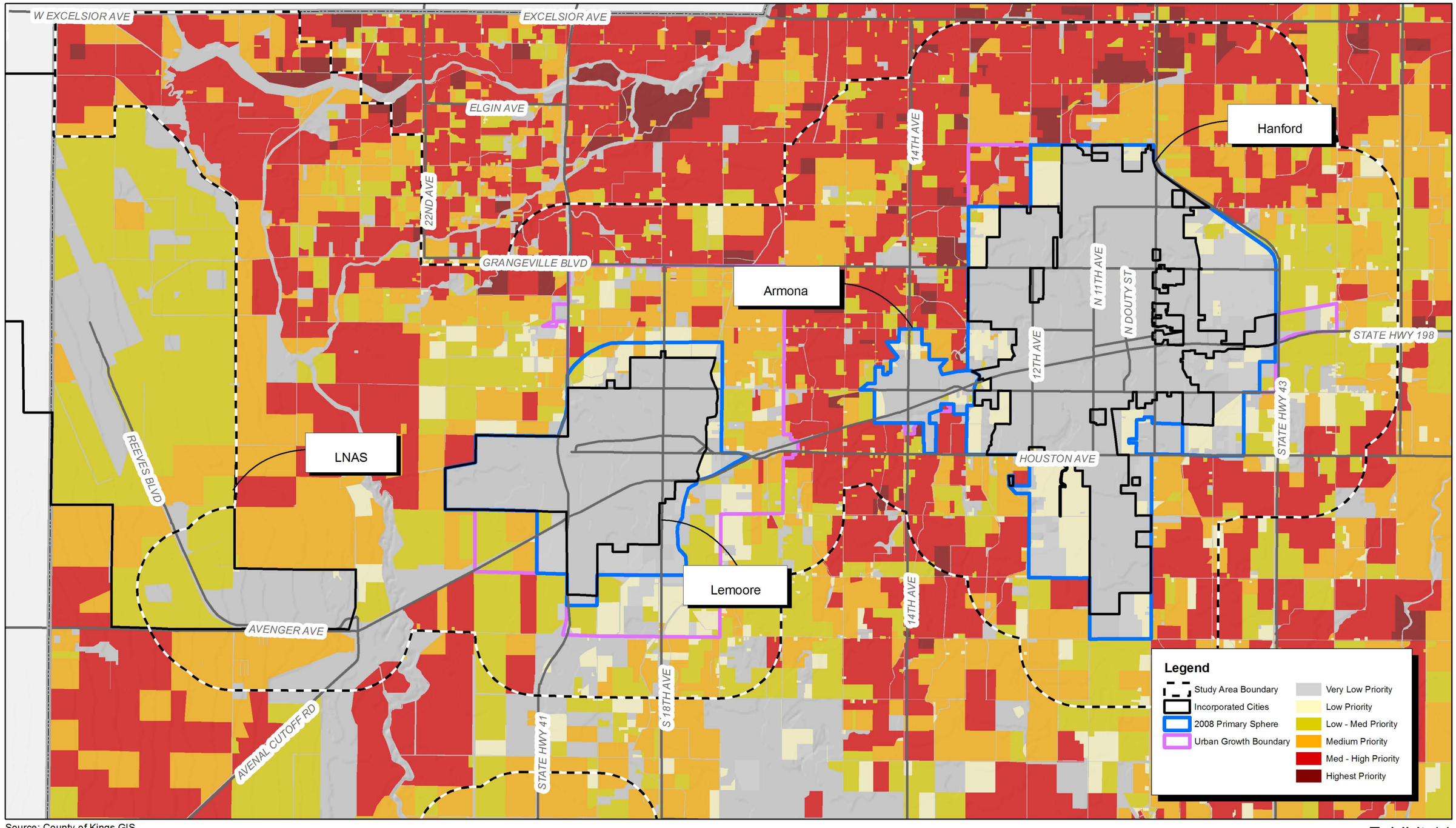
As discussed in the previous section, numerous factors were considered in an effort to develop a ranking of "priorities" of various farmlands throughout the County. Since this study has defined specific geographic areas of study, the results of the prioritization of farmlands will be examined in each of the Study Areas.

2.5.1 - Hanford/Armona/Lemoore/LNAS Priority Land

As indicated on Exhibit 11, there exists a substantial amount of Medium to Highest priority farmland within the Study Area. The Study Area contains: 2,079 acres of Highest Priority; 30,021 acres of Medium-High Priority; 21,675 acres of Medium Priority; 15,880 acres of Low-Medium Priority; 6,745 acres of Low; and 3,023 acres of Very Low. There are 53,775 acres of farmland that is in the Medium to Highest Priority categories in the Study Area. Most of the land in the higher priority category is located outside of the Primary and Secondary Spheres. However, the City of Hanford is surrounded by the higher priority lands on three sides (north, south, and west).

2.5.2 - Avenal Priority Land

The Avenal Study Area contains a relatively small amount of Priority lands (Exhibit 12). The Avenal Study Area contains the following Priority lands: 1,349 acres of Highest Priority; 2,015 acres of Medium-High; 1,798 acres of Medium; 2,544 acres of Low-Medium; 313 acres of Low; and 173 acres of Very Low.



Source: County of Kings GIS.

NORTH

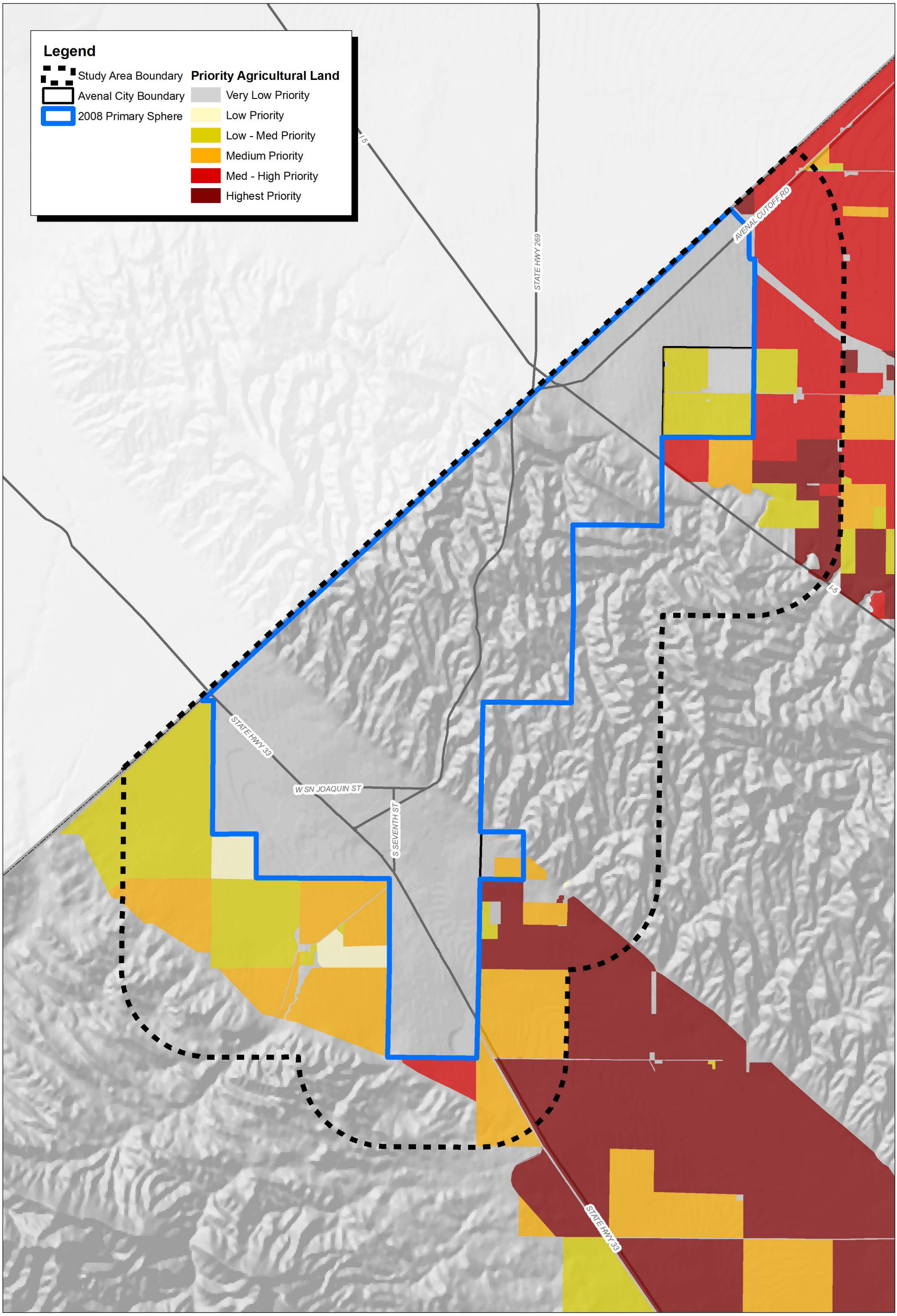
1.5 0.75 0 1.5
Miles

Michael Brandman Associates

26870005 • 08/2008 | 11_hanford_ag.mxd

Exhibit 11
Hanford, Armona, Lemoore
and LNAS Priority Agricultural Land Map

KINGS COUNTY AGRICULTURAL LAND CONVERSION STUDY



Source: Kings County.

NORTH

1 0.5 0 1 Miles

Michael Brandman Associates

26870005 • 08/2008 | 12_avenal_ag.mxd

Exhibit 12
Avenal
Priority Agricultural Land Map

2.5.3 - Corcoran Priority Land

Approximately half of the land within the Corcoran Study Area is prioritized as Medium. However, as indicated on Exhibit 13, there are significant portions of the Study Area that contain lands in the Low-Medium to Very Low category, thus leaving considerable growth opportunity without the impacts related to the loss of more valuable farmland.

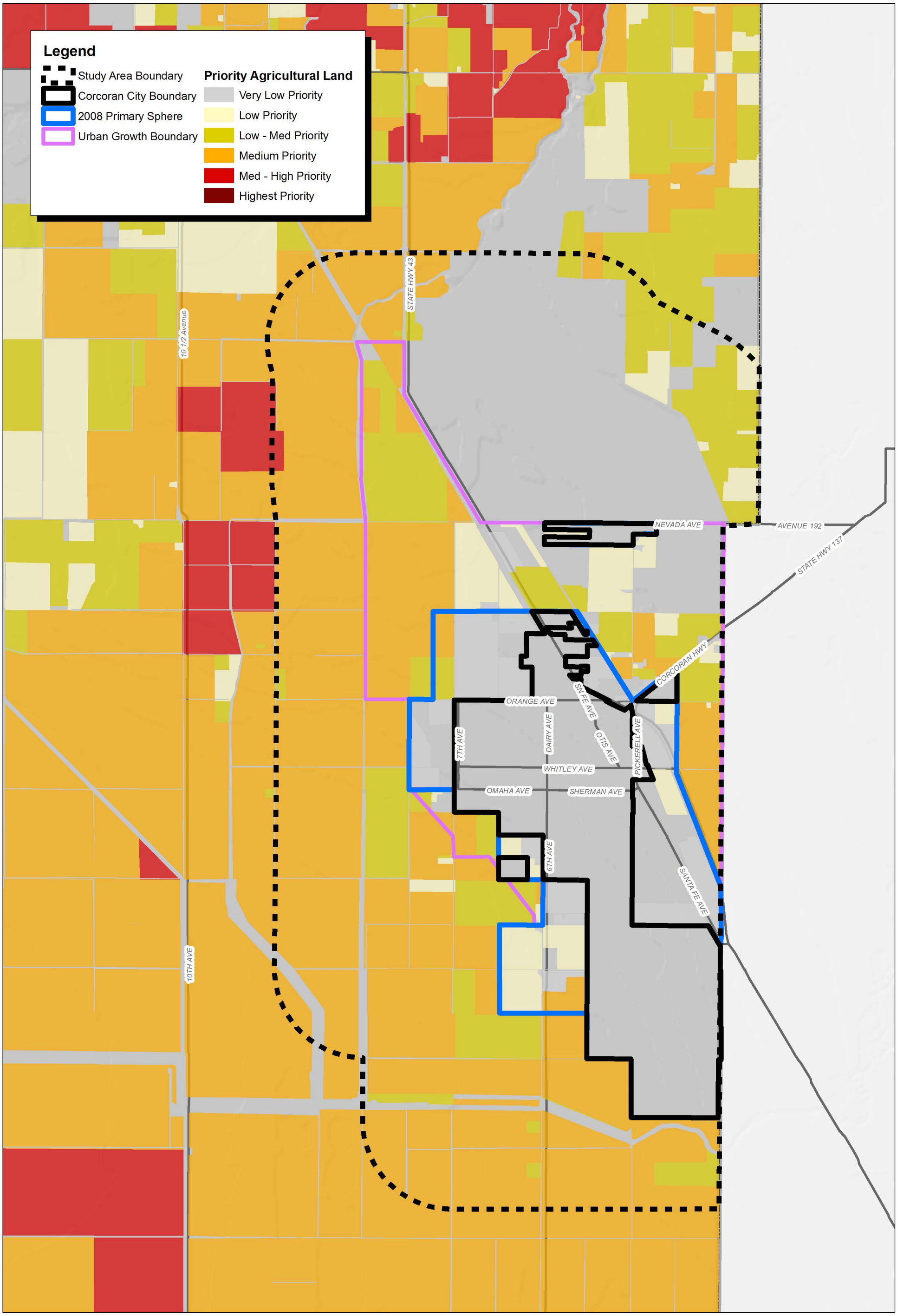
The Corcoran Study Area breaks down as follows: 0 acres of Highest Priority; 52 acres of Medium-High; 12,937 acres of Medium; 4,053 acres of Low-Medium; 1,664 acres of Low; and 1,474 acres of Very Low.

2.5.4 - Stratford Priority Land

The Stratford Study Area contains mostly the Medium and Low-Medium Priority categories with good potential for growth within its Primary and Secondary Spheres. The Area consists of: 0 acres of Highest Priority; 0 acres of Medium-High; 3,920 acres of Medium; 2,407 acres of Low-Medium; 859 acres of Low; and 88 acres of Very Low (Exhibit 14.)

2.5.5 - Kettleman City/New Town Priority Land

The Kettleman City/ New Town area offers some good areas for growth. As shown on Exhibit 15, development at the New Town site includes a significant amount of land that is classified as Very-Low Priority. In addition, there is significant room for growth on lower-Priority land in the area surrounding Ketteleman City, much of which is within its existing Primary and Secondary Spheres. The Study Area breaks down as follows: 0 acres of Highest Priority; 0 acres of Medium-High; 784 acres of Medium; 2,501 acres of Low-Medium; 810 acres of Low; and 0.5 acres of Very Low.



Source: Kings County.

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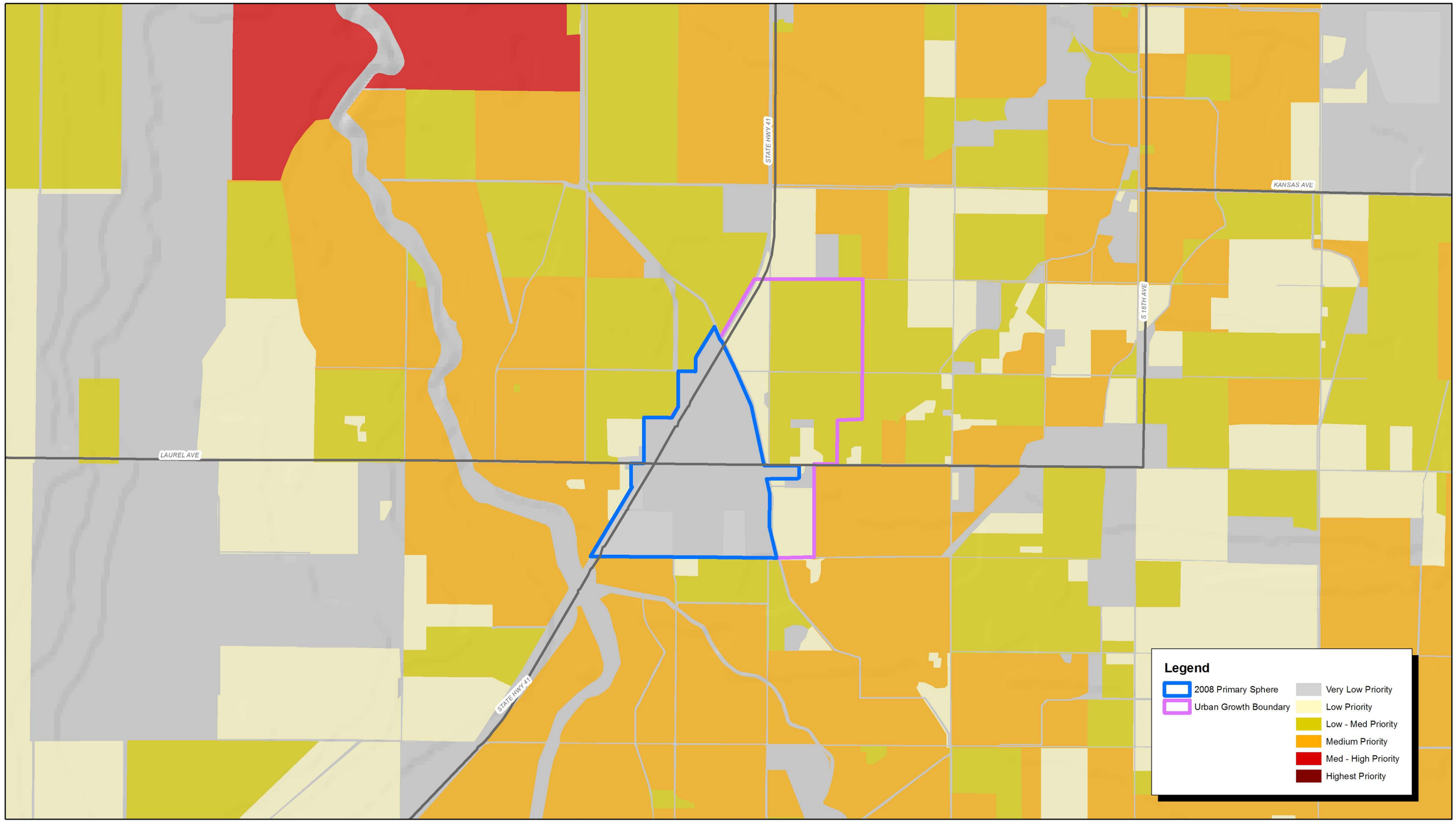
1 0.5 0 1 Miles

Michael Brandman Associates

26870005 • 08/2008 | 13_corcoran_ag.mxd

Exhibit 13
Corcoran
Priority Agricultural Land Map



Source: County of Kings GIS.

NORTH

0.5 0.25 0 0.5
Miles

Michael Brandman Associates

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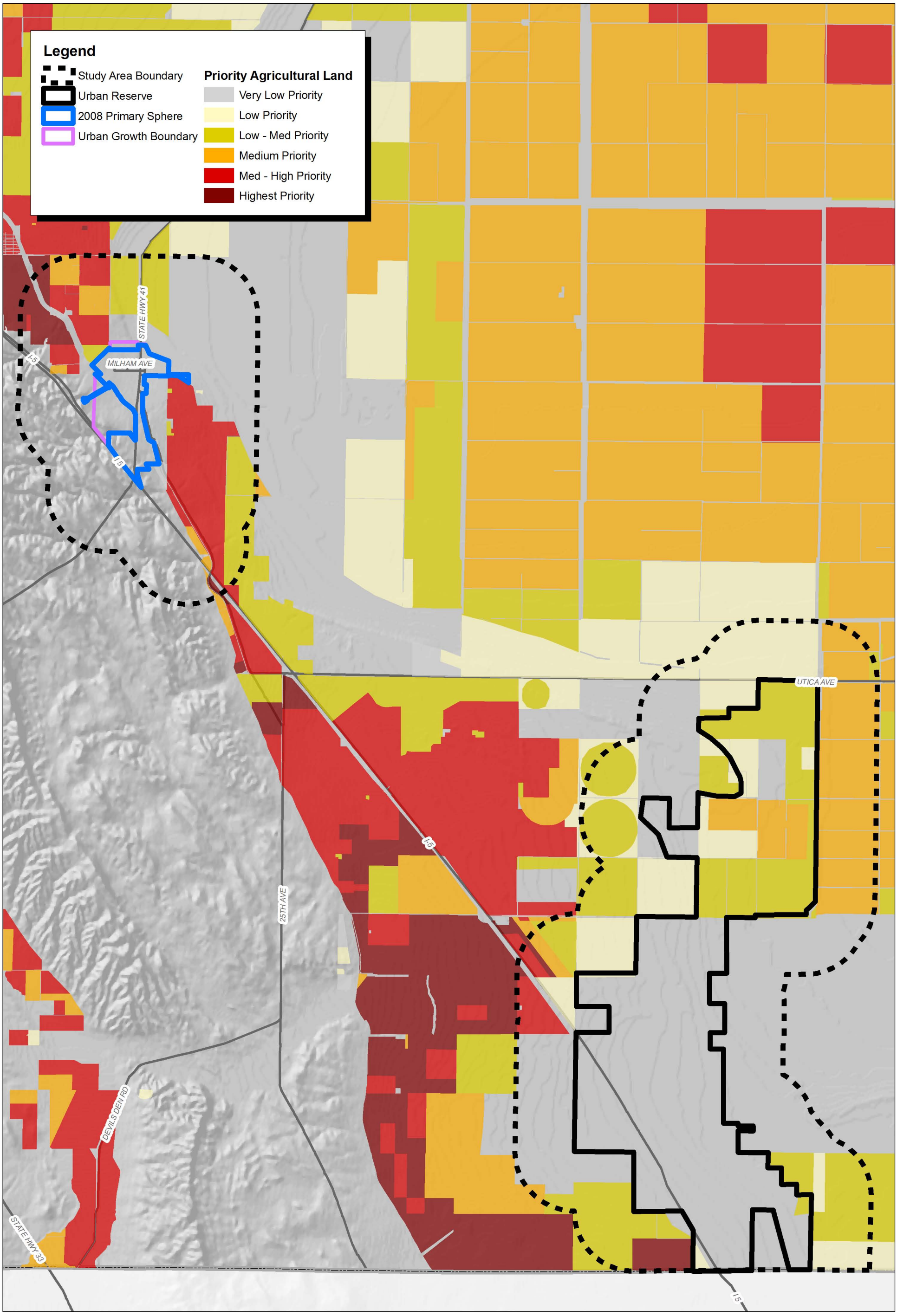
Exhibit 14
Stratford
Priority Agricultural Land Map

KINGS COUNTY AGRICULTURAL LAND CONVERSION STUDY



Source: Kings County.

Michael Brandman Associates

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Exhibit 15
Kettleman City / Urban Reserve Priority Agricultural Land Map

SECTION 3: EVALUATION

This section briefly identifies alternative courses of action and mechanisms to address the conservation of valued agricultural lands. Factors which may limit effectiveness of such measures are identified.

3.1 - NO-ACTION SCENARIO

Under the No Action Scenario, which serves as the control for evaluation, the status quo is maintained indefinitely. In this scenario, development will continue to occur and land owners may develop their land as it is their legal right to do so, without the requirement of mitigation for lost agricultural resources. However, this is not meant to imply that haphazard development will occur, as the County and the incorporated cities therein have general plan policies in place that ensure orderly growth. These policies generally require efficient use of existing infrastructure, encourage infill development, disallow leap-frog development, and strive to protect agricultural resources to the extent possible. In addition, development within a Sphere of Influence will require an annexation and subsequent review and approval from the Local Agency Formation Commission (LAFCO). LAFCO has its own guidelines for approving annexations and other jurisdictional boundary changes, and its primary purpose is to maintain orderly growth and protect prime agricultural lands.

In the No Action Scenario, current zoning is the primary conservation tool. However, a substantial portion of each of the Study Areas includes lands within the Primary and Secondary Spheres. Agricultural lands in these Spheres are typically zoned as Limited Agriculture or General Agriculture. In the case of the Hanford-Armona-Lemoore-LNAS Study Area, there exists some Exclusive Agriculture zoning as well, because of the 3-mile buffer around LNAS. The Limited Agriculture zoning classification is intended to serve as a buffer between urban uses and intensive agricultural uses. Essentially this zone is an interim zoning classification that precedes expected future urban growth. Under the current zoning within each of the Study Areas, it seems accurate to note that the preservation of agricultural lands within the Study Areas is not intended to be accomplished through zoning alone. According to a joint report prepared by the American Farmland Trust and the Agricultural Issues Center, the use of zoning alone as a means of farmland preservation has proven to be mostly ineffective except in areas that have very restrictive zoning codes in terms of permitted uses and very large minimum parcel size (2006). Where zoning alone is intended to act as a conservation tool of farmland, the outcome is often one that ultimately does not conserve farmland. Some of the primary reasons for this include:

- Zoning Restricts individual parcels
- Zoning can be subject to political climate and market climate.
- Land owner resistance to economic restriction on their land
- Restrictions on the land can be somewhat easily changed through a zone regulation or district change.

- Can lead to incompatible uses as urban uses abut farmland, because conflicts, and increase non-farm use value of surrounding land.

Kings County is essentially operating under the equivalent of a No Action Scenario with reliance upon current zoning assisted by the Williamson Act, which is also a temporary measure. However, the County is currently preparing a progressive and comprehensive approach to farmland preservation. Simply continuing under the current system as the only means to preserve farmland and stem the premature conversion of farmland does not occur may not be enough to accomplish County goals.

3.2 - DEVELOPMENT MITIGATION AND CONSERVATION EASEMENTS

The use of mitigation for new development in an effort to preserve farmland, by directing the location of new growth, is one mechanism that has become increasingly popular in California. Essentially, the agency charged with the regulation of land use collects fees prior to the issuance of grading and/or building permits. The fee can either be based on assessed value of the land slated for development, or a direct acre-for-acre trade. In fact, many jurisdictions in California require mitigation equaling as much as five acres of "preserved" land for every developed or "lost" acre of farmland.

Mitigation fees are collected by the jurisdictional agency and the funds are set aside to purchase land elsewhere or to purchase agricultural easements on farmland at the location of the agency's is choosing. The most successful programs utilize the purchase of agricultural easements. Agricultural easements are similar to the Transfer of Development Rights (discussed later in this report) in that the right to change the land use to any designation except exclusively farming is sold to the agency to be held in perpetuity. The landowner still maintains all other rights on the land, including the right to use the land for exclusively farming activities, the right to hold title, the right to sell, the right to give or donate the land. The restriction of land use to exclusively agricultural is passed on to subsequent owners of the land through deed restrictions. Typically the amount paid for the easement is the difference between assessed value as non-agricultural and assessed value as agricultural use.

Some of the benefits of the use of development mitigation for the purchase of agricultural easements are that it allows agencies to guide urban development to areas where it makes sense to do so, and preserve productive farmland in areas away from the threat of urban development. It may also be a benefit to the farmers whose land is placed in the easement as it allows for reinvestment or upgrade of their farm and equipment with the payment they receive for the easement. In addition, if a ratio is used that is greater than 1:1, the potential to protect additional farmland acreage exists, while still allowing for urban growth.

Since the overwhelming changes that have swept California since the passage of Proposition 13 in 1978, local agencies have had to utilize various tools to help pay for the costs of public infrastructure, facilities, and services. One has been the use of development impact fees or "fair share" payments

designed to mitigate the effects of new development. This has been permitted under the Mitigation Fee Act (Government Code § 66001). Essentially, new development pays for itself. Due to the general acceptance of development's responsibility to pay for itself in California as standard operating procedure and the use of mitigation to offset impacts pursuant to the California Environmental Quality Act (CEQA), this method of farmland preservation can be very successful.

3.3 - AGRICULTURAL BUFFER ZONES

Agricultural buffers are typically defined in two ways. One is the "adjoining buffer" which usually refers to the use of a wall, a street, specific setback, or even vegetation. The second is the "geographic buffer" which entails the use of wide natural or planted vegetated areas which act as either an informal or formal demarcation of an urban growth line.

While the use of agricultural buffers has proven to be an effective tool (at times) to protect urban and agricultural land uses from each other, its use as a broad-based and effective policy tool for the preservation of farmland would not be expected in this case. Where it would be used as an informal or formal urban growth line, it would have similar characteristics as an Urban Growth Boundary; the application of an Urban Growth Boundary is described below.

3.4 - URBAN GROWTH BOUNDARIES

The use of Urban Growth Boundaries (UGB) has certainly grown in popularity over the past decade. Ultimately, UGBs represent the creation of a boundary over which development cannot cross. In California, the process can be initiated by voter approval or Council action. Typically the UGB is set for 20 years or more. The use of an UGB is an effective tool for preserving farmland or other natural resources. Some of the benefits of the use of an UGB include:

- Preserves community identity (such that nearby communities do not merge together)
- Promotes urban/suburban revitalization
- Saves tax money in that it forces the more efficient use of public infrastructure
- Can encourage the development of affordable housing
- Development patterns tend to be more conducive for effective use of public transit
- Open space is nearby to urban centers
- Promotes long-term thinking about a community's future.

Additionally, if the UGB is initiated and approved by voters, any future change to it requires voter approval, which can be quite a powerful tool. In Kings County, the City of Lemoore has added policies to its updated general plan that call for the formation of an UGB.

The use of an UGB as a tool to preserve farmland would not be an effective tool for use by Kings County. First, an UGB is a tool more appropriately used by individual cities. The County would have to work with each of the land use agencies throughout the County to persuade them to adopt

such a planning tool. The County does not have jurisdiction over land use decisions within incorporated city boundaries. Secondly, if these were individually adopted, they may differ from the long-term plans of the County to preserve farmland. As a result, the County would have little, if any, say in how farmland is preserved (or not preserved) in the County.

3.5 - TRANSFER OF DEVELOPMENT RIGHTS

The use of Transfer of Development Rights (TDR) is a tool that is sometimes used to preserve agricultural lands or other environmentally-constrained or valuable land. It is essentially a market-driven strategy that allows a rural resident or landowner to transfer their development density or intensity rights to a developer so that the developer may develop property where urban growth may be more desirable (the "receiver" location) and a rate of growth that may be greater than would otherwise be permitted at the original "transfer" location. The developer pays the donor landowner a fee and the landowner agrees to have a deed restriction placed on their land that prohibits them from developing it. However, the landowner still maintains the rights to hold, sell, give, or donate their land in the future. The deed restrictions on development, however, are transferred if ownership of the land changes.

However, the use of TDRs does not guarantee the preservation of farmland, as it is market-driven. In addition, it would be risky to attempt to preserve certain contiguous areas of farmland since it is up to the landowner to participate. In addition, a city or municipality may not want growth intensities beyond what was contemplated in their general plan. There is certainly the logistical factor in this case; the County cannot transfer development rights to an individual city over which it has no jurisdiction.

SECTION 4: CONCLUSIONS

As discussed in this report, the value of farmland in Kings County and the San Joaquin Valley as source of food and food products for the nation, as well as the world, and as a paramount economic engine that drives state and local economies, cannot be understated. In direct and looming conflict to the collective values of this land are current and future growth pressures. In order for Kings County to plan for its future by preserving the finite nature of important agricultural lands, all while accommodating necessary urban growth, it must develop a long-term, comprehensive plan to ensure that all of its needs are met.

It is clear that the pressures of urban growth are real. It is also shown that there exist substantial areas of Medium, Medium-High, and Highest Priority farmland within each of the Study Areas contemplated in this study; these are the areas with the highest growth potential. It is also evident that without a plan and new set of policies, much of this land will be lost forever without any guaranteed protection through some mechanism, tool, or strategy--all of this at a great economic loss to the local economy, as well as a cumulative loss of farmland for the entire state.

This report concludes that Kings County should enact policies to set forth a Development Mitigation and Agricultural Easement mechanism to accomplish its goals. This approach and other potential strategies were set forth above in Section 3. As discussed above, the use of mitigation fees on new development (or "fair share" payment) is a common practice in the development process in California, as a result of the public sector's inability to pay for improvements to infrastructure, facilities, and services resulting from new development, as well as from the environmental review process.

The use of the Development Mitigation and Agricultural Easement also allows the County to confine growth, while preserving farmland that is away from urban growth pressures. Due to the value of the land to be developed, the County could receive a more favorable benefit through the use of higher protected-to-developed land ratios. In addition, many farmers will benefit from the payment received when an agricultural easement is placed on their property, which could lead to re-investment in their farms and an improved quality of life.

An outline of the recommended policy is provided in the following section.

SECTION 5: POLICY RECOMMENDATIONS

The following policy recommendations should be used in the current update of the General Plan or through an amendment to the current General Plan. Subsequently, a County ordinance should be adopted as an implementation action thereof.

Preserve Agricultural Resources Through Land Use Controls and Regulation

The County of Kings shall seek to preserve farmland throughout the County while allowing for a certain amount of urban growth in areas where it is appropriate to do so.

The County should consider revising existing zoning regulations as they pertain to Agricultural Zones to include a discretionary review/approval process to evaluate the granting of easements for habitat conservation or restoration purposes, or for other purposes that would limit agricultural use of a property. The purpose of the discretionary review would be to limit the conversion of high quality/high value agriculture lands to non-agricultural uses and avoid compatibility conflicts between proposed habitat/wetland areas and proximate agricultural uses. It is also recommended that the County coordinate closely with the State Department of Fish and Game and other local, state and federal agencies that may be interested in acquiring such easements for habitat restoration or other purposes so that both agencies are aware of how such acquisitions may impact Agricultural Resources in Kings County.

The County should implement a Farmland Preservation Mitigation Strategy that requires proponents of new development to mitigate the loss of farmland. Land within the Primary Sphere is exempt from mitigation requirements since it is planned and devoted to urban use. Variable Rate mitigation may be employed within the Urban Growth Boundary (UGB) when appropriate consideration is employed by project proponents to increase residential densities through smart growth practices and facilitate the prevention of significant outward expansion. Density ranges within the UGB should be mitigated using ratios to be determined by the County. These ratios should be inversely proportional to the overall density of a project. For example, low density developments should require a greater amount of land as mitigation, where higher density projects would require less land for mitigation.

To the extent possible, preserved farmland should have equal or greater priority than the land to be developed, as shown on the 2009 Kings County Agricultural Priority Map.

Farmland will be mitigated through the use of Agricultural Easements placed on willing landowners outside of the areas where urban growth pressures are expected or in other areas the County deems appropriate. The price of the easement to be paid to the landowner should be negotiated by the County and agreed upon by the property owner. The basis for the fee should be the difference between the assessed value of the property that is being developed as a non-agricultural use and the assessed value of the land to be developed as an agricultural use.

Agricultural Easement is defined as follows: An agreement where a landowner agrees to forgo the right to develop their property in any manner except solely for the purpose of agricultural uses defined specifically by the terms of the easement contract and the existing underlying zoning of said property. The landowner retains all other rights to the property including the right to: hold; sell; gift; or donate the land. The landowner shall collect a negotiated fee to be paid by the developer (or from a special mitigation fee bank created by the County). The County (or its benevolent designee) shall maintain the purchased right in perpetuity.

The creation of undersized parcels (10 acres or less) accommodating Farm Home Retention or transfer to family members through the Agriculture Land Division Process, that are located outside of the Study Area Boundaries should be exempt from the agricultural mitigation requirement until such time as there is a transfer of title to a non-commercial farming interest. The transfer to a non-farming interest would require a mitigation ratio to be determined by the County.

The mitigation requirements set forth herein should not apply to the conversion of low quality agricultural land which is also designated as New Town in the Kings County General Plan Update. However, prime farmland, farmland of statewide importance, and unique farmland located within the New Town designation shall not be exempt from these agricultural mitigation policies adopted by the Kings County Board of Supervisors. These lands within the New Town designation should mitigate to the adopted standard.

SECTION 6: REFERENCES

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