4.11 AGRICULTURAL RESOURCES

4.11.1 INTRODUCTION

This section addresses the potential for the Proposed Project to impact the agricultural resources in and around the Proposed Project location. Following an overview of the environmental setting in **Subsection 4.11.2** and the relevant regulatory setting in **Subsection 4.11.3**, project-related impacts and recommended mitigation measures are presented in **Subsection 4.11.4**.

4.11.2 ENVIRONMENTAL SETTING

Regional

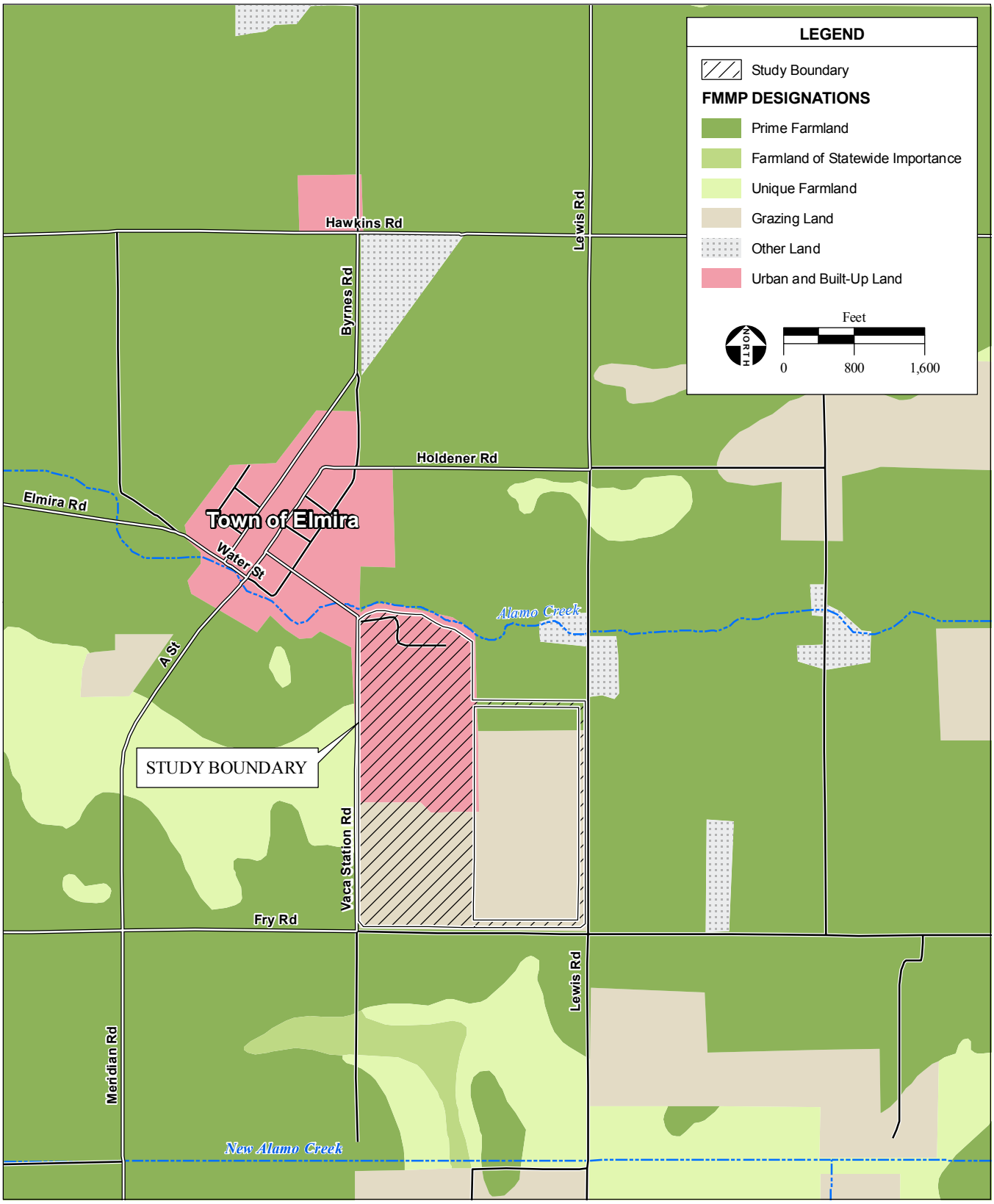
According to the 2008 Annual Crop Report the value of agricultural production for Solano County (County) was approximately $292,840,200. The majority of that value was from the cultivation of nursery products and alfalfa crops. The project site is located within the western portion of the Elmira/Main Prairie Agriculture Region, one of ten identified agricultural regions in the County. The Elmira/Maine Prairie Region consists of approximately 75,358 acres of farmland whose major crops include: alfalfa, wheat, corn, pasture, beef cattle, and sheep. The northern portion of the region, including the lands surrounding the project site, is dominated by field crops while the southern portion is dominated by grazing land for livestock (UCAIC, 2007).

Agricultural Lands Classifications within Solano County

The California Department of Conservation (DOC) defines Prime Farmland as "farmland with the best combination of physical and chemical features able to sustain long term production of agricultural crops." This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. As of 2008, the total acreage of important farmland in the County was 153,298 acres, including 135,735 acres of prime farmland (88 percent of County total). According to the DOC Farmland Mapping and Monitoring Program (FMMP), a total of 4,439 acres of important farmland in the County was converted to other uses between the years 2006 and 2008 (DOC, 2008a). The average annual conversion of 1,152 acres of important farmland has occurred in the County since 1984 (DOC, 2008b).

Project Site Setting

As shown in **Figure 4.11-1**, the project site primarily consists of land that is classified as Urban and Built-Up Land and Grazing Land by the DOC (2008). There is approximately 8.34 acres of designated Prime Farmland in the northeast portion of the City owned property, 2.86 acres of which is located within the study area for this EIR. This land is currently being leased by the City for agricultural purposes. As shown in **Figure 4.11-2**, the project site does not include any Williamson Act contract lands. However, lands adjacent to the northern border of the project site are currently subject to Williamson Act contracts.



SOURCE: Farmland Mapping and Monitoring Program, 2008; AES 2009

Figure 4.11-1
Farmland Classifications

SOURCE: Solano County General Plan, 2006; AES 2009

Figure 4.11-2

Williamson Act Parcels

Project Site Soil

The DOC FMMP has prepared a "Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance." Of the five soils described in **Section 4.5 -**Geology and Soils, the two Capay variations and the two Yolo variations are considered Prime Farmland Soils (DOC, 2006).

Table 4.11-1 shows the National Resource Conservation Service (NRCS) land capability classification for project site soils. The NRCS Land Capability Classification System is based on the limitations of soils for irrigated field crops, the risk of damage if soils are used for crops, and the way soils respond to management. Land capability classes for irrigated lands are designated by the numbers I through VII, indicating progressively greater limitations and narrower choices for agricultural use. The land capability classes are defined as:

- Class I soils have slight limitations that restrict their use.
- Class II soils have moderate limitations that restrict the crop selection or that require moderate conservation practices.
- Class III soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class IV soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
- Class V soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland and/or wildlife habitat.
- Class VI soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class VII soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, and/or wildlife habitat.

The California revised Storie Index is a soil rating based on four soil characteristics that govern a soil's potential for cultivated agriculture in California (**Table 4.11-1**). These characteristics include: (1) degree of soil profile development, (2) texture of the surface layer, (3) slope, and (4) manageable features including drainage, fertility, acidity, erosion, and salt content. The Storie Index rating is presented as a score ranging from 0 to 100. For simplification, the NRCS combines the Storie Index ratings into six grade classes as follows (NRCS, 2009):

- Grade 1 (excellent) – 100-80;
- Grade 2 (good) – 79-60;
- Grade 3 (fair) – 59-40;
- Grade 4 (poor) – 39-20;
- Grade 5 (very poor) – 19-10; and
- Grade 6 (nonagricultural) – less than 10.

TABLE 4.11-1 LAND CAPABILITY CLASSIFICATION AND STORIE INDEX RATING

Soil Type	Land Capability Classification [a]	Storie Index Rating
Capay Silty Clay Loam (Ca)	Class II	Grade 1
Capay Clay (Cc)	Class II	Grade 3
San Ysidro Sandy Loam (SeA)	Class IV	Grade 3
Yolo Loam (Yo)	Class I	Grade 1
Yolo Loam, clay substratum (Yr)	Class II	Grade 1
Note: a – Classifications are for irrigated soils. Source: NRCS, Web Soil Survey 2009.		

Surrounding Land Uses

Surrounding land uses consist primarily of lands classified as Prime Farmland and Unique Farmland (**Figure 4.11-1**). A large area of land to the northeast of the project site, which contains the unincorporated community of Elmira, is classified as Urban and built up land.

4.11.3 REGULATORY CONTEXT

Federal

Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that federal programs are administered in a matter that is compatible with state and local units of government, and private programs and policies to protect farmland (7 U.S.C. § 4201).

The NRCS, responsible for the implementation of the FPPA, categorizes farmland in a number of ways. These categories include: prime farmland, farmland of statewide importance, and unique farmland. Prime farmland is considered to have the best possible features to sustain long-term productivity. Farmland of statewide importance includes farmland similar to prime farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Unique farmland is characterized by inferior soils and generally needs irrigation depending on climate. The Land Evaluation and Site Assessment is a numeric rating system used by the NRCS to evaluate the relative agricultural importance of farmlands.

State

California Farmland Mapping and Monitoring Program

The FMMP, which monitors the conversion of the state's farmland to and from agricultural use, was established by the DOC, under the Division of Land Resource Protection. The program maintains an

inventory of state agricultural land and updates its "Important Farmland Series Maps" every two years. The FMMP is an informational service only and does not constitute state regulation of local land use decisions.

The four categories of farmland, which include Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, are considered valuable and any conversion of land within these categories is typically considered to be an adverse impact. The DOC provides the following definitions for the categories of farmland found on the project site:

> **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
>
> **Grazing land:** Land on which the existing vegetation is suited to the grazing of livestock.

A map of the FMMP designations for the project site and surrounding area is provided in **Figure 4.11-1**.

Williamson Act

The Williamson Act is a State program that was implemented to preserve agricultural land. Under the provisions of the Williamson Act (California Land Conservation Act 1965, Section 51200), landowners contract with the county to maintain agricultural or open space use of their lands in return for reduced property tax assessments. The contract is self-renewing; however, the landowner may notify the county at any time of intent to withdraw the land from its preserve status. Withdrawal from a Williamson Act contract involves a ten-year period of tax adjustment to full market value before protected agricultural/open space land can be converted to urban uses (DOC, 2009). As shown in **Figure 4.11-2**, the project site does not include any Williamson Act contract lands. Lands adjacent to the northern border of the project site are currently subject to Williamson Act contracts.

Local

Solano County Right to Farm Ordinance

The County Right to Farm Ordinance was adopted to support County policies regarding the conservation and enhancement of agricultural operations in unincorporated County lands. The stated purpose and intent of the Right to Farm Ordinance is to reduce impacts to County agricultural resources by limiting the circumstances under which properly conducted agricultural operations will not be deemed a nuisance. The ordinance promotes a good-neighbor policy by requiring that users of property adjacent to or near agricultural operations be notified of the inherent potential problems associated with being located near such operations, including noise, odors, dust, operation of machinery, application of fertilizers, soil amendments, seeds and pesticides and other potential effects. Through notification, it is intended that property owners will better understand the potential consequences of being located near agricultural operations. The ordinance states that attendant conditions from properly conducted agricultural operations shall not be considered a nuisance to adjacent property owners and shall be accepted as being a normal and necessary aspect of being located in a rural area (Solano County, 2008).

City of Vacaville General Plan (1990)

The following General Plan guiding and implementation policies associated with agricultural resources are applicable to the Proposed Project.

Guiding Policies

8.1-G3: Maintain a compact urban form and locate growth areas to minimize loss of agricultural resources

5.1-G3: Require buffer landscaping and multiple use, where feasible, of utility sites and rights-of-way to harmonize with adjoining uses.

5.2-G5: Design public buildings to fit into and complement their ultimate surroundings; buffer public buildings from their surroundings as to shield unsightly areas from public view.

5.2-G6: Provide adequate landscaping for all public buildings and installations.

Implementing Policies

2.1-I1: Continue to implement design guidelines for all development, including residential, commercial and industrial projects and public facilities. Identify and prepare design guidelines for entry points into the City and Downtown.

3.5-I1: Maintain agricultural production areas east of Leisure Town Road. In accordance with policies set forth in the 1980 General Plan, maintain agricultural production areas in Upper Lagoon, Bassford Canyon and Vaca Valley.

5.2-I5: Implement zoning designations (s) that will clearly delineate major institutions and public facilities and their use.

City of Vacaville Land Use and Zoning Designation

The project site is designated in the General Plan as Public/ Institutional Waste Disposal (P*) and zoned as Community Facilities (CF) (**Figure 4.8-1** and **Figure 4.8-2**). The P* land use designation includes uses such public facilities, large institutions, and utilities.

4.11.4 Impacts and Mitigation Measures

Method of Analysis

This section identifies any impacts to agricultural resources that could occur from construction, operation, and/or maintenance of the Proposed Project as determined in the Initial Study (**Appendix B**). Impacts to agricultural resources were analyzed based on farmland classification provided by the DOC and NRCS, and comparison of these factors to the significance criteria listed below. If significant impacts are likely to

occur, mitigation measures are included to increase the compatibility and safety of the Proposed Project and to reduce impacts to less-than-significant levels.

Thresholds of Significance

Criteria for determining the significance of impacts to agricultural resources have been developed based on Appendix G of the California Environmental Quality Act's (CEQA) *Guidelines*. Impacts to agricultural resources would be considered significant if the Proposed Project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

Project Specific Impacts

Impact

4.11-1 The Proposed Project would result in the conversion of Prime Farmland to non-agricultural.

With implementation of the Proposed Project, agricultural uses surrounding the City's property would continue to occur as they do under operation of the existing EWWTP. Currently, the northeastern portion of the City owned EWWTP property is leased to a private farmer and is actively farmed. The leased portion of the City's property is mapped as Prime Farmland by the FMMP (**Figure 4.11-1**). The Proposed Project would convert approximately 2.86 acres of this Prime Farmland with the development of the proposed landscape buffer along the northeast boundary of the site. Additionally, the 5.48-acres of prime farmland located within the City's property south of the proposed landscape buffer may be indirectly converted to non-agricultural use due to access issues created through the proposed development. The total potential conversion of prime farmland resulting from the Proposed Project would be approximately 8.34 acres. Because the land use and zoning designation for the entire City owned property is classified as Public/Institutional (P), which allows for the development of public utility, conversion of this agricultural land has been considered within the City and County's long-term land use plans for the site. Regardless, the Proposed Project would still result in a net conversion of prime agricultural land. This impact is considered significant and unavoidable. **Significant and Unavoidable.**

Impact

4.11-2 The Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

The project site parcels are not subject to Williamson Act contracts and are not zoned for agricultural use. Additionally, the Proposed Project would be compatible with on-going agricultural activities on adjacent lands zoned for agricultural uses. Therefore, this impact is considered less than significant. **Less than Significant.**

Cumulative Impacts

4.11-3 The Proposed Project would contribute to adverse cumulative impacts associated with conversion of agricultural land uses.

Cumulative projects in the vicinity of the project site, including growth resulting from build-out of the City's General Plan and potential development of a power plant adjacent to the project site, would result in the conversion of prime agricultural land to urban uses. Although future projects would be developed in accordance with local and regional planning documents which have previously considered the conversion of agricultural land to other uses in the establishment of land use policy, this EIR presents the conclusion that the conversion of prime farmland is considered a significant impact. Therefore, this impact is considered significant and unavoidable. **Significant and Unavoidable.**