

## Appendix B. 2008 Agricultural Resources Assessment

## Appendix

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## **Appendix B: Agricultural Resources**

B.1 - Agricultural Mitigation Fee Investigation MBA, Revised August 22, 2008  
(Contains LESA Model Evaluation as an Appendix to Item B.1)



**B.1 - Agricultural Mitigation Fee Investigation  
MBA - Revised August 22, 2008**



**Agricultural Mitigation Fee Investigation  
Technical Memorandum  
Edgewater Communities Project  
City of Chino, California**

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May 18, 2007 (REVISED August 22, 2008)

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## **ACRONYMS**

ACE	Agricultural Conservation Easement
AG	Agricultural (designation from The Preserve Specific Plan)
AG/OS-N	Agricultural and Open Space Natural (designation from The Preserve Specific Plan)
AMFP	Agricultural Mitigation Fee Program
CEQA	California Environmental Quality Act
CFD	Community Facilities Districts
CVFT	Central Valley Farmland Trust
dus	Dwelling Units
EIR	Environmental Impact Report
FMMP	Farmland Monitoring and Mapping Program
LAFCO	Local Area Formation Commission
LAFCO	Local Area Formation Commission
LCC	Land Capability Classification
LE	Land Evaluation
LESA	Land Evaluation and Site Assessment
NRCS	Natural Resource Conservation Service
OS-N	Open Space Natural (designation from The Preserve Specific Plan)
OS-R	Open Space Recreational (designation from The Preserve Specific Plan)
OS-W	Open Space Water (designation from The Preserve Specific Plan)
OSSA	Open Space Subvention Act
RMP	Resource Management Plan
SA	Site Assessment
SCS	Soil Conservation Service
ZOI	Zone of Influence

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## **SECTION 1: INTRODUCTION**

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### **1.1 - Purpose of Study**

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The focus of this report is related to the potential impacts from implementation of the Edgewater Project in the City of Chino, California. The Project proposes to convert approximately 273 acres of agricultural land to non-agricultural uses. The potential impacts from the Project include the conversion of designated Farmlands and lands currently zoned for agriculture. Conversion could also create indirect impacts to other agricultural lands in the vicinity and to the existing infrastructure that services area producers. This report evaluates the regulatory and legal requirements relating to agricultural land conversions, the direct and indirect values of the subject properties, and opportunities for mitigation.

#### **1.1.1 - Methodology**

To determine a method of agricultural mitigation most suitable for the City of Chino, a comprehensive analysis of current agricultural mitigation programs was conducted, both locally and regionally. A case study approach was adopted and a survey of numerous California municipalities was performed. It was established that the bulk of California's agricultural mitigation programs exist in the central and northern valleys, where there is a long agricultural history that extends deeply into the local economic and cultural psyche.

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### **1.2 - Existing Setting and Regional Land Use Trends**

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The proposed Edgewater Project lies within The Preserve Specific Plan area in the City of Chino. This area was formerly part of the Chino Valley Dairy Preserve until its annexation by the City in 2003. Agricultural uses in this area have been well established since the late 1800s, with dominant agricultural activities being dairy farming, crop production of sugar beets, grains, fruits, nuts, and vegetables. Grazing of sheep, horses, and cattle has also been prevalent. These uses were intensified beginning in the early 1950s, when dairy farmers from Los Angeles and Orange counties began to relocate their operations to the Chino Basin. These operations had relocated due to urban encroachment and other pressures then occurring in the coastal counties.

Over the last two decades, agricultural producers that had relocated to Chino to remove themselves from the pressures of urban encroachment have again been confronted with some of the same circumstances. Urbanization within the inland region has substantially elevated the value of non-urbanized but adjacent agricultural land, thus increasing property tax assessments and the pressure to sell properties for land development. Urban encroachment has also created compatibility tensions as residential uses have been built adjacent to active agricultural lands. In addition, some jurisdictions have actively pursued and encouraged the conversion of agricultural lands. Though State and local

laws and policies provide some protection for existing agricultural uses, many operators have chosen to sell their properties. Motivations for land sales are many and are specific to each landowner and property, but are typically driven by economic factors and/or personal choice.

Table 1, below, illustrates land use conversion in San Bernardino County between 1984 and 2004. During that time, an average of 4,148 acres per year has been converted from agricultural to nonagricultural uses in San Bernardino County. This trend is accelerating; conversions since 2000 average 7,651 acres per year in San Bernardino County.

**Table 1: Land Use Conversion in San Bernardino County, 1984-2004**

Land Use Type	1984 (acres)	1994 (acres)	2004 (acres)	Total Change (acres)	Average Annual Change (acres)
Agricultural Lands	1,033,183	990,799	950,222	-82,961	-4,148
Urban and Built-up Lands	169,349	227,401	259,266	+89,917	+4,496

Source: California Department of Conservation, Farmland Mapping and Monitoring Program. 2004.

**1.2.1 - Factors that Drive Agricultural Land Conversion**

The reasons for the increasing conversion of agricultural lands to urban uses are largely economic and social. The economic factors involved are easy to distinguish, and most public policy efforts aimed at slowing agricultural land conversion have been focused on this aspect. The social factors, on the other hand, are more difficult to define and address from a policy perspective. Much of the phenomena is driven by personal and market choices that have traditionally been outside the purview of policy makers.

**Economic Factors**

Jurisdictions lying adjacent to rapidly growing urban areas have little economic incentive to retain farmlands. The revenues received from agricultural lands are a small percentage of the revenues that can be collected from urban and suburban uses. Growing demand for housing and other uses in these areas drive land values upward and thus provide the motivation for jurisdictions to allow and even encourage urban development. Rising property values also provide the impetus for many agricultural property owners to sell their lands. These sales can provide a tremendous windfall for landowners. Taxation and estate considerations can also play a role in a landowner’s decision to sell.

**Social Factors**

Social factors are largely driven by public perception of agricultural lands and farming in general. Urban dwellers often see agricultural lands as a nuisance or an eyesore. Few urban residents retain any direct connection with food production, and therefore do not have an appreciation for the role that agriculture plays in civilization. Agricultural education is largely absent from curriculums, and

farmers are finding it difficult to recruit the younger generation into farming. Many older farmers are forced to sell if no one in the family is willing to continue the operation. These and other social factors contribute to agricultural land conversion.

### **1.2.2 - Impacts of Agricultural Land Conversion**

The conversion of farmlands to urban development is of worldwide concern. It is especially problematic in the developed world, where urban dwellers have largely lost any direct involvement with the production of their own food. Impacts of agricultural land conversion can be divided into three broad categories: economic, social, and environmental.

#### **Economic Impacts**

The economic impacts of agricultural land conversion include higher costs created when agricultural goods must be transported longer distances from the point of production to the point of sale. On a national level, reliance on imported agricultural products can add to the nation's trade deficit.

Residential and other types of development near existing agricultural operations can impinge upon the operating efficiency of remaining agricultural properties. Restrictions upon plowing and grading activities, the application of pesticides, and hours of operation may be required of agricultural producers in order to "maintain the peace" with their new neighbors. Restrictions of this type often increase the cost of production for agricultural operators. These and other costs may ultimately render the continuation of agricultural operations infeasible.

On a local level, areas with significant agricultural production contain an extensive network of agricultural infrastructure that supports the production and distribution of farm goods. Purveyors of agricultural equipment, supplies, and services rely on a certain level of agricultural production in their local area to stay in business, as do transportation businesses and other support services. Economists refer to an "irreducible minimum," which is the point at which an industry or operation can no longer sustain itself. Once a certain number of agricultural lands in a given area go out of production, the economic infrastructure that supported those lands can no longer remain in business. In turn, the collapse of this supporting economic infrastructure places additional strain on those operations that remain, and soon the remaining lands are also forced to convert. In this manner, the loss of a single agricultural operation can appear less than significant, but the cumulative impact of each loss can actually be significant, since each loss contributes to a region's move towards the irreducible minimum.

#### **Social Impacts**

Many agricultural operations are family-run and contribute to a high degree of social cohesion. The rural nature of agricultural areas can promote a sense of self-reliance, while promoting interdependence among community members. Farming areas generally have less crime than urban areas, and require a much lower per capita level of social and governmental services.

Agricultural land conversion can have significant intergenerational impacts, as younger members of farming families become less inclined to carry on farming operations once their elders retire or die. This creates additional pressure for older farmers to sell their properties.

On a national level, the loss of local production can create the need for increased import of agricultural goods. Excessive importation and lack of domestic production can create a dependence on foreign suppliers that may not be entirely reliable. This trend can increase the nation's vulnerability should food supplies or transportation networks be cut off or threatened by natural occurrences or human-caused disruption.

### **Environmental Impacts**

Agricultural lands provide open space that can have aesthetic benefits. This open space can also provide important habitat for many types of wildlife. Birds use agricultural fields and orchards for foraging and nesting, as do many types of small mammals. Fallow or inactive farmlands can be valuable habitat for a variety of species. The conversion of agricultural lands removes these lands for use by wildlife, and can lead to declines in wildlife and biological diversity in general.

Loss of farmlands can have tremendous impacts on hydrological processes in a given area. Open farmlands provide areas where rainfall can enter the groundwater system and thus recharge groundwater aquifers. The impermeable surfaces created by urbanization do not allow these functions. Impermeable surfaces can contribute to runoff conditions that are difficult to manage and can contain high levels of urban pollutants. These pollutants can cause significant ecological disruption to downstream water bodies, including rivers, lakes, reservoirs, and oceans. Wildlife and other organisms that use these resources can be adversely affected by higher pollutant levels. Urban contaminants can also create significant problems for human uses, such as water dependent recreation and drinking water supplies.

The loss of local agricultural production can lead to increases in emissions of harmful air quality constituents as agricultural products are transported over longer distances. Burdens on local transportation networks can also be increased as more heavy trucks enter urbanized areas to deliver goods.

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## **1.3 - Regulatory and Legal Overview**

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The following discussion presents the legal and policy issues and constraints associated with the conversion of agricultural lands to non-agricultural uses.

### **1.3.1 - California Environmental Quality Act (CEQA)**

CEQA requires that decision-makers evaluate whether or not the loss of agricultural resources associated with a project is significant. The presence of agricultural lands within a project area does

not necessarily result in the automatic finding of a significance impact. Rather, CEQA provides specific guidelines and a defined process of evaluation for determining the significance of the particular lands in question. If it is determined that the conversion of the lands in question would create a significant impact, then those impacts must be mitigated (i.e., the impact eliminated or reduced to less than significant levels) or the project must be found to have other benefits that outweigh the identified impacts.

Local jurisdictions can adopt their own thresholds for determining the significance of a project. In the absence of local standards, Appendix G of the CEQA Guidelines provides specific thresholds to determine if a proposed project would result in a significant impact to agricultural resources. Under the CEQA Guidelines, a project's impact would be significant if the project were to do any of the following:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on maps prepared pursuant to the Farmland Monitoring and Mapping Program of the California Resources Agency, to non-agricultural use;
- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use (i.e., indirect impacts on farmland).

The CEQA Guidelines provide that the California Agricultural Land Evaluation and Site Assessment (LESA) Model can be used to determine the significance of a project's impacts. The LESA model is a quantitative model that evaluates the specific components of an agricultural property and the surrounding area. A more complete description of the model is located in Appendix A, LESA Model Evaluation, of this document.

### **1.3.2 - Farmland Monitoring and Mapping Program**

The terms "Prime Farmland," "Unique Farmland," and "Farmland of Statewide Importance" are legal classifications that are derived from California's Farmland Monitoring and Mapping Program (FMMP). The program rates agricultural lands according to physical characteristics and other factors. Definitions for each of these three land classes are provided below:

**Prime Farmland** is 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 some time during the four years prior to the mapping date.

**Unique Farmland** is 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 Statewide Importance** is 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 some time during the four years prior to the mapping date.

**Grazing Land** is defined as land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres. Due to variations in soil quality, smaller sized Grazing Land may appear within larger pastures.

**Other Land** is defined as 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. Lands containing confined livestock, poultry or aquaculture facilities, strip mines, borrow pits, and water bodies smaller than 40 acres are also considered Other Land. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

The FMMP also inventories and maps a variety of other land use categories. For purposes of determining a project's significance under CEQA, only Prime Farmland, Farmland of Statewide Importance, and Grazing Land are considered. FMMP maps are updated every two years based on aerial photographs, computer mapping, public review, and field reconnaissance.

### 1.3.3 - California Land Conservation Act (Williamson Act)

The Williamson Act was enacted in 1965 with the principal purpose of preserving agricultural and open space lands by discouraging "premature and unnecessary" conversion to urban uses. Nearly 16.9 million acres of land statewide are currently protected under Williamson Act provisions.

The principal component of the Williamson Act is a process that allows private landowners to voluntarily contract with cities and counties to restrict land to agricultural and open-space uses. Landowners entering into such an arrangement agree to a 10-year contract that is automatically renewed unless either the contracting jurisdiction or the landowner chooses to opt-out at the end of the term. In return for restricting uses on their property, landowners are taxed at a significantly lower rate than might be the case if their property were assessed at potential market value. This arrangement is especially important to agricultural landowners with properties adjacent to rapidly

expanding urban areas. In these cases, properties under Williamson Act contract can be taxed at rates ranging from 20 to 75 percent below potential market value assessments. Contracting jurisdictions receive partial reimbursement for reduced property tax revenue from the state via the Open Space Subvention Act (OSSA) program, which is financed from California's General Fund.

A Williamson Act contract on a property obligates the property owner to a variety of restrictions. The minimum contract is 10 years, and remains enforceable even if the property changes ownership. Landowners may opt-out of their contract without penalty only at the end of the term. If the contract is not renewed at the end of the term, the property's assessment value reverts to its potential market value. Should the landowner desire to cancel the contract prior to the end of the term, the contracting jurisdiction must make specific findings that are supported by substantial evidence. The opportunity to alter the use of the subject property is not adequate evidence to support cancellation, or are assertions of unsatisfactory economic return should the property retain its agricultural designation. Should the cancellation be approved, the landowner must pay a cancellation fee equal to 12.5 percent of the current fair market value of the property.

Landowners can be found in breach of contract if they do not comply with the terms of the agreement. Legislation passed in 2004 disallowed the construction of certain residential, commercial, and industrial structures not related to agricultural operations on contract properties. The law allows jurisdictions to impose penalties on nonconforming properties of up to 25 percent of fair market value.

#### **1.3.4 - City of Chino General Plan**

The City of Chino General Plan provides policies, goals, and other forms of broad direction to guide management of the City. Goals and policies of the General Plan that are relevant to agricultural resources are found in the Conservation/Open Space Element, adopted in 1990. The City is currently in the process of formulating a comprehensive Update to the General Plan, which is intended to guide the City through 2025. The Update process is expected to be completed in mid- to late-2008.

The Conservation/Open Space Element contains the following goals, policies, and actions that are relevant to this discussion:

**Agricultural Preservation** - To preserve and protect land devoted to agricultural uses and to promote activities to help achieve self-sustainment (Goal G5-1).

**Continued Agricultural Production** - To encourage property owners with land under agricultural and crop production to continue agricultural operations (Policy P5-1.1).

**Right to Farm Ordinance** - The City shall prepare an ordinance amendment which permits agricultural property owners the right to continue agricultural practices until their property is developed (Action A5-1.1.1).

**County Dairy Preserve** - To encourage the continued operation and production of agriculture in the area designated as the San Bernardino County Dairy Preserve (Policy P5-1.2).

**Honor Existing Williamson Act Contracts East of Euclid Avenue** - The City shall honor and encourage the maintenance of Williamson Act contracts for properties east of Euclid Avenue that may be annexed into the City (Action A5-1.2.1).

**Encourage Buffer Zones** - To encourage the use of buffer zones that minimize conflicts between agricultural and non-agricultural uses (Policy P5-1.3).

**Agricultural/Animal Setback Ordinance** - The City shall continue to enforce its agricultural/animal setback ordinance while encouraging dense buffer zones in the form of landscaping and walls between agricultural and non-agricultural uses (Action A5-1.3.1).

### 1.3.5 - The Preserve Specific Plan

The City adopted The Preserve Specific Plan in 2003. Adoption of the Specific Plan was part of a planning process that included the annexation of approximately 5,435 acres of the Chino Valley Dairy Preserve into the City of Chino. As part of the annexation process, the City also adopted a General Plan Amendment that linked The Preserve Specific Plan with the City's existing General Plan, thus satisfying the requirement for consistency with the General Plan. A programmatic Environmental Impact report (EIR) was also prepared and certified as part of this process.

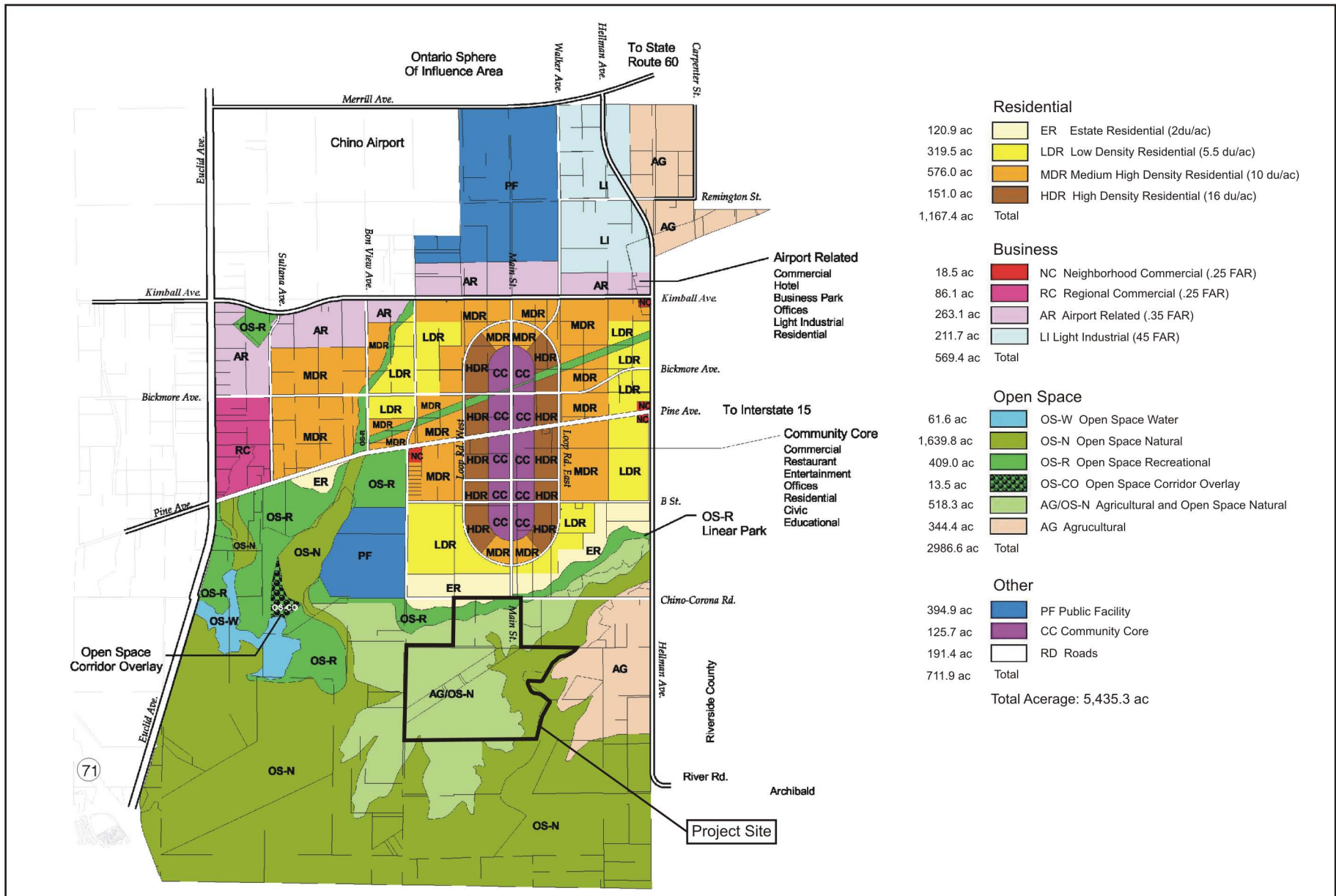
The Preserve Specific Plan designated properties below the 566' elevation, as mapped in The Preserve Specific Plan and EIR (2003), for agricultural and open space uses based on the 566' elevation representing the boundary of the Prado Dam Inundation Area that would be prone to occasional inundation (see Exhibit 1). The area at or below the 566' elevation comprised approximately 2,917 acres, or about 54 percent of The Preserve Specific Plan area. All of the lands proposed for development with the current Edgewater Project were designated for some type of agricultural/open space use under The Preserve Specific Plan, including approximately 197 acres of the Project site that was designated as Agriculture and Open Space Natural (AG/OS-N).

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## 1.4 - Existing Land Use Under The Preserve Specific Plan

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The Preserve Specific Plan designated properties below the 566' elevation, as mapped in The Preserve Specific Plan and EIR (2003), for agricultural and open space uses based on the 566' elevation representing the boundary of the Prado Dam Inundation Area that would be prone to occasional inundation (see Exhibit 1). The area at or below the 566' elevation comprises approximately 2,917 acres or about 54 percent of The Preserve Specific Plan area. The 2003 Preserve Specific Plan (Section V, Open Space Designations) divided the open space land use designations within the Specific Plan area into the following five land use designations (see Exhibit 1):



Source: The Preserve Final EIR, March 2003.



MAP NOT TO SCALE

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# Exhibit 1

## The Preserve Land Use Plan

EDGEWATER COMMUNITIES • CITY OF CHINO  
 AGRICULTURAL MITIGATION FEE INVESTIGATION

- Agriculture
- Agriculture and Open Space-Natural
- Open Space-Natural
- Open Space-Recreation
- Open Space-Water

**Agriculture:** The Agricultural Land Use Designation was intended to provide for agricultural uses including farming, stables, pastures, and grazing.

**Agricultural/Open Space-Natural (AG/OS-N):** The Agricultural/Open Space-Natural Land Use Designation was intended to provide for limited agricultural and open space uses, including passive recreation, trails, crop farming, and open space. It was also intended to protect important biological resources found within lands designated AG/OS-N from incompatible land uses that could damage these resources.

**Open Space-Natural (OS-N):** The Open Space-Natural Land Use Designation was intended to provide for permanent natural open space, wildlife preserves, natural drainage and stream courses, cultural and historic resources, and to protect natural plant and animal habitats.

**Open Space-Recreation (OS-R):** The Open Space-Recreation Land Use Designation was intended to establish open spaces for active and passive recreation, and to provide protection from environmental hazards.

**Open Space-Water (OS-W):** The Open Space-Water Land Use Designation applied to Prado Lake and was intended to preserve water resources.

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## 1.5 - Proposed Land Use Under the Proposed Edgewater Project

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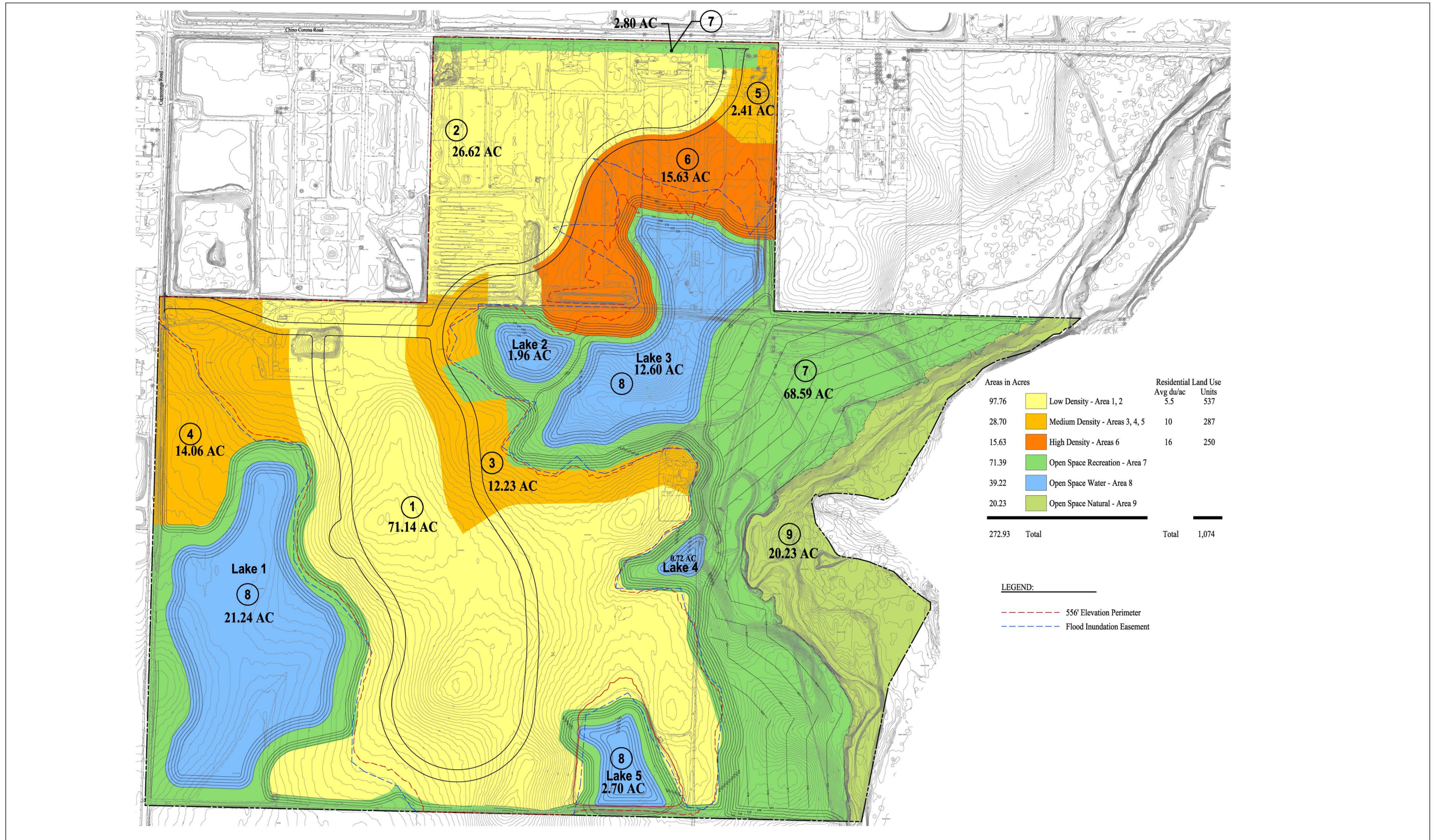
The Edgewater Project site is a 273-acre parcel of land located in the southeast corner of the City of Chino and is part of The Preserve Specific Plan area. The proposed conceptual plan currently designates approximately 142 acres to residential uses and approximately 131 acres to open space uses. The proposed land uses are shown in Table 2 and illustrated in Exhibit 2.

**Table 2: Edgewater Communities Statistical Summary**

Land Use	Type	Dwelling Units (du)	Parcel Acreage (Gross Acres)	Total Acreage (Gross Acres)
Residential	Low Density	537	97.76	
	Medium Density	287	28.70	

**Table 2 (Cont.): Edgewater Communities Statistical Summary**

Land Use	Type	Dwelling Units (du)	Parcel Acreage (Gross Acres)	Total Acreage (Gross Acres)
	High Density	250	15.63	
Subtotal				142.09*
Open Space	OS/Recreation		71.39	
	OS/Water		39.22	
	OS/Natural		20.23	
Subtotal				130.84
<b>Total</b>		<b>1,074</b>	<b>272.93</b>	<b>272.93</b>
* 2.77 acres of the 142.09-acre residential area is planned for public dedication to additional street right of way for Chino Corona Road and Cucamonga Avenue.				



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## Exhibit 2 Proposed Edgewater Project Plan / Land Use

EDGEWATER COMMUNITIES • CITY OF CHINO  
AGRICULTURAL MITIGATION FEE INVESTIGATION

## SECTION 2: AGRICULTURAL RESOURCE EVALUATION

The purpose of this section is to apply a measure of value to the agricultural resources located within the City of Chino. To thoroughly evaluate agricultural lands, a multi-faceted approach is taken to include as many pertinent measures of value as possible, including a broad measure of political and stakeholder interests, regulatory considerations, and a site assessment consistent with the CEQA Guidelines.

While there are commonalities to methods for assigning value to agricultural lands in general, every jurisdiction must apply a standard which reflects the intentions and interests of their particular local situation. In the case studies discussed in Section 3 of this Technical Memorandum, a variety of approaches have been taken, some based on survey and analysis, and some by adoption of an existing standard. The process does not lend itself to a one-size fits all approach.

For the purposes of the initial analysis, a survey-type approach was used to collect the raw valuation data that was used to reach conclusions and establish average value ranges for further study and analysis.

### 2.1 - Land Evaluation and Site Assessment Model Analysis/Results

The City of Chino does not have a local significance threshold for the loss of agricultural resources. In order to objectively evaluate the importance of agricultural resources on the Edgewater property, the California Agricultural Land Evaluation and Site Assessment Model (LESA) tool created by the California Department of Conservation in 1997 is used as a quantitative method for evaluating the effects of converting agricultural land to non-agricultural uses.

Utilizing the LESA Model, a project will result in a significant impact on agricultural resources if it, meets the criteria as shown in Table 3. The LESA model includes both Land Evaluation (LE) and Site Assessment (SA) scoring thresholds. An Agricultural Resource Analysis for the Edgewater Communities Project site utilizing the LESA model is contained in Appendix A of this Technical Memorandum.

**Table 3: California LESA Model Scoring Thresholds**

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant.
40 to 59 points	Considered significant only if LE and SA sub-scores are each greater than or equal to 20 points.
60 to 79 points	Considered significant unless either LE or SA sub-scores are each less than 20 points.

**Table 3 (Cont.): California LESA Model Scoring Thresholds**

Total LESA Score	Scoring Decision
80 to 100 points	Considered significant.
LE = Land Evaluation      SA = Site Assessment Source: California Department of Conservation, 1997.	

**2.1.1 - Land Evaluation**

There are two Land Evaluation (LE) factors used in the LESA Model to determine whether a project would have significant impacts on agricultural resources:

- The Land Capability Classification Rating.
- The Storie Index Rating.

**Land Capability Classification (LCC) Rating**

Soils type is one indicator of how valuable the site is as an agricultural resource and is thus a measure of the capacity of a parcel of land to produce agricultural products. As such, a parcel with highly valued agricultural soils will have a higher LCC rating than a parcel with poorly valued agricultural soils. The LCC rating is based on the suitability of soils for growing crops. The LCC includes eight classes of land designations I through VIII. The criteria used to determine a particular Class is based on landscape location, slope of field, and depth, texture and reaction of the soil. Soils designated as Class I have the fewest limitations for cropland, and soils designated as Class VIII are the least suitable for cropland. Classes I through IV are generally considered arable land suitable for cropland (although Class IV land designations have severe limitations on plant choices that can be grown); Classes V through VIII are generally not considered suitable for cropland, but may be suitable for pasture, range, woodland, or grazing.

Subclasses designated with a lower case letter e, w, s, or c are often used in conjunction with the Classes I through VIII to further describe soil limitations:

- e**      Erosion.
- w**      Water in or on the soil causes limitation in plant growth.
- s**      Soil is shallow, droughty, or stony.
- c**      Climate is generally too cold or hot for many plants.

Class I does not have subclasses; it is considered to have few limitations.

Soil descriptions are further broken down to capability units indicated by a number 0 through 9. These are related to the actual soil content (i.e., limitation caused by gravelly soil, erosive soils, flooded soil, slow permeability, salt or alkali soil, low fertility, or other issues that limit effective rooting depth).

## **Storie Index Rating**

The Storie Index expresses numerically the relative degree of suitability of a soil for general intensive farming. The Storie Index uses soil characteristics such as soil depth, texture of the surface soil, density of the subsoil, drainage, salt content, alkalinity, and relief. The Storie Index is based on a 100-point scale. As part of the LESA Model, a Storie Index score is calculated by multiplying the Storie Index by the proportion of the project area covered by a particular soil.

## **Site Assessment**

There are four Site Assessment (SA) factors in the LESA Model that are used to determine whether a project would have significant impacts on agricultural resources:

- Project Size Rating.
- Water Resource Availability Rating.
- Surrounding Agricultural Land Rating.
- Surrounding Protected Resource Land Rating.

## **Project Size Rating**

The Project Size Rating is based on the LCC acreage figures tabulated under the LE portion of the Model and then determining which grouping generates the highest Project Size Score. This score is a function of the quality of the soil on the project site and vicinity for potential agricultural production.

## **Water Resource Availability Rating**

The Water Resource Availability Rating is based upon identifying the various water sources that may supply a given property, and then determining whether different restrictions in supply are likely to take place in years that are characterized as being periods of drought and non-drought.

## **Surrounding Agricultural Land Rating**

Determination of the Surrounding Agricultural Land Rating is based upon identifying the project's Zone of Influence (ZOI), which is defined as that land near a given project that is likely to influence, and to be influenced by, agricultural use of the subject site. The ZOI is determined by creating the smallest rectangle that will completely contain the project site, then creating a second rectangle that extends one-quarter mile beyond the first rectangle and including each parcel that is completely or partially within the one-quarter mile buffer. The percentage of total land within this area (minus the subject property) that is under agricultural production is then determined. The LESA Instruction Manual's Table 6 is used to derive a value based on the total percentage of agricultural land in the ZOI.

## **Surrounding Protected Resource Land Rating**

This rating is scored in a similar manner as the surrounding agricultural land rating. Protected Resource Lands are those with long-term use restrictions that are compatible with or supportive of agricultural uses and include the following:

- Williamson Act contracted lands.
- Publicly owned lands maintained as park, forest, or watershed resources.
- Lands with agricultural, wildlife habitat, open space or other natural resource easements that restrict the conversion of such lands to urban uses.

The percentage of land within the ZOI (minus the subject property) that is considered a protected resource is then determined. The LESA Instruction Manual's Table 7 is used to obtain a value based on the total percentage of protected resource land in the ZOI.

## **Final LESA Score and Evaluation of the Edgewater Site**

A single LESA score is generated for a given project once the individual LESA factors have been scored and weighted. As shown in Table 3, scores are based on a scale with a maximum 100 points. A score of 0 to 39 points means the resources are not considered significant. A score of 40 to 59 points is considered significant only if the LE and SA sub-scores are each greater than or equal to 20 points. A score of 60 to 79 points is considered significant unless either the LE or SA sub-scores are each less than 20 points. Finally, a score of 80 to 100 points is considered significant regardless of the LE or SA sub-scores.

The Edgewater Project site has been used for agriculture and overlies soils classified by the Natural Resource Conservation Service (NRCS) as Soil Conservation Service (SCS) Class I and II, which are prime agricultural soils. The site has ready access to irrigation and potable water, and a portion of the site is in Williamson Act Agricultural Preserve status.

Using the LESA Model and conservative assumptions as inputs into the LESA Model, Michael Brandman Associates (MBA) evaluated the Edgewater site and found it to have a LESA rating of 80.83 points, with both LE and SA scores well over 20 points. The LESA worksheets are included in Appendix A of this Memorandum. This score indicates that agricultural resources on the Edgewater site are considered significant.

## **Conclusions and CEQA Requirements**

The EIR for the Edgewater Communities Project contains mitigation measures and alternatives to the proposed Project to help reduce the agricultural resources impact. If agricultural impacts cannot be reduced to less than significant levels through the implementation of all feasible mitigation, and there are no feasible Project alternatives that would reduce the impact to less than significant levels, CEQA

requires that the Project have a Statement of Overriding Considerations if the City chooses to approve the project.

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## **2.2 - Values of Subject Property and Regional Agricultural Lands**

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In determining the value ranges for the Edgewater property, a survey of existing agricultural lands within the City of Chino was conducted. Typically, this process would include surveying recent sales of agricultural properties nearby to the subject property to determine current values for all agricultural properties in the area. However, with little exception, all of the recent acquisitions of agricultural land in the subject area (within the last 5 years) have been purchased by Chino Holding Company LLC. Since actual purchase prices are not available, and since transfer tax information has been suppressed, MBA is dependent on the most current County Assessor tax rolls to supply a best estimate.

Since the subject property has a small portion, approximately 36 acres, which is still subject to Williamson Act restrictions and thus liable for cancellation fees, a survey of similar properties subject to cancellation fees is also included in the analysis.

### **2.2.1 - Values of Agricultural Lands in the Vicinity**

Eighteen properties, all within 1.5 miles of the subject property, were surveyed for current property tax liability. The properties consisted of 11 parcels zoned Agricultural (AG), and 7 parcels zoned Open Space Contract (OSC) (Williamson Act). The properties were selected for their proximity to the Project site and general composition (i.e., size, type of current agricultural activity on the site, and current status within The Preserve Specific Plan).

The average agricultural parcel considered for this analysis has an average per acre value of approximately \$68,626. This includes properties with current agrarian activity and those retaining the (AG) Agricultural entitlement. Within this parcel group, a high value of \$136,272 per acre on a 14.97-acre parcel was measured, and a low value of \$18,074 per acre on a 51.27-acre parcel was determined (see Table 4).

The average Williamson Act encumbered property included in the analysis was determined to have an average per acre value of \$7,515. The highest-valued encumbered property had a value of \$8,274 per acre, and the lowest had a value of \$5,072 per acre (see Table 4).

The average values for parcels subject to the Williamson Act listing were much more closely grouped. The spread on the parcels zoned AG and unencumbered have a much wider value range based on several contributing factors. First, the value of any land not encumbered or limited by any other regulatory mechanism is determined largely by free market dynamics. These include, but are

not limited to, location, access, utility service, drainage, soil conditions, surrounding property uses, etc.

Secondly, the City of Chino is unique because the only real acquisition activity recently (last 5 years) has been by one development group, causing an artificially high valuation of the agricultural lands due to sole-buyer dynamics associated with the purchase of these lands. Since there has been an artificial factor in agricultural land sales in Chino, it is difficult to apply a similar valuation equation as was used in the case studies in Section 3 for the cities of Stockton, Gilroy, Davis, and Tracy. In those examples, establishing a fee title value was straightforward due to the availability of sales information and multiple buyers setting an open market price spread, as described Section 3.

Thirdly, the inclusion of some Chino agricultural lands in The Preserve Specific Plan has a unique effect that impacts valuation of these lands. The proposed Project rests not only within open space set aside by The Preserve Specific Plan, but also within a Candidate Conservation/Relocation Area, per the current Resource Management Plan (RMP).

The agricultural lands most recently sold have been located north of Chino Corona Road and thus out of the open space-zoned portion of The Preserve Specific Plan. Mitigation in this location is currently addressed by The Preserve Development Agreement, between the City and Chino Holding Company LLC. To assign a value to regional and Project-specific parcels, a survey of 2006 County of San Bernardino property tax rolls was conducted. Agricultural lands within 1.5 miles of the proposed Project boundary were selected for comparison and analysis, including those lands within the 1.5-mile radius currently zoned OSC and encumbered with a Williamson Act contract.

**Table 4: Regional Agricultural Lands**

<b>Parcel Number</b>	<b>Parcel Designation</b>	<b>Estimated Value (\$)</b>	<b>Per Acre Value (\$)</b>	<b>Acreage</b>
1057-201-05	OSC	187,000	8,274	22.6
1057-201-06	OSC	113,215	7,623	4.85
1057-201-07	OSC	40,369	8,073	5.0
1057-201-08	OSC	317,646	7,579	41.91
1057-181-17	AG	42,017	45,670	0.92
1057-181-20	OSC	140,737	7,915	17.78
1057-181-27	AG	926,677	18,074	51.27
1057-181-25	AG	80,712	26,462	3.05
1057-181-16	AG	784,940	27,198	28.86
1057-181-19	OSC	175,201	8,073	21.70
1057-181-11	AG	2,040,000	136,272	14.97

**Table 4 (Cont.): Regional Agricultural Lands**

Parcel Number	Parcel Designation	Estimated Value (\$)	Per Acre Value (\$)	Acreage
1057-181-08	AG	5,618,160	72,277	77.73
1057-181-03	AG	4,057,560	72,456	56.0
1057-181-02	AG	394,254	109,515	3.60
1057-181-07	AG	111,281	109,961	1.012
1057-181-06	AG	3,116,812	109,477	28.47
1057-212-08	AG	1,135,720	27,532	41.25
1057-212-15	OSC	91,897	5,072	18.12
Parcel Designation: AG = Agricultural Zoning Designation                      OSC = Open Space Contract (Williamson Act) Source: Michael Brandman Associates, 2007.				

**2.2.2 - Agricultural Values of the Subject Property**

As discussed above, the purchasing dynamic in Chino makes agricultural land valuations less straightforward than in other jurisdictions. However, even though the agricultural lands sold in the last 5 years may be somewhat inflated, they do establish a baseline which can be factored into this analysis.

Approximately 36 acres of the Project site remain under Williamson contract. The owner of this property, however, has filed a notice of intent not to renew the contract, and the contract is set to expire on December 31, 2015. Regardless, the 36-acre parcel technically remains under contract. Using the above valuation averages, a value for the approximate 36 acres of Williamson Act property can be determined to be \$7,515 per acre in its current encumbered status. Once the encumbrance is lifted, the property could be expected to dramatically increase in value by as much as nine fold to \$68,626 per acre. This dramatic increase for unencumbered agricultural land, however, is due directly to the development potential of the land.

## SECTION 3: MITIGATION PRACTICES STATEWIDE

### 3.1 - Results of Surveys of Other Jurisdictions for Mitigation Approaches

The purpose of the analysis presented herein is to document the wide range of mitigation options currently being practiced around the State to assist the City of Chino in developing a specific mitigation approach to compensate for the loss of agriculturally-zoned property within The Preserve and south Chino. The following case study approach identifies key features of mitigation methodologies for the jurisdictions analyzed. Four California cities in the north-central part of the State have been evaluated: Stockton, Gilroy, Davis, and Tracy. The cities were chosen to demonstrate the range of alternative strategies that have been adopted by other jurisdictions. While similarities can be found in the examples provided, each City also adopted provisions that were unique to them in order to meet their own specific requirements.

#### 3.1.1 - City of Stockton Agricultural Mitigation Fee Program

##### Background

The City of Stockton, responding to a petition filed by the Sierra Club in September 2004, entered into a settlement agreement that included implementation of a temporary Agricultural Mitigation Fee Program (AMFP). The City of Stockton is located in San Joaquin County.

This program imposed an initial \$3,250 per acre mitigation fee on projects that proposed development of existing agricultural lands. The fee was intended to mitigate the immediate loss of agricultural lands within the City of Stockton, and lay the foundation for a permanent program that could be implemented after further analysis could be conducted.

As a follow-up to these initial actions, the City commissioned the completion of a Nexus Study. The purpose of the study was to explore options that could be used to offset the loss of Important Farmlands as identified by the California Department of Conservation's Farmland Monitoring and Mapping Program (FMMP). This effort was intended to define the purpose of the fee consistent with the definition of significant impacts to agricultural lands under CEQA.

Two public hearings were conducted to collect community input. The public hearings discussed several points that became the template for the Nexus Study.

- Whether direct acquisition should be considered in addition to or instead of a fee requirement.
- Establishment of No Pay Zones, sliding scales, or exceptions.
- Location of acceptable mitigation lands (inside or outside the City's Sphere of Influence).
- Determination of mitigation ratios.

- Extent of cooperation with non-governmental partners like the Central Valley Farmland Trust (CVFT) etc.
- Establishment of easement conditions, easement values, and allowable uses.
- Refinement and determination of fees.

## **Results**

Following the completion of the Nexus Study and the public hearings, the City arrived at the following determinations that it believed would best serve the interests of the community while contributing to a more balanced development plan for the City of Stockton.

### ***Fee Versus Acquisition***

The City determined that a combination of voluntarily imposed easements and fee-financed mitigation land procurements would be most appropriate. It was determined that the agricultural mitigation fees would be used by the City or a qualifying land trust to purchase agricultural mitigation land. This definition was to include both easements and fee interests in lands with perpetual agricultural land use restrictions. The fee approach was judged to be more flexible and provided for ease of adjustment as program costs increased over time.

### ***No Pay Zones***

There are land areas within the City of Stockton that are contained within the San Joaquin Multiple Species and Habitat Conservation Plan (SJMSCP). The SJMSCP has its own fee structure; therefore, proposed projects falling within the plan's jurisdiction would be exempt from the Agriculture Mitigation Fee Program. For those areas outside of the SJMSCP boundaries, the minimum project size subject to the fee would be 1 acre.

### ***Agricultural Conservation Easements***

An agricultural conservation easement (ACE) is a self-imposed voluntary recorded restriction on a subject property that places restrictions on the use of the property. Generally, the ACE makes agricultural operations the sole acceptable usage. These easements would be purchased using funds collected by the AMFP. The payer of those fees would be the entity or its agent who filed for the final recordation of a subdivision map. In determining appropriate fee schedules, the City determined that it is vital to consider all associated costs that will apply to instituting a fee program, including those costs that may be incurred in future maintenance activities.

### ***Mitigation Ratios***

In defining its AMFP, the City of Stockton considered a 1:1 mitigation ratio as ideal for the initial phase, with future program evaluation allowing for reconsideration. The ratio represents what the City judged to be a consistent representation of the overall intent of the AMFP, which is to promote balanced development while conserving its historic agricultural resources.

### **Location of Mitigation Lands**

The City determined that all lands acquired through the AMFP were to be located within San Joaquin County. This determination was based on the belief that the program should further the mitigation and conservation goals of the City of Stockton and benefit the county as a whole. The benefits derived would thus be generated through the conservation of open space and agricultural belts between existing and future residential and commercial/industrial development.

Also part of the City's rationale was the nexus between direct impacts, indirect impacts, and the types of development subject to the AMFP. Under the City's definitions, direct impacts are those that result in a net loss of agricultural acreage. Indirect impacts are reductions in the agricultural productivity of the land because of the incompatibility of the adjacent land uses. These incompatibilities include but are not limited to pesticide incursion into residential areas, dust and noise, insects, trespass to agricultural land, vandalism, invasive plants, and conflicts between farm animals and domesticated pets.

### **Cost Evaluation of Easement**

In arriving at the fee structure to apply to the AMFP, the City considered a number of parameters, including value, encumbered value, easement cost, and additional costs, as discussed below.

#### **Value**

The value of the easement should be determined by the market rate at the time the easement was put into effect. Market conditions and direct program costs would drive the adjustment of the mitigation fees over time.

The fee title or full value of the land includes several combined property rights including the right to sell, the right to develop, continued agricultural production, and any other purpose consistent with local zoning. Based on 2003 through 2005 sales in San Joaquin County of agricultural lands between 78 and 330 acres in size, the City determined that the weighted average fee title land value for the area is approximately \$12,000 per acre. This valuation could be adjusted up or down based on market conditions.

#### **Encumbered Value**

The assessment of value necessarily considers any natural features or conditions that have the effect of encumbering the parcel by its presence, such as flood plains, topography, geology, etc. In the case of Stockton, a review of public title records of recent sales of such encumbered properties in the San Joaquin Valley produced a weighted average value of \$4,250 per acre.

#### **Easement Cost**

The City determined that the actual easement value would be defined as the difference between the fee title value and the encumbered value of the property. In the case of Stockton, this value is roughly

\$7,500.00 per acre. Additional transaction costs, such as appraisals, processing, and easement document creation add approximately 5 percent more to this, yielding a total of \$8,150 per acre. The formulas used to perform this calculation are summarized below in Table 5.

**Table 5: Easement Acquisition Costs**

	Formula	Value Per Acre (\$)
Fee Title Value	A	12,000
Encumbered Value	B	4,250
Easement Value	C=A-B	7,750
Acquisition Cost	D=C*1.05	8,138
Source: City of Stockton Agricultural Mitigation Nexus Study, June 2006.		

**Additional Costs**

In addition to acquisition-related costs, there are also administrative and monitoring costs associated with the successful administration of an AMFP. The Center for Natural Lands Management surveyed 28 preserves throughout the United States and determined that the national average for administration and monitoring is about \$51 per acre annually, with significant variation between preserves. Taking into account the costs associated with many publicly accessible preserves versus the costs likely to be incurred in their program, a 60 percent downward adjustment was made to this national average, resulting in a local San Joaquin County program cost for administering and monitoring of \$20.40 per acre. Average parcel size is approximately 50 acres, yielding administrative and monitoring costs of \$1,000 per transaction. An additional 5 percent in contingency costs are also built into the Stockton AMFP, or \$450 per transaction (see Table 7 below).

**Fee Calculation Summary**

Taking into account the above cost estimates, the City has arrived at the following fee structure, summarized below in Table 6.

**Table 6: Fee Calculation Summary**

Easement Acquisition Costs per Acre	\$8,150
Administrative and Monitoring Costs	\$1,000
Contingency Costs	\$ 450
Total Fee per Acre	\$9,600

**3.1.2 - City of Gilroy Agricultural Mitigation Fee Program**

**Background**

The City of Gilroy is located in southern Santa Clara County, and is a short driving distance from Santa Cruz, the San Joaquin Valley, and the San Francisco Bay area. The City developed historically

as an agricultural community, but has transitioned in recent times to include a significant bedroom community element. This emerging semi-urbanization includes the commercial and service infrastructure to support this new constituency. In 1996, the City of Gilroy, Santa Clara County, and the Local Area Formation Commission (LAFCO) entered into an agreement that established a 20-year growth area for Gilroy, east of Highway 101. Among other purposes, the agreement was intended to establish specific policies in regards to agriculture and open space.

In May 2004, the City adopted its own version of the LAFCO Agricultural Mitigation Policy. The City began the research and planning process by forming an Agricultural Mitigation Task Force, comprised of a broad cross section of local stakeholders, including developers, farmers, realtors, open space advocates, and City planning staff. The task force conducted its own research and surveyed members of its constituency groups, and utilized the LAFCO Mitigation Policies Statement as a general guide. Through this process, the task force drafted a policy recommendation that was designed to accomplish the following:

- Recognize the historic contributions of agriculture to the local economy.
- Protect Gilroy's farmland from urban encroachment.
- Preserve the City's semi-rural character.
- Facilitate the creation of an agricultural buffer between Gilroy and the surrounding communities.

### **Task Force Study Results**

The task force adopted a range of measures designed to conserve agricultural lands and open space, and to provide mitigation if those lands were converted to other uses. The measures included the implementation of a mitigation land program, in lieu fees, agricultural buffers, and right to farm protections for agricultural lands.

Policies adopted by the City require mitigation for the loss of lands defined as Prime Farmland or Farmland of Statewide Importance, as well as lands determined to be significant when assessed using the LESA Model as administered through the standard CEQA process during project review.

### **Mitigation Options**

The City adopted three mitigation options that could be used to satisfy the requirements. All options require the establishment of a funding mechanism to cover program administration and monitoring of established easements.

## **Purchase of Mitigation Lands and/or Development Rights**

The first option allowed for the purchase of an equal amount (1:1 ratio) of agricultural land within mitigation zones as outlined in the City's General Plan and the transfer of the ownership of this land to the City's Open Space Authority or other City-approved agency.

The second option provided for the purchase of development rights at a 1:1 ratio of agricultural land within the mitigation zones and the transfer of ownership of these rights to the Open Space Authority or other City-approved agency. Under this option, the purchase value of the agricultural conservation easement would be based upon the appraisal of the value of development rights and not fee-title rights.

## **Mitigation Fees**

The third option allowed the payment of in-lieu fees based upon the lowest appraised value for purchasing development rights in the mitigation zones. The fees would include all normal and customary administrative and transactional fees charged on a cost recovery basis, and would be maintained by the City in an escrow account and adjusted every two years based on appraisals for the mitigation zones.

## **General Plan Support of Agriculture**

The City has also adopted a series of right to farm ordinances and General Plan policies designed to protect existing agricultural operations. These include the establishment of agricultural buffers and deed restrictions.

### **3.1.3 - City of Davis Agricultural Mitigation Fee Program**

#### **Background**

The City of Davis is located in Yolo County, west of Sacramento. Beginning in 1995, the City began requiring agricultural mitigation for projects requiring zone changes or development within the City limits and adjacent sphere of influence that involved conversion of agricultural land.

#### **Mitigation Lands**

To offset the gradual net loss of agricultural lands, the City has adopted a 2:1 agricultural mitigation ratio requirement. The establishment of criteria for preferred locations or zones for agricultural mitigation land was determined by the Davis City Council after receiving input from the Davis Planning Commission, Yolo and Solano Counties, the Davis Open Space Committee, the Natural Resources Commission, and the Yolo and Solano County Farm Bureaus.

The end product of this process was the creation of an agricultural land mitigation map that clearly identified lands and zones deemed suitable for agricultural mitigation. In making their determination, the City adopted the following criteria:

- Mitigation lands must be located within the Davis Planning Area as shown in the General Plan.
- Designated lands or zones must be compatible with the Davis General Plan and the General Plans of Yolo and Solano Counties.
- Zones must include agricultural land similar to the acreage, soil capability, soil types, and water use of lands sought to be converted to nonagricultural use.

The City also integrated the agricultural mitigation lands program with the habitat conservation objectives of the City and the Yolo County Habitat Management Program. Under the combined program, up to 20 percent of the lands set aside for agricultural mitigation could also be enhanced or managed for habitat management purposes. The City also authorized the levying of additional fees and/or maintenance requirements for lands used for this purpose.

### **Mitigation Fees**

In lieu of purchasing mitigation lands, the City adopted a provision whereby applicants could pay a fee to the City. Monies from this fee, in total, would be used by the City to purchase appropriate mitigation land and to administer the system of agricultural mitigation lands, with priority given to lands with prime agricultural soils and habitat value. The fee would be based on a 2:1 replacement ratio for a farmland conservation easement, or farmland deed restriction established by the City Council by resolution or through an enforceable agreement with the developer. The fee would be equal to or greater than the value of a previous farmland conservation transaction in the planning area plus the estimated cost of legal, appraisal and other costs, including staff time, to acquire property for agricultural mitigation.

Determination of the fee would not be calculated by a set formula, but rather on a case-by-case basis as approved by the City Council. It was determined that this methodology would best meet the goals of the policy while granting a degree of flexibility for variables such as changing market conditions, project-specific legal and administrative costs, etc.

### **Other Funding Sources**

City voters approved a measure in 2000 that imposed an annual \$24 per household tax to be used to fund additional open space acquisitions including agricultural mitigation lands. The City anticipates that the tax will produce approximately \$17.5 million in revenue over the next 30 years.

### **General Plan Support of Agriculture**

The City's General Plan requires the City to work cooperatively with Yolo and Solano Counties to preserve agricultural lands within its planning area that are not otherwise identified as necessary for development. General Plan policies also require the City to: 1) preserve and encourage agricultural land use and operations within the City and Yolo and Solano Counties; 2) reduce the occurrence of conflicts between agricultural and nonagricultural land uses; and 3) protect the public health. One

intent of these requirements is to reduce the loss of agricultural resources by limiting the circumstances under which agricultural operations may be deemed a nuisance.

The General Plan also requires that purchasers and tenants of nonagricultural land close to agricultural land or operations be notified of the City's support of preservation of agricultural lands and operations. Additionally, the City requires all new developments adjacent to agricultural land or operations to provide a buffer to reduce the potential conflicts between agricultural and nonagricultural land uses. Specific requirements for established buffer zones are detailed in the City's Right-to-Farm ordinance (Chapter 40A).

As a condition of approval for a discretionary development project located within 1,000 feet of agricultural land and operations, every transferor of such property is required to insert a deed restriction, supplied by the City, whose language is to be used verbatim.

### **3.1.4 - City of Tracy Agricultural Mitigation Fee Program**

#### **Background**

The City of Tracy is located in San Joaquin County approximately 60 miles east of San Francisco. In 2004, the City entered into a settlement agreement with Delta Keeper, the Sierra Club, the South San Joaquin Irrigation District, and other nearby jurisdictions. Part of that agreement directed Tracy and several other cities in the area to implement an AMFP to mitigate for the loss of farmland.

Before adopting an AMFP, the City initiated the preparation of a Nexus Study to address the concept of instituting a mitigation program. This study was completed in June 2005. Based on the findings in this study, the City adopted a resolution in October 2005 to authorize the collection of agricultural mitigation fees. The City also provided for the purchase and conservation of agricultural mitigation lands.

#### **Mitigation Lands**

Under the City's policy, potential agricultural mitigation lands must be composed of lands classified as Important Farmland and must be similar in quality and quantity as those lands being converted from agricultural uses. In this case, Important Farmland means Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, as defined by the California Department of Conservation. Marginal farmlands with poorer soil quality or potential water supply limitations are not considered sufficient for mitigation purposes.

#### **Fee Determination**

The City adopted the structure and fee schedule recommended in the San Joaquin County Farmland Conversion Fee Nexus Study. The study recommended that the fee should be a minimum of \$2,000 dollars for each acre of important farmland converted to private urban uses. A provision for the annual adjustment of the fee for inflation or other factors was also included in the recommendation.

## **Fee Utilization**

The City adopted guidelines that directed how the collected fees would be spent:

- The first \$1,000 of the per acre fee would be paid to a qualified land trust to purchase agricultural land in the vicinity of the City,
- The second \$1,000 of the fee would be used by the City as follows:
  - \$250 for the purchase of agricultural mitigation land, which may not be used for the disposal of wastewater effluent, to be held by the City or qualifying land trust.
  - \$750 for the purchase of agricultural mitigation land, which may be used for the disposal of wastewater effluent.
- Any monies collected above the \$2,000 per acre would be used solely for purchase of agricultural mitigation lands and would not be subject to the formula described above.

## **Additional Provisions**

The City of Tracy's AMFP is unique because it was implemented as part of a broader agreement in cooperation with other adjacent jurisdictions. Part of the reason for this structure was the nature of the lawsuit that was brought against the City and the other jurisdictions in the area. This collective approach offered some advantages because it allowed participating jurisdictions to pool their resources and to jointly inventory appropriate mitigation lands. This structure was intended to provide more flexibility to the participating cities while still meeting the requirements of the settlement agreement.

## SECTION 4: MITIGATION CONCEPTS

### 4.1 - Mitigation Requirements

CEQA requires that decision-makers evaluate whether or not the loss of agricultural resources associated with a project is significant. CEQA provides specific guidelines and a defined process of evaluation for determining the significance of the particular lands in question, CEQA Guidelines for assessing a project's impacts on agricultural resources are listed in Section 1.3.1. CEQA Guidelines also provide that the California Agricultural Land Evaluation and Site Assessment (LESA) Model can be used to determine the significance of a project's impacts.

The results of the LESA analysis employed in the evaluation of Edgewater project impacts on agricultural resources (described in detail in Section 2) yielded a LESA score of 80.83, indicating that some measure of mitigation for the Edgewater Project would be required, even if proposed mitigation cannot fully mitigate for the loss of these agriculturally significant lands.

### 4.2 - Mitigation Options/Scenarios

The first step in establishing an agricultural mitigation program for the City of Chino would be a policy determination about whether the intention is to preserve agricultural lands for agrarian purposes or as part of general open space lands. An important consideration is whether the City of Chino intends to institute an agricultural mitigation program that will compensate for the loss of lands within The Preserve Specific Plan's Open Space Recreational, Agricultural, and Open Space Natural designations. Should the City desire to institute a 1:1 mitigation ratio for the loss of these open spaces, it will be necessary to establish a funding mechanism to: a) acquire the replacement lands; b) compensate for legal and logistical acquisition costs; and c) pay for on going administrative and maintenance costs.

A 1:1 mitigation ratio is a conservative approach for attempting to preserve agricultural lands because it does not take into account indirect impacts by the surrounding properties to the agricultural lands. Surrounding impacts can be significant and also detrimental to the health or viability of adjacent agricultural lands. With this in mind, the City would need to make a policy determination regarding how much agricultural land to attempt to preserve, over the next 25 years, for example. This determination will help to assess the level of funding needed to pay for the conservation effort over time, and assist in setting an agricultural mitigation fee structure, should the City decide to pursue that option.

The following discussions provide several approaches that the City could use to accomplish its agricultural mitigation goals. Each approach draws from different components of the case study programs discussed in Section 3, and takes into account the City of Chino's unique situation,

community history, and anticipated growth. Each scenario does not need to be completely independent of one another; rather, a combination of options could be created as best fits specific circumstances.

#### 4.2.1 - Option #1, Agricultural Mitigation Fee

Calculating an agricultural mitigation fee to be used for purchasing easements typically takes into account the appraised value of land both at the full market value and the encumbered value. The Chino market, however, is skewed due to the following factors:

- The geographically self-contained nature of agricultural lands within the City. The agricultural lands are essentially surrounded by residential and other developed land uses. This means the land available for potential development is concentrated in the south central portion of the City. In most other agrarian communities in California, the subject city is surrounded by agricultural and open space lands, and the strategy is to mitigate the loss of agricultural and open space lands as the city expands outward. This is not the case in Chino.
- Much of the agricultural land available for development has been purchased in the last five years by a single development group. This has had the effect of setting a locally inflated value for agricultural lands once the land is no longer subject to Williamson Act encumbrances.

Since the difference between unencumbered and encumbered agricultural lands in the Chino area is considerable (\$68,626-\$7,515 or \$61,111/acre), it is reasonable to adjust the amount to allow for a more market-comparable calculation. Reflecting the development differences between other agricultural communities and the City of Chino, a 75 percent downward adjustment for unencumbered agricultural land is considered reasonable (See Table 7).

**Table 7: Mitigation Fees for Purchase of Easements**

	Formula	Value Per Acre
Adjusted Average Title Value	A	\$17,156 <sup>1</sup>
Encumbered Value	B	\$7,515
<b>Agricultural Mitigation Fee</b>	<b>A-B</b>	<b>\$9,641</b>
Notes: Formula to calculate Agricultural Mitigation Fees (Option #1) suited to the City of Chino is based on approach utilized by the City of Stockton. <sup>1</sup> \$68,626 less 75% (\$68,626) = \$17,156		

#### 4.2.2 - Option #2, Offsite Property Purchases

The purchase of offsite agricultural lands to mitigate net losses within the City of Chino will be difficult because of the limited amount of agricultural lands still available in the City. The procurement of lands located elsewhere within the County of San Bernardino is possible through

coordination of a more regional effort with either the County or any of several agricultural preservation organizations.

### **Overview**

Offsite property purchases would use the basic format contained in The Preserve Specific Plan RMP for biological resources conservation, which refers to The Preserve Final EIR's Biological Mitigation Measure B-3(8): "Purchase real property and/or conservation easements or other land use encumbrances with long-term conservation value to offset environmental impacts." This method essentially involves moving agricultural land around by encumbering other lands in place of recently unencumbered property.

This same approach is used by several of the case study jurisdictions whose primary focus is the retention of actual agrarian operations. This is typically done at either a 1:1 or 2:1 mitigation ratio, depending on how aggressive the program is intended to be and the relative expected life of the mitigation program. Otherwise stated, a determination must be made if the mitigation activity is designed to be either permanent or transitional,

Generally, an agricultural sphere of control is established around the City in which mitigation lands can be purchased and encumbered. Since this is not practical in the City of Chino, a focus on using remaining agricultural land as a buffer seems reasonable.

### **Funding/Fee Structure**

Offsite property purchases can be funded and fees collected similar to how the RMP Environmental Fee and Preserve Development Impact Fee are collected in the Preserve Development Agreement (June 2004). Fee calculations should be consistent with California Government Code Section 66001 (The Mitigation Fee Act). This approach would require the creation of a Mitigation Fee Fund to accept deposit of funds for future purchases and/or becoming associated with a viable land conservation or open space management group to administrate the program.

Since the actual range of values between encumbered Williamson Act lands and unencumbered agricultural properties is considerable, it is suggested that a modified ratio be used for determining agricultural mitigation fees.

### **Benefits**

- Allows for the retention of agricultural lands within a designated region, while allowing managed development activity in currently restricted areas.
- Can be implemented as a short or long-term solution, i.e., establishing time limits for the protected lands or setting expiration dates such as the case with current Williamson Act encumbered lands.

- Has proven results; it is currently being used elsewhere in the state.

### Shortfalls

- Fragments agricultural lands and creates potential land use conflicts with surrounding properties, leading to a less than viable local agricultural economy.
- Potentially separates agricultural lands from other general open space, which nullifies agricultural property as a buffer to natural open space settings.
- Creates additional administrative issues for the City to either directly implement or oversee.

### 4.2.3 - Option #3, Agricultural Belts and Buffers

The Agricultural Belts and Buffers option would involve establishing an agricultural loss threshold by amending The Preserve Specific Plan and RMP, to set a new minimal acreage for Agricultural and Open Space-Natural designated lands, including the use of agricultural belts. This approach would create built-in buffers for existing Open Space-Natural zoned lands by establishing a minimal agricultural belt between any development and natural open space. The buffer should be as wide as, or wider than, the land that would have served as a working agrarian site. Additionally, a requirement for green belts to be adjacent to any agricultural belts would minimize potential for any negative indirect impacts. The agricultural belts could be leased for agricultural use or used as community educational gardens, in coordination with Chino Unified School District or a similar entity.

### Funding

The creation of working agricultural belts creates ongoing administrative activities including potential leasing programs or community gardening programs. These features would allow for a more aggressive fee collection structure based on a hybrid valuation formula somewhere between the encumbered values of Williamson Act properties and market value parcels, as discussed in Section 2.

The fee range would take into account the need for more than just a mitigation fund for purchasing land, but also to fund significant ongoing administrative requirements. This could be accomplished by the inclusion and formation of Community Facilities Districts (CFDs) or a mandatory investment in a mitigation bond fund.

### Benefits

- Protects existing agricultural and open space lands from fragmentation.
- Buffers natural open space from development activities, preserving the community's natural rural heritage.
- Allows current projects to move ahead at a reduced size and scope, while drawing a definite line against future proposed incursions.
- Guarantees survival of some level of agrarian heritage within the City, long-term.

## Shortfalls

- Creates a new bureaucratic function within the City's infrastructure.
- Provides only limited protection to existing agricultural property in its current size and scope.
- Increases the likelihood for other similar incursions into The Preserve's Specific Plan open space and agriculturally-designated areas.

### 4.2.4 - Alternative Mitigation Approaches

The following options represent general concepts to mitigate for the loss of agricultural lands due to implementation of the Edgewater Communities Project. These are general approaches that might be followed if a less-than-full-replacement mitigation ratio is considered.

#### Community Gardens

The use of community-based gardens is a well accepted and popular mitigation option for cities attempting to offset the loss of general open space lands due to urban encroachment.

#### Establishment of an Agricultural/ Dairy Museum

Establishing an agricultural/dairy museum is an alternative designed to provide a means to preserve the agricultural heritage of an area without committing to setting aside large amounts of land. This measure allows for the mitigation fees collected to be very specifically used for the design, construction, and operation of an educational facility. This facility could provide decades of educational value to the community as well as creating a potential tourist destination. Inclusion of an agricultural/dairy museum has recently been included in the proposed Edgewater project plan.

#### Creation of a Dairy Technology Demonstration Project

Creating a dairy technology demonstration project is similar to the museum option, but with a technological focus. This facility could be constructed in tandem with the museum, or as stand-alone. The demonstration of state-of-the-art dairy mechanical advances could also be developed in coordination with a local educational institution, such as the Cal Poly Pomona Sustainability Project.

#### Airport Area Agricultural Mitigation Zone

An airport area agricultural mitigation zone could be employed if the City decides to proceed with the agricultural land mitigation ratio approach. The agricultural lands around the airport are of significant size and shape to allow for a viable mitigation land bank or set-aside. These lands represent some of the last lands in the area that could be used for such a program.

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## **Appendix A: LESA Model Evaluation**



**Agricultural Resource Analysis  
Edgewater Communities  
City of Chino, San Bernardino County, California**

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Michael Brandman Associates

December 5, 2006  
Revised March 13, 2008|  
Revised August 22, 2008

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## SECTION 1: INTRODUCTION

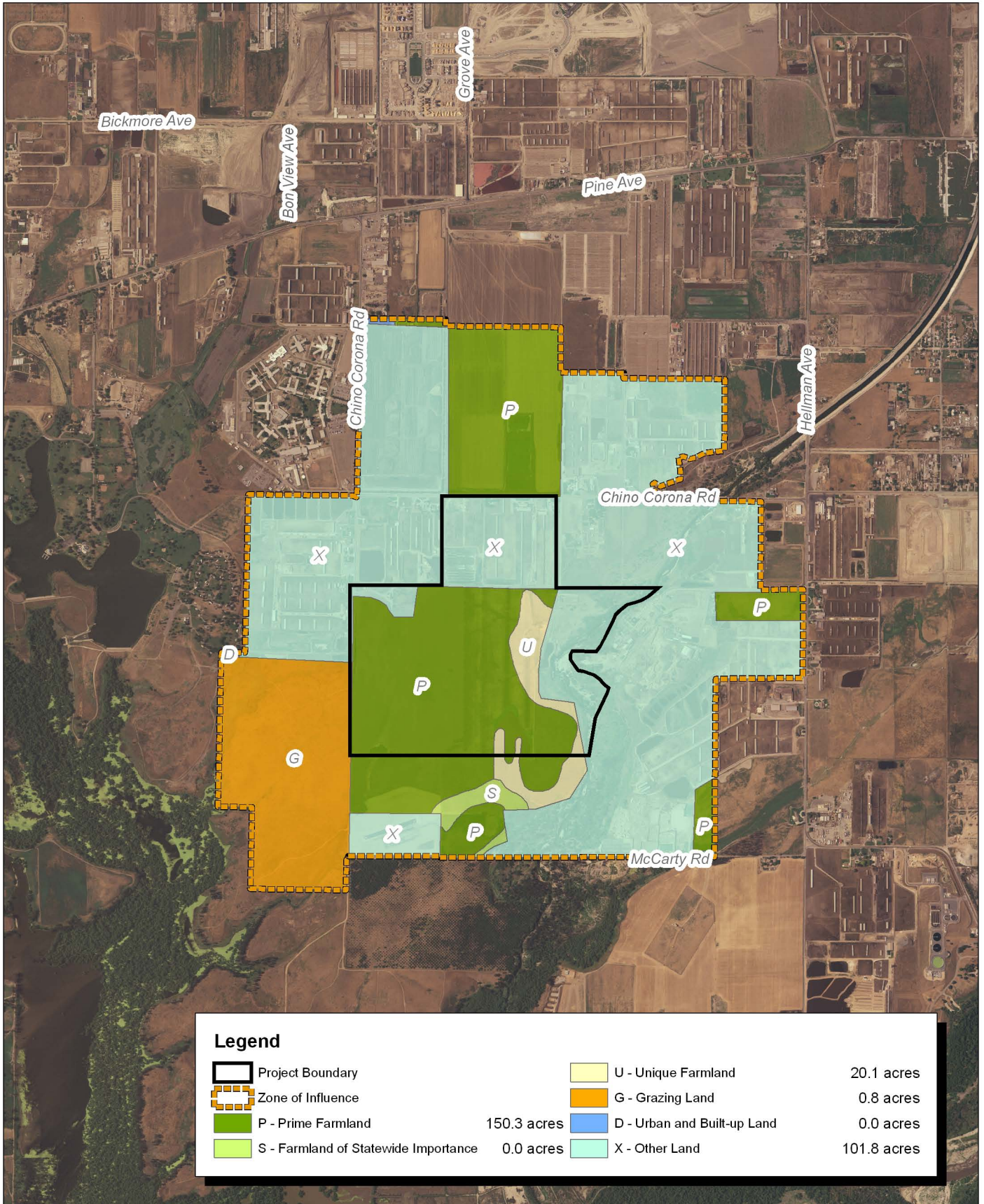
The purpose of this analysis is to analyze the impacts of the Edgewater Communities Project (Project) on agricultural resources within the Project site and in the immediate vicinity.

### 1.1 - State Farmland Mapping Program

The California Department of Conservation established the Farmland Mapping and Monitoring Program (FMMP) in 1982. The FMMP is a non-regulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland with additional categories, including Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. The maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance.

Based on the FMMP data, the Project site contains approximately 150.3 acres of Prime Farmland, 20.1 acres of Unique Farmland, 0.8 Grazing Land, and 101.8 acres of Other Land (see Exhibit 1). The FMMP Important Farmland categories are defined as follows:

- **Prime Farmland** is defined by the FMMP as 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 in the four years prior to the mapping date.
- **Unique Farmland** is 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 zone in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Grazing Land** is defined as land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres. Due to variations in soil quality, smaller units of Grazing Land may appear within larger irrigated pastures.
- **Other Land** is defined as land not included in any other mapping category. Common examples include low-density rural developments, brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines; borrow pits; and water bodies smaller than 40 acres. Vacant land and nonagricultural



Source: Ca. Dept of Conservation, FMMP (2006).



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## Exhibit 1 Farmland Mapping and Monitoring Program

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land surrounded on all sides by urban development and greater than 40 acres is also mapped as other land.

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## **1.2 - Williamson Land Conservation Act of 1965 (Williamson Act)**

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The California Land Conservation Act of 1965 (Williamson Act) enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, the landowners receive property tax assessments based on farming and open space uses, as opposed to full market value, thus resulting in a lower tax burden. These contracts are for 10 years at a time, and roll into the next year unless the owner files a “notice of nonrenewal.” The purpose of the Williamson Act is to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The minimum preserve size is 100 acres. The landowner can petition to cancel a contract; however, the jurisdiction must make a finding based on substantial evidence that supports the cancellation of the contract. Upon approval, the landowner must pay a fee equal to 12.5 percent of the unrestricted, current fair market value.

Approximately 36 acres of the Project site remain under Williamson Contract. The owner of this property, however, has filed a notice of intent not to renew the contract, and the contract is set to expire on December 31, 2015. Regardless, the 36-acre parcel technically remains under contract, so the Project will conflict with an existing Williamson Act contract.

## SECTION 2: LAND EVALUATION AND SITE ASSESSMENT (LESA) MODEL

Using the Land Evaluation and Site Assessment (LESA) Model, a project will result in a significant impact on agricultural resources if it meets the criteria specified in Table 1. The criterion includes a Land Evaluation (LE) scoring threshold and a Site Assessment (SA) scoring threshold. The LESA Model Worksheets completed to assess the Edgewater Project’s impacts are provided in Appendix A of this document.

**Table 1: California LESA Model Scoring Thresholds**

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA sub-scores are each greater than or equal to 20 points
60 to 79 points	Considered significant unless either LE or SA sub-scores are each less than to 20 points
80 to 100 points	Considered significant
LE = Land Evaluation                      SA = Site Assessment Source: California Department of Conservation (CDC) 1997.	

### 2.1 - Land Evaluation

There are two Land Evaluation factors used in the LESA Model to determine whether a project would have significant impacts on agricultural resources:

- The Land Capability Classification Rating; and
- The Storie Index Rating.

#### 2.1.1 - Land Capability Classification (LCC)

The types of soils on a site is one indicator of how valuable the site is as an agricultural resource and is thus a measure of the capacity of a parcel of land to produce agricultural products. As such, a parcel with highly valued agricultural soils will rate higher in terms of land capability than a parcel with poorly valued agricultural soils. The Land Capability Classification (LCC) rating is based on the suitability of soils for growing crops. The LCC includes eight Classes of land designations I through VIII, with soils designated I having the fewest limitations and VIII being the least suitable for cropland. Classes I through IV are generally considered arable land suitable for cropland (although Class IV has severe limitations on the choice of plants that can be grown), and V through VIII are generally not considered to be suitable for cropland, but may have uses for pasture, range, woodland, or grazing. The criteria used to determine a particular Class is based on landscape location, slope of field, and depth, texture, and reaction of the soil.

Subclasses designated with a lower case letter “e,” “w,” “s,” or “c” are often used in conjunction with the roman numerals to further describe soil limitations:

- e Shows that the main limitation is erosion.
- w Shows that water in or on the soil caused limitation in plant growth.
- s Shows that the soil is shallow, droughty, or stony.
- c Shows that the limitation is a climate that is generally too cold or hot for many plants.

There are no subclasses in Class I because Class I is considered to have few limitations. Soil descriptions are further broken down to capability units that are shown with a number 0 through 9. These are related to the actual soil content (i.e., limitation caused by gravelly soil, erosive soils, flooded soil, slow permeability, salt or alkali soil, low fertility, or other issues that limit effective rooting depth).

Soils within the Project site are shown in Table 2 and Exhibit 2:

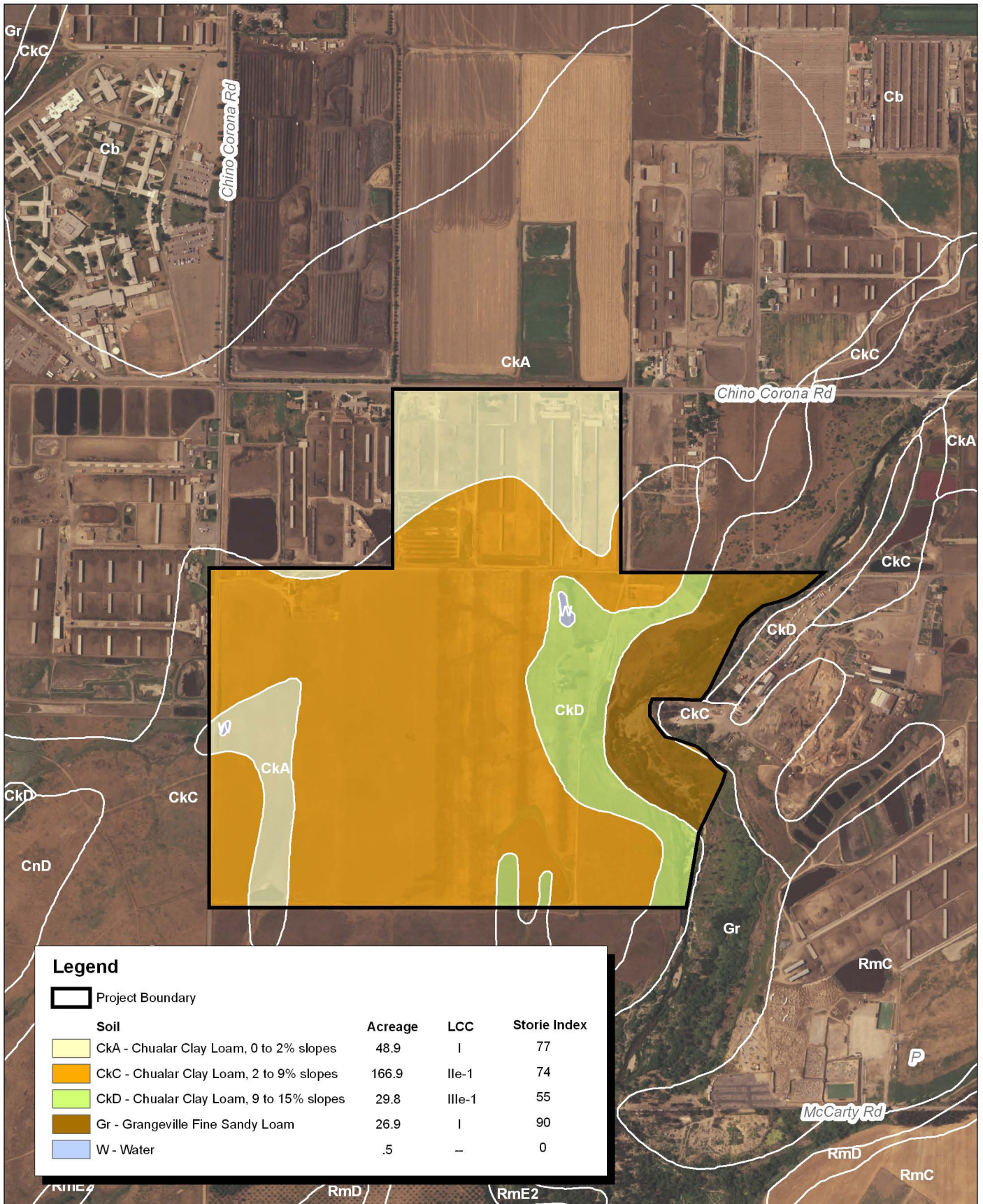
**Table 2: Project Soils**

Soil Map Unit	Acreage	LCC	LCC Rating <sup>1</sup>
CkA	48.9	I	100
CkC	166.9	Ile-1	90
CkD	29.8	IIIe-1	70
Gr	26.9	I	100
Water	0.5	--	0

Notes:  
 CkA= Chualar Clay Loam                      CkC = Chualar Clay Loam  
 CkD = Chualar Clay Loam                      Gr = Grangeville Fine Sandy Loam  
<sup>1</sup> The LCC Rating is derived from data in the Soil Survey of San Bernardino County, CA Southwestern Part (USDA 1980) and Table 2 of the LESA Model Instructions.  
 Source: MBA 2008.

The data in Table 2 above was used to derive an LCC score based on the LCC Rating and the proportion of the Project site covered by each soil (calculated by multiplying the LCC Rating by the proportion of the Project covered by a particular soil). The results of these calculations are found in Table 1A of the LESA Worksheets in Appendix A of this Agricultural Resource Analysis.

Based on the LESA Worksheets (Table 1A), the LCC scores are: 17.9 for the 48.9 acres of CkA, 55.0 for 166.9 acres of CkC, 7.6 for the 29.8 acres of CkD, 9.9 for the 26.9 acres of CkD, and 0.0 for the 0.5 acre of Water. The overall LCC score for the Project site is 90.4.



Source: Soil Survey of San Bernardino County, CA, Sothwestern Part (USDA, 1980).

**MBA**  
 Michael Brandman Associates  
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**NORTH**

1,000 500 0 1,000  
 Feet

## Exhibit 2 USDA Soils Map

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### 2.1.2 - Storie Index

The Storie Index expresses the relative degree of suitability of a soil for general intensive farming numerically. The Storie Index uses soil characteristics such as soil depth, texture of the surface soil, density of the subsoil, drainage, salts and alkali, and relief. The Storie Index is based on a 100-point scale. As part of the LESA Model, the Storie Index is used to determine a Storie Index score (calculated by multiplying the Storie Index by the proportion of the Project covered by a particular soil).

As shown in the LESA Worksheet (Table 1A), it was determined that the Project site receives a total Storie Index score of 73.90.

---

## 2.2 - Site Assessment

---

There are four Site Assessment factors in the LESA Model that are used to determine whether a project would have significant impacts on agricultural resources as follows:

1. Project Size Rating;
2. Water Resource Availability Rating;
3. Surrounding Agricultural Land Rating; and
4. Surrounding Protected Resource Land Rating.

### 2.2.1 - Project Size Rating

The Project Size Rating is based on the LCC acreage figures tabulated under the LE portion of the Model and then determining which grouping generates the highest Project Size Score. This score is a function of quality of soil on the Project and vicinity for potential agricultural production.

According to Table 1B of the LESA Worksheet,, the 29.8 acres of LCC Class III soils generates a Project Size Score of 30, and the 242.7 acres of LCC Class I and Class II soils generate a Project Size Score of 100. Therefore, the site receives a Project Size rating of 100 (highest Project Size Score) based on the 242.7 acres of LCC Class I and Class II soils.

### 2.2.2 - Water Resource Availability Rating

The Water Resource Availability Rating is based upon the various water sources that may supply a given property, and then determining whether different restrictions in supply are likely to take place in years that are characterized as being periods of drought and non-drought. Water is currently supplied to the Project site. Based on Table 5 of the LESA Instruction Manual, it is determined that irrigated production is considered feasible during drought and non-drought conditions, although there may be economic restrictions to agricultural production during drought years. As shown in LESA Worksheet 2, the resulting Water Resource Availability score is 95.

### 2.2.3 - Surrounding Agricultural Land Rating

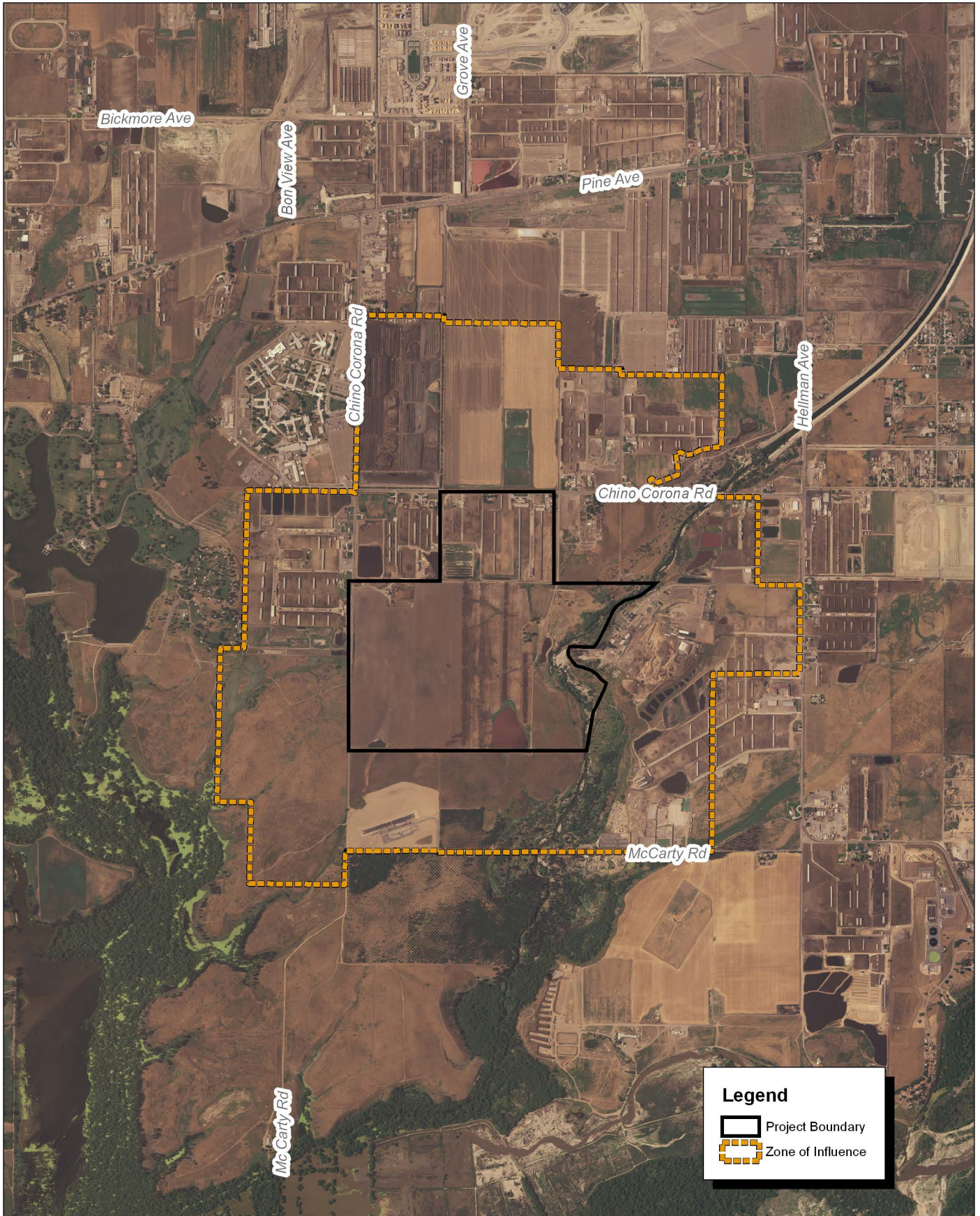
Determination of this rating is based on identifying the Project's Zone of Influence (ZOI), which is defined as that land near a given project that is likely to influence, and to be influenced by, the agricultural land use of the subject project site. The ZOI is determined by creating the smallest rectangle that will completely contain the project site, then creating a second rectangle that extends 0.25 mile beyond the first rectangle and including each parcel that is completely or partially within the 0.25-mile buffer (Exhibits 3 and 4). The percentage of total land within this area (minus the Project site) that is under agricultural production is then determined. The total acreage of the Project's ZOI (excluding the Project site) is approximately 949 acres. Approximately 688.5 acres in the ZOI are currently under agricultural production (72.6%). This results in a score of 70 since it is between 70 and 74 percent of the overall ZOI as defined in Table 6 of the LESA Instruction Manual.

### 2.2.4 - Surrounding Protected Resource Land Rating

This rating is scored in a similar manner as the surrounding agricultural land rating. Protected Resource Lands are those with long-term use restrictions that are compatible with or supportive of agricultural land uses and include the following:

- Williamson Act contracted lands;
- Publicly owned lands maintained as park, forest, or watershed resources; and
- Lands with agricultural, wildlife habitat, open space or other natural resource easements that restrict the conversion of such lands to urban industrial uses.

Approximately 159 acres of the parcels within the Project's 949-acre ZOI are currently under Williamson Act Contract (see Exhibit 4.2-3). This amount equals less than 40 percent of the overall ZOI and, therefore, receives a rating of zero as per the LESA Model.



Source: USDA NAIP 2005.



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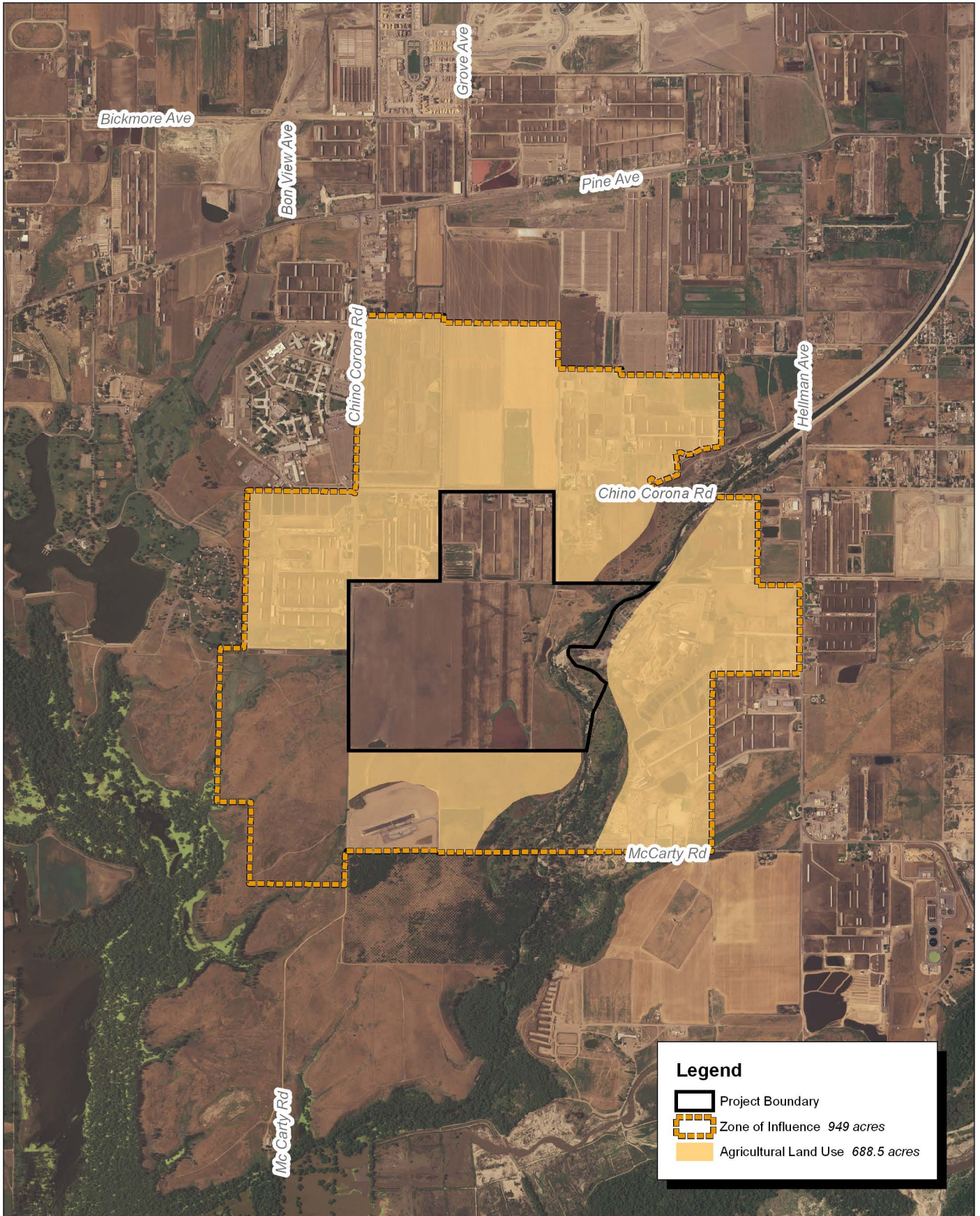


**Legend**




-  Project Boundary
-  Zone of Influence

## Exhibit 3 Zone of Influence

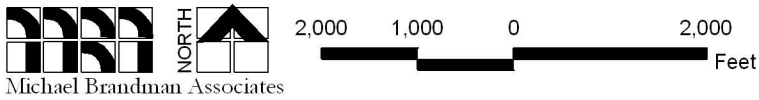
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**Legend**

-  Project Boundary
-  Zone of Influence 949 acres
-  Agricultural Land Use 688.5 acres

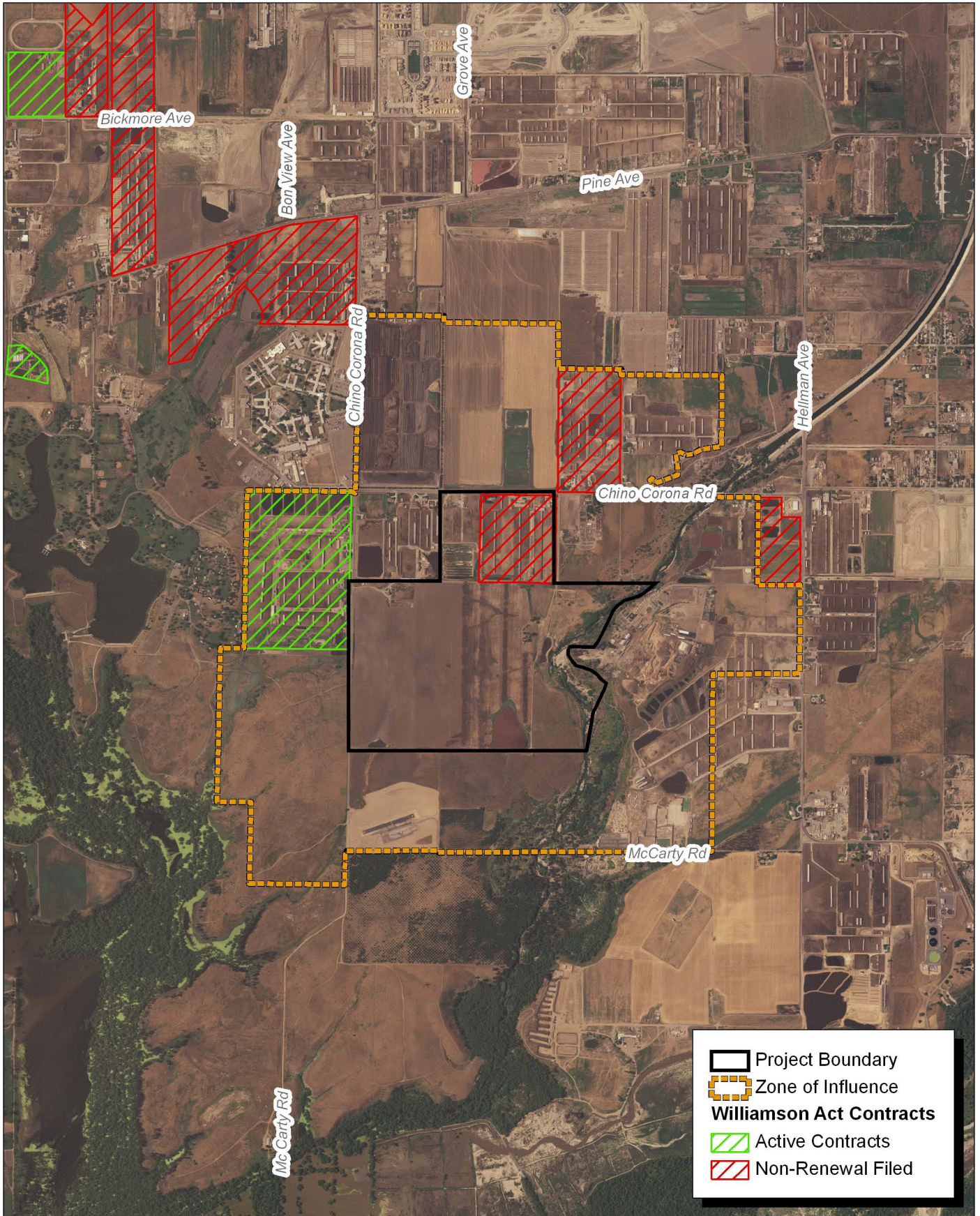
Source: Michael Brandman Associates, 2008.



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## Exhibit 4 Agricultural Land Uses

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Source: City of Chino Williamson Act Map (May 20, 2008).



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## Exhibit 5 Williamson Act Contracts

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### **SECTION 3: FINAL LESA SCORE**

A single LESA score is generated for a given project after all of the individual Land Evaluation and Site Assessment factors have been scored and weighted. Scores are based on a scale of a maximum 100 points. Table 1, California LESA Model Scoring Thresholds in this Agricultural Resource Analysis displays the ratings that determine if a project will result in a significant impact to agricultural resources.

The final LESA score for the proposed Project, according to the Worksheets contained in Appendix A of this report, is 80.83. The proposed Project has a total score between 80 and 100 points, and both the LE and SA sub-scores are greater than 20 points (the LE is 41.08 and the SA score is 39.75). Based on LESA Model significance thresholds, the proposed Project will have a significant impact on agricultural resources.

## **SECTION 4: REFERENCES**

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## **Appendix A: LESA Model Worksheets**



Site Assessment Worksheet 2.- Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score
1	Irrigation	1.000	95	95.000
3	0	0.000	0	0.000
3	0	0.000	0	0.000
4	0	0.000	0	0.000
5	0	0.000	0	0.000
6	0	0.000	0	0.000
7	0	0.000	0	0.000
8	0	0.000	0	0.000
9	0	0.000	0	0.000
10	0	0.000	0	0.000
<b>Totals:</b>		1.0	Total Water Resource Score	95

Site Assessment Worksheet 3.  
 Surrounding Agricultural and Surrounding Protected Resource Land

A	B	C	D	E	F	G
<b>Zone of Influence</b>					Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
	Acres in Agriculture	Acres of Protected Resource	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)		
Total Acres						
949	688.5	0	72.55%	0.00%	70	0

### Final LESA Score Sheet

	Factor Scores	Factor Weight	Weighted Factor Scores
<b>LE Factors</b>			
Land Capability Classification	90.43	0.25	22.61
Storie Index	73.90	0.25	18.48
LE Subtotal		<b>0.50</b>	<b>41.08</b>
<b>SA Factors</b>			
Project Size	100	0.15	15.00
Water Resource Availability	95	0.15	14.25
Surrounding Agricultural Land	70	0.15	10.50
Surrounding Protected Resource Land	0	0.05	0.00
SA Subtotal		<b>0.50</b>	<b>39.75</b>
<b>Final LESA Score:</b>			<b>80.83</b>