

B. AGRICULTURAL RESOURCES

The Agricultural Resources section of the EIR was prepared based on review soils information prepared by the Natural Resource Conservation Service, review of the County Agriculture and Conservation and Open Space Elements, and consultation with the San Luis Obispo County Agriculture Department. The County Department of Planning and Building was also consulted to determine Williamson Act status of parcels in Edna Valley, in the vicinity of the Landfill. The analysis considers impacts to agricultural soils, existing and potential future agricultural operations, and water supply, and assesses agricultural compatibility.

1. Existing Conditions

a. Regional Setting

According to the California Department of Food and Agriculture, California is the leading agriculture-producing state. Although the sales value of California agriculture products decreased in 2008, the state still received its second highest value on record. California's 81,500 farms and ranches received \$36.2 billion for the output in 2008, down from the 2007 record high of \$36.4 billion. California remained the number one state in cash farm receipts in 2008, with its \$36.2 billion in revenue representing 11.2 percent of the US total. California accounted for 14 percent of national receipts for crops and 7.5 percent of US revenue for livestock and livestock products (USDA 2008).

In 2008, San Luis Obispo County ranked sixteenth among state counties in overall agricultural production value, down from 15th in 2007 (USDA 2008). San Luis Obispo's total agricultural production value was approximately \$606,746,000 in 2008. The leading commodities in San Luis Obispo in 2008 were wine grapes, broccoli, strawberries, cattle and calves, and vegetable bedding. Based on the 2009 Crop Statistics Released for San Luis Obispo County, total crop values in 2009 are estimated at a gross value of \$623,095,000, a three percent increase from 2008. The number one commodity crop in San Luis Obispo County in 2009 was wine grapes, valued at \$166,378,000, or 27 percent of the combined value of the County's entire agricultural industry. In addition to wine grapes, the top ten commodities in San Luis Obispo County were strawberries (\$73,198,000), broccoli (\$60,162,000), cattle and calves (\$51,992,000), vegetable transplants (\$33,207,000), head lettuce (\$27,721,000), cut flowers (\$25,026,000), indoor decoratives (\$18,430,000), cauliflower (\$13,618,000), and leaf lettuce (\$12,313,000) (County Department of Agriculture, 2010).

~~As of 2004, San Luis Obispo County ranked 17th in the state for overall agricultural production value (San Luis Obispo County Farm Bureau; August 31, 2004). Based on the 2006 Annual Report, the number one commodity crop in San Luis Obispo County in 2006 was wine grapes, which was valued at \$151,990,000. In addition to wine grapes, the top ten commodities in San Luis Obispo County were broccoli (\$64,044,000), cattle and calves (\$59,869,000), strawberries (\$40,051,000), vegetable transplants (\$32,880,000), cut flowers (\$29,607,000), head lettuce (\$29,253,000), indoor decoratives (\$28,063,000), Hass avocados (\$23,445,000), and celery (\$14,802,000). The total value of vegetable, fruit and nut, nursery and seed, field, and animal commodities increased in value from \$381,806,000 in 1997 to \$630,870,000 in 2006. Wine grape value in 2006 constituted approximately 24 percent of the total commodity value (Department of Agriculture; 2007).~~

~~The 2007 Annual Report had not been released at the time this EIR was prepared; however, some 2007 statistics were available from the Agricultural Commissioners Office. Total crop value increased by over \$20,000,000 in 2007. Wine grapes continued to be the most valuable crop, generating an estimated \$141,674,000 (Department of Agriculture, 2008).~~

b. Edna Valley

1) Agricultural Production and Operations

Edna Valley agricultural operations include a significant number of vineyards, avocado and citrus groves, row crops, dry farmed grain, and cattle ranches. Row crops are common in the southern portion, along Highway 227 south of Biddle Ranch Road. Vineyards dominate the northern portion of the valley, particularly south of the San Luis Obispo Airport. Cattle ranches are found in the hills to the east. Wine tasting rooms and larger-scale wine production facilities are increasingly popular throughout the valley. Some equestrian uses are located in the area as well, although these are generally not considered an agricultural resource unless animal husbandry is a major component of the use.

Multiple large agricultural clusters, including Varian Ranch and Edna Ranch, are also located in Edna Valley. These developments include large residential developments located within and/or adjacent to active cattle ranches and vineyards.

Agricultural operations bordering the Landfill include a large vineyard on the east, and an equestrian facility to the west. Based on aerial photos of the site, the vineyard was developed sometime after 1994, after approval of the previous expansion of the Landfill. Small scale grazing occurs to the south and north of the Landfill. Dry farmed grain is produced approximately one quarter mile to the south of the expansion area.

The Landfill is located on parcels in two land use categories, Public Facilities and Agriculture. The expansion area is located entirely on parcels designated Agriculture. Adjacent parcels are all designated Agriculture (refer to Figure IV-1). The southern and western portions of the expansion area are periodically grazed.

2) Agricultural Water Supply

The Landfill is located near the borders of the San Luis Obispo and Pismo groundwater basins, both of which are in the Central Coast hydrologic basin, as defined by the RWQCB. The Landfill is technically in the Pismo basin; however, local geologic conditions have resulted in the creation of a groundwater sub-basin (refer to Figure V.K.-2). Groundwater in this sub-basin is somewhat disconnected from other local aquifers by faulting and changes in local geology. This sub-basin formed the study area for determination of potential water quality and quantity impacts and is therefore appropriate when considering agriculture-related water impacts as well.

Water Resources, Section V.K.6. (Cumulative Impacts), identifies existing agricultural water demands in the groundwater study area using most recent demand factors used by the County Planning and Building Department. Water users in the sub-basin include domestic users, the Landfill, and agricultural operations (vineyards being the most significant user in the study area). The study concluded that potential groundwater use, in the hydrogeologic study area is

approximately 164.3 ~~342~~afy. It also concluded that groundwater recharge is adequate to meet this demand. ~~This conclusion is verified by the fact that groundwater levels in 14 monitoring wells at the Landfill generally did not change significantly between 1989 and 2005 despite pumping by users in the sub-basin.~~

c. Onsite Soils

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) assesses a soil's agricultural productivity by utilizing the land capability classification system, the Land Inventory and Monitoring system (LIM), and the California Revised Storie Index. The land capability classification system classifies soil units based on limitations for field crop production, the risk of damage due to crop production, and how the soil responds to management (refer to Table V.B.-1). Generally, soils classified as prime by the NRCS are also those identified as Class I and II soils by the Land Capability Classification, although there are a few exceptions in San Luis Obispo County.

The Storie index typically utilized by the state is the California Revised Storie Index. The NRCS defines this as a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California. The Storie Index assesses the productivity of a soil from the following four characteristics: factor A, degree of soil profile development; factor B, texture of the surface layer; factor C, slope; and factor X, manageable features, including drainage, micro-relief, fertility, acidity, erosion, and salt content. A score ranging from 0 to 100 percent is determined for each factor, and the scores are then multiplied together to derive an index rating. For simplification, Storie Index ratings have been combined into six grade classes as follows: Grade 1 (excellent), 100 to 80; grade 2 (good), 79 to 60; grade 3 (fair), 59 to 40; grade 4 (poor), 39 to 20; grade 5 (very poor), 19 to 10; and grade 6 (nonagricultural), less than 10.

The County of San Luis Obispo has combined information from these various sources into a single definition of Important Agricultural Soils of San Luis Obispo (Conservation and Open Space Element, 2010, Table SL-2 and Glossary page 12.8). Important Agricultural Soils may be in one or more of the following categories, prime farmland, farmland of statewide importance, other productive soils and highly productive rangeland, Prime farmland based upon the county's definition utilized both the state and federal definitions of prime farmland.

Based on the *Soil Survey of San Luis Obispo County, California Coastal Part* soil survey maps, three soil types are present within the expansion area (refer to Figure V.B.-1). The soil number, soil name, slope, class, Storie Index, and prime soil classification for each soil type within the project parcels are listed in Table V.B.-3 below. Complete soil descriptions can be referenced in Section V.G., Geology and Soils.

**TABLE V.B.-1
Land Capability Classifications**

Class	Definition
I (1)	Slight limitations that restrict use.
II (2)	Moderate limitations that reduce the choice of plants or require moderate conservation practices.
III (3)	Severe limitations that reduce the choice of plants or require special conservation practices, or both.
IV (4)	Very severe limitations that restrict the choice of plants or require very careful management, or both.
V (5)	Little or no hazard of erosion but have other limitations, impractical to remove, that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
VI (6)	Severe limitations that make them generally unsuited to cultivation and that limit their use mainly to pasture, range, forestland, or wildlife food and cover.
VII (7)	Very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife.
VIII (8)	Limitations that preclude their use for commercial plant production and limit their use to recreation, wildlife, or water supply or for esthetic purposes.

Source: *Soil Survey of San Luis Obispo County, California Coastal Part, United States Department of Agriculture Soil Conservation Service (September 1984)*

**TABLE V.B.-2
California Revised Storie Index**

Grade Group	California Revised Storie Index	Definition
1	80 to 100	Excellent – very minor or no limitations that restrict use of general agricultural use
2	60 to 80	Good – suitable for most crops, but have minor limitations that narrow the choice of crops and may require some special management practices
3	40 to 60	Fair – suited to fewer crops or to special crops and require careful management
4	20 to 40	Poor – limited to a narrow range of crops and require special management for intensive agriculture
5	10 to 20	Very Poor – generally not suited to cultivated crops but can be used for pasture and range
6	Less than 10	Non-agricultural – not suited to agricultural use

Source: *United States Department of Agriculture, Natural Resources Conservation Service (accessed June 2008).*

**TABLE V.B.-3
Soil Types**

<u>Map Symbol</u> Soil Number	<u>Map Unit</u> Soil Name	% Slope	Class		CA Revised Storie Index	<u>Important Farmland Inventory Classification / Important Farmland of San Luis Obispo County Soil Classifications</u>	Approximate Acres
			Irrigated	Non-irr.			
102	Arnold loamy sand	5 to 15	<u>4</u> IV	<u>4</u> IV	<u>Fair</u> 58	<u>Farmland of Local Potential / Farmland of Statewide Importance</u> LP	43
189	Pismo loamy sand	9 to 30	N/A	<u>7</u> VII	<u>Poor</u> 23	<u>Grazing Land</u>	36
149	Lodo clay loam	30 to 50	N/A	<u>5</u> VI	<u>Non-ag</u> 9	<u>Grazing Land</u>	1

Source: *United States Department of Agriculture, Natural Resources Conservation Service (accessed June 2008), County of San Luis Obispo (2010)*

~~d. County of San Luis Obispo Agriculture and Open Space Element Soil Classification~~

~~The County of San Luis Obispo Agriculture and Open Space Element (Chapter 2) defines outlines eight soil capability classes as defined by the NRCS. Irrigation capability is required to be designated a Class I or II soil in these descriptions. These Class I or II soils are commonly referred to as “prime agricultural soils” as:~~

- ~~a. Land with a NRCS land capability rating of Class I or Class II (all land to qualify for these ratings must be irrigated); or,~~
- ~~b. Other irrigated lands that have suitable soils, climate and water supply which sustain irrigated crops valued according to one of the following criteria:~~
 - ~~1. Land planted in crops which have produced an annual gross value of \$1,000 or more per acre for three of the previous five years.~~
 - ~~2. Land planted in orchards, vineyards and other perennial crops that would produce an average annual gross value of \$1,000 or more per acre if in full commercial bearing. Value is calculated by multiplying the average production per acre by the average value of the commodity for the previous five years as determined from the Annual Reports of the San Luis Obispo County Department of Agriculture and Measurement Standards.~~

~~Soils onsite are not rated Class I or II, nor are they planted in crops. They do not meet the prime soil criteria as defined in the Element.~~

e.d. California Department of Conservation Classification

The California Department of Conservation (DoC) Division of Land Resource Protection developed the Farmland Mapping and Monitoring Program (FMMP) in 1984 to analyze impacts to California's agricultural resources. Land is rated based on the land capability classification system, the LIM system, and land use.

Land designations include the following categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, and Other Land. The CDC considers Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance to be Important Farmland. These categories are defined by the FMMP as follows:

- **Prime Farmland (P):** Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance (S):** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland (U):** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance (L):** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. The San Luis Obispo County Agriculture Department defines these as areas of soils that meet all the characteristics of Prime or Statewide, with the exception of irrigation. Additional farmland includes dryland field crops of wheat, barley, oats, and safflower.
- **Farmland of Local Potential (LP):** This rarely used classification includes soils which qualify for Prime Farmland or Farmland of Statewide Importance, but generally are not cultivated or irrigated. The San Luis Obispo County Agriculture Department defines these as lands having the potential for farmland, which have Prime or Statewide characteristics, and are not cultivated.”
- **Grazing Land (G):** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other

groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

- **Urban and Build-up Land (D):** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land (X):** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

Based on the Important Farmland Map for San Luis Obispo County, Farmland of Local Potential and Grazing Land, are located in the expansion area (refer to Figure V.B.-1).

f.e. Soil Capability for Crop Production

For purposes of this analysis, “agricultural capability” is defined based on a combination of characteristics including parcel size, soil types, water availability, and land use category (zoning). Size is critical for evaluating the potential long-term viability of a parcel. Under current county regulations the minimum parcel size allowed for parcels in the Agriculture land use category is 20 acres, provided the site meets specific criteria, including but not limited to Class I or II (refer to Table V.B.-1) irrigated underlying soils, use of 90 percent of the site for crop production, and identification of existing, adequate water source. Parcels that do not meet these criteria are subject to larger minimum parcel sizes. Parcels supporting irrigated row crops, nurseries, field crops, orchards, or vineyards have minimum parcel size of 20 acres. Irrigated pasture, grain, and hay, and dry farm orchards and vineyards have a minimum parcel size of 40 or 80 acres. Dry farm field crops, grain, and hay have a minimum parcel size of 160 acres, and grazing land has a minimum parcel size of 320 acres.

g.f. Farmland Conversion

Between the years 2002 to 2004, 1,671 acres of agricultural land were converted to non-agricultural use within San Luis Obispo County. Approximately one million acres of agricultural land is located within the County, including 276,000 acres of Important Farmland, and 750,000 acres of grazing land (refer to Table V.B.-4).

h.g. Williamson Act

The expansion area is located on a parcel formerly under Williamson Act contract; however, the contract recently expired (Wahler, 2008). A parcel located just to the south of the expansion area was also under contract until recent years. Parcels located to the north and east of the Landfill are also under contract (refer to Figure V.B.-2).

**TABLE V.B.-4
San Luis Obispo County Farmland Conversion 2002-2004**

Agricultural Land Use Category	Total Acreage Inventoried		2002-2004 Acreage Changes			
	2002	2004	Acres Lost	Acres Gained	Total Changed	Net Changed
Prime Farm Land	41,294	40,508	2,049	1,263	3,312	-786
Farmland of Statewide Importance	19,357	19,750	879	1,272	2,151	393
Unique Farmland	38,613	35,697	5,600	2,684	8,284	-2,916
Farmland of Local Importance	179,797	180,411	4,496	5,110	9,606	614
<i>IMPORTANT FARMLAND SUBTOTAL</i>	<i>279,061</i>	<i>276,366</i>	<i>13,024</i>	<i>10,329</i>	<i>23,353</i>	<i>-2,695</i>
Grazing Land	749,786	750,810	4,820	5,844	10,664	1,024
<i>AGRICULTURAL LAND SUBTOTAL</i>	<i>1,028,847</i>	<i>1,027,176</i>	<i>17,844</i>	<i>16,173</i>	<i>34,017</i>	<i>-1,671</i>
Urban and Built-up Land	41,361	42,124	151	914	1,065	763
Other Land	221,353	222,266	383	1,296	1,679	913
Water Area	10607	10602	5	0	5	-5
TOTAL AREA INVENTORIED	1,302,168	1,302,168	18,383	18,383	36,766	0

Source: California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, 2004.

2. Regulatory Setting

This section includes a description of local and state regulations associated with the protection of agricultural resources. The California Department of Conservation is the agency with authority to regulate agricultural resources on a state level. That agency oversees monitoring of land conversion and implementation of the Williamson Act. Locally, the County Department of Planning and Building implements the Williamson Act, and is responsible for compliance with CEQA as it relates to agriculture, and for implementing the Agriculture and Open Space Element (ASOE) of the General Plan. That agency coordinates with the County Agriculture Department in determining consistency with the Agriculture Element ASOE, and in identifying impacts and mitigation under CEQA.

a. State Regulation and Policy

1) California Land Conservation Act (Williamson Act)

As defined by the CDC, 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. As an incentive, landowners receive lower property tax assessments based on agricultural or open space land uses, as opposed

to the real estate value of the land. Local governments receive a subsidy for forgone property tax revenues from the state via the Open Space Subvention Act of 1971.

b. Local Regulation and Policy

1) Agriculture and Open Space Element

The Agriculture ~~and Open Space~~ Element of the San Luis Obispo County General Plan provides a background on agricultural ~~and open space~~ resources within the County. Through the goals, policies, implementation programs, and measures provided within the document, the County's intent is: "Identify those areas of the county with productive farms, ranches and soils, and establish goals, policies and implementation measures that will enable their long-term stability and productivity." ~~"to promote and protect the agricultural industry of the County, to provide for a continuing sound and healthy agriculture in the County, and to encourage a productive and profitable agricultural industry."~~

In addition, the County adopted an updated Agricultural Buffer Policy and Procedure Document (November 2005). The purpose of this document is to: 1) promote and protect agriculture; 2) protect the public's health and safety; and, 3) provide the Board of Supervisors, Local Agency Formation Commission, school districts, and city councils with technical information, assistance, and buffer recommendations to address land use compatibility and issues affecting agriculture. Buffer recommendations provided by the County Agriculture Department are advisory, and made on a case-by-case basis within the established buffer policies and procedures.

2) San Luis Obispo County Right-to-Farm Ordinance

The San Luis Obispo County Right-to-Farm Ordinance (County Code Chapter 5.16 – Appendix D of the Agriculture Element) states that "the use of real property for agricultural operations including agricultural processing is a high priority and favored use." The ordinance states that: "it is the declared policy of this County to enhance and encourage agricultural operations, including agricultural processing within the County...[and] to provide to the residents of this County proper notification of the County's recognition and support through this ordinance of those persons' and/or entities' right to farm". The ordinance also states that: "where non-agricultural land uses occur near agricultural areas, agricultural operations frequently become the subjects of nuisance complaints due to lack of information about such operations. As a result, agricultural operators may be forced to cease or curtail their operations. Such actions discourage investments in farm improvements to the detriment of agricultural uses and the viability of the County's agricultural industry as a whole."

The Right-to-Farm Ordinance advises purchasers of residential and other property types adjacent to existing agricultural operations of the inherent potential nuisances associated with the purchase of such property. Concerns may include the noise, odors, dust, chemicals, smoke, and hours of operation that may accompany agricultural operations.

3. Thresholds of Significance

The significance of potential agricultural impacts are based on thresholds identified within Appendix G of the CEQA Guidelines, the County's CEQA checklist, and other county

documents, which provide the following thresholds for determining impact significance with respect to agricultural resources. Agricultural impacts would be considered significant if the proposed project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.
- Conflict with existing zoning for commercial agricultural use, or a Williamson Act contract.
- Involve other changes in the existing environment, which due to their location or nature, could individually or cumulatively result in loss of farmland, to non-agricultural use.
- Impair commercial agricultural use of other property or result in conversion to other uses.
- Conflict with any local, state, or federal policies or ordinances protecting agricultural resources.

Additional thresholds of significance applicable to the proposed project include the following ~~Agricultural impacts~~ and would be considered significant if the proposed project would:

- Cause an adverse effect to agricultural viability by placing incompatible or potentially incompatible land uses near active agricultural areas.
- Adversely affect commercial agricultural production both on and off-site.

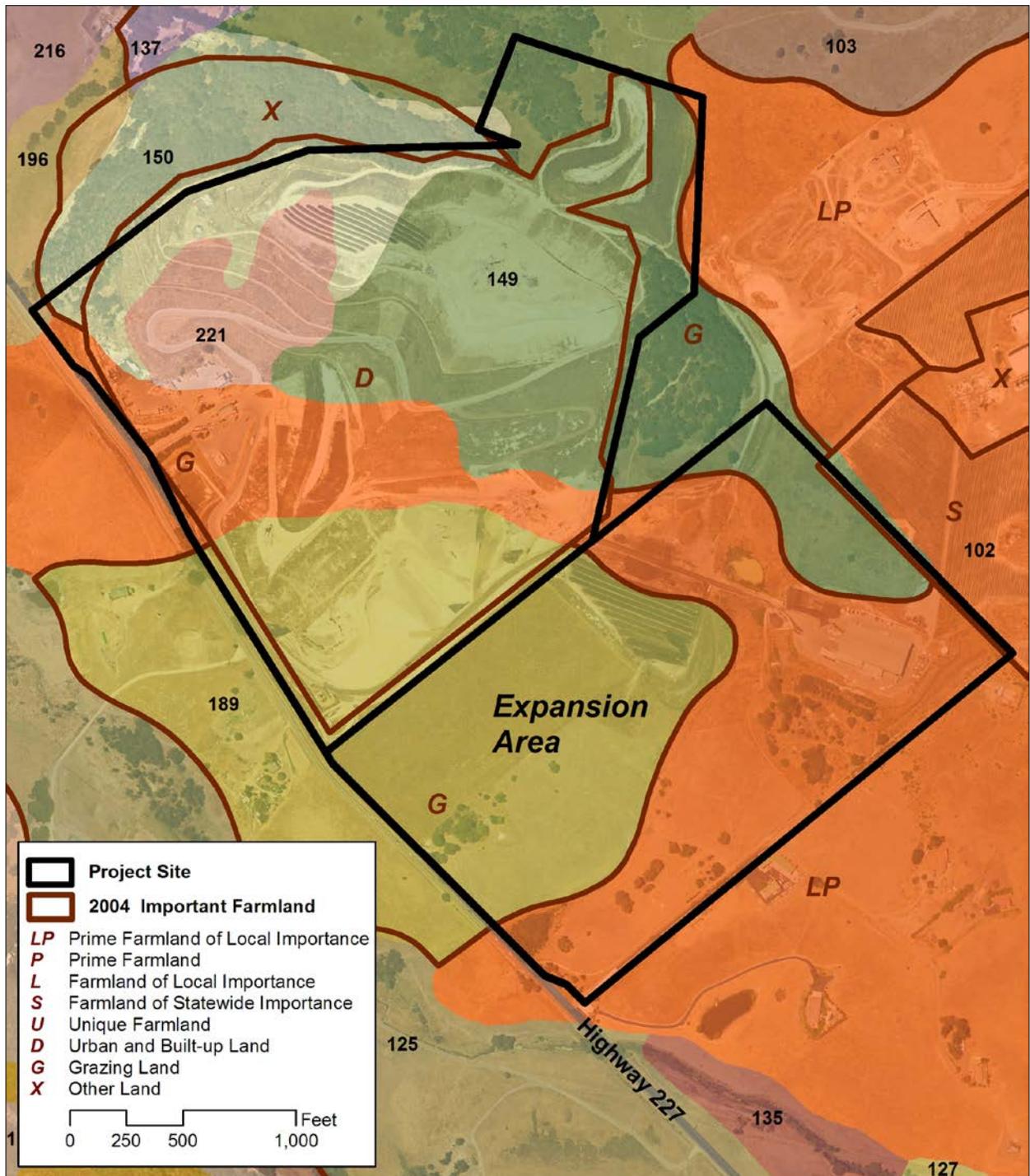
4. Impact Assessment and Methodology

Impacts to agricultural resources were assessed by utilizing data and maps published by the USDA, CDC, and County Agriculture Department, including soil information, farmland mapping, and economic data. The project was analyzed for the potential conversion of important farmland, loss of productive agricultural soils, incompatible land uses, and inconsistencies with regulations and policies intended to preserve agricultural resources.

The analysis of agricultural constraints included a review of GIS maps, local and state literature and records, consultation with the County Agricultural Commissioner's Office and the San Luis Obispo County Department of Planning and Building, and field visits to the project study area and the surrounding region. GIS data provided by the County were utilized to determine soil types and identify parcels within and adjacent to the project study area. These layers were joined with the project study area layer to quantify the acreage of affected soils, and agricultural use areas.

Documents used for the literature review included the *County of San Luis Obispo Crop Report*, the *County of San Luis Obispo General Plan Agriculture ~~and Open Space~~ Element*, and the *San Luis Obispo Area Plan*. Other documents included the *NRCS Soils Data for San Luis Obispo County*, the *CEQA Guidelines*, and the *California Farmland Conversion Report* published by the CDC. Field visits were performed to assess existing land uses and potential constraints.

Source: Soil Survey of San Luis Obispo County, Coastal Soils



Project Site

2004 Important Farmland

LP Prime Farmland of Local Importance
P Prime Farmland
L Farmland of Local Importance
S Farmland of Statewide Importance
U Unique Farmland
D Urban and Built-up Land
G Grazing Land
X Other Land

0 250 500 1,000 Feet

Soil Unit	
102 - Arnold loamy sand, 5% to 15% slopes	150 - Lodo clay loam, 50% to 75% slopes
103 - Arnold loamy sand, 15% to 50% slopes	189 - Pismo loamy sand, 9% to 30% slopes
108 - Briones loamy sand, 15% to 50% slopes	190 - Pismo rock outcrop complex, 30% to 75% slopes
125 - Carralitos sand, 2% to 15% slopes	191 - Pismo-Tierra complex, 9% to 15% slopes
127 - Cropley clay, 0% to 2% slopes	196 - Salinas loam, 0% to 2% slopes
135 - Elder sandy loam, 2% to 5% slopes	216 - Tierra sandy loam, 2% to 9% slopes
137 - Elder sandy loam, 9% to 15% slopes	221 - Xererts-Xerolls-Urban land complex, 0% to 15% slopes
149 - Lodo clay loam, 30% to 50% slopes	

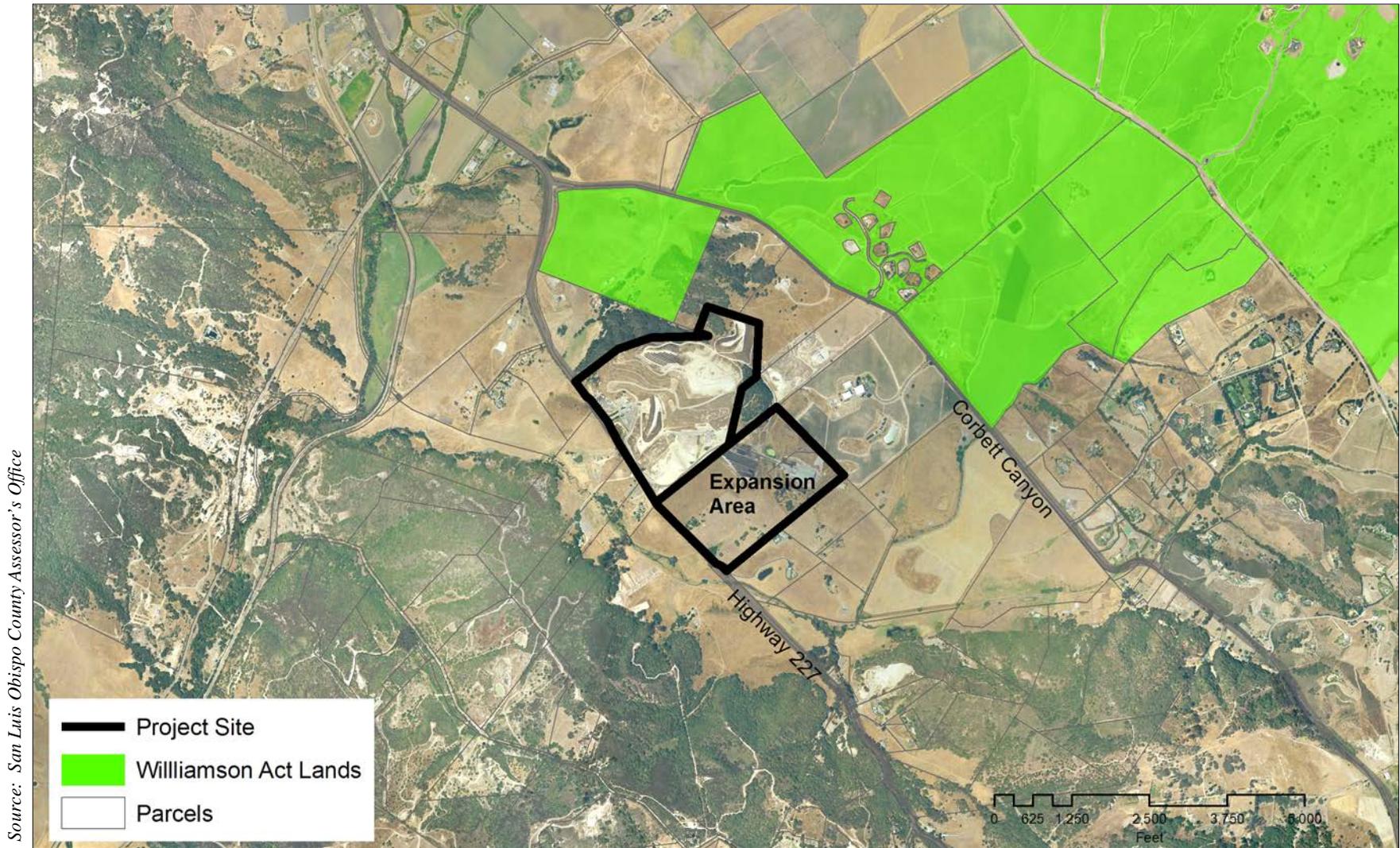


NORTH

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Soils and Important Farmland Map
FIGURE V.B.-1

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NORTH
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Parcels with Williamson Act Contracts
FIGURE V.B.-2

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5. Project-specific Impacts and Mitigation Measures

Potential agricultural impacts, including water use, have been assessed assuming total buildout of the proposed project. Buildout would not occur for more than five years.

a. Conversion of Agricultural Soils to Non-Agricultural Use

Implementation of the proposed project would result in non-agricultural development on potentially productive soils on the 88-acre expansion site to the south of the existing Landfill. This site consists of three parcels designated Agriculture. One of the parcels is 12.5 acres in size, and is occupied by the existing Materials Recovery Facility (MRF). The two other parcels are 75.5 and 0.23 acres in size.

The proposed project would directly convert approximately 15 acres of Farmland of Statewide Importance (Arnold loamy sand, Class 4) and indirectly encroach upon it such that it would leave the remaining 20 acres fragmented and too constrained by roads, structures, ponds, or stockpiles for agriculturally productive use. It would also directly convert approximately 20 acres of Grazing Land (Pismo loamy sand, Class 7) that has previously supported a vineyard (2006), and an additional 20 acres of Grazing Land on similar soils (the COSE does not identify this soil type as an Important or Productive Soil). The proposed project would directly convert or indirectly impact approximately 35 acres of Important Farmland/Important Agricultural Soil, and 40 acres of Grazing Land (not considered an Important Agricultural Soil), totaling 75 acres. With appropriate water resources, a parcel of this size, containing these soils, could be commercially viable.

Based on groundwater evaluations conducted on wells serving the project site (i.e., pump tests on expansion site wells conducted by Fugro 2010), on-site groundwater production is approximately 25 AFY. Therefore, the site has the water resources onsite necessary to support a 20 acre vineyard, as there was one located in the expansion area until 2006. Based on data from the Water Demand assessment prepared for the County's Draft Water Master Plan Update, vineyards in the San Luis Obispo/Avila area demand approximately 0.8 acre feet of water per acre per year. At this rate, to support a 40-acre vineyard onsite (generally the minimum parcel size for a commercially viable operation on these soils), approximately 32 AFY of water would be necessary.

The 1,687-acre groundwater basin that the project is located within can support additional intensification of approximately 145 acres of agriculture. The groundwater basin area includes at least an additional 275 acres of land, which could be planted with vineyards (refer to Water Resources, Section 6.a.); however, the on-site groundwater supply of 25 AFY is not adequate to support a 40-acre vineyard operation. Therefore, implementation of the project would not result in a significant impact to Important (Productive) Agricultural Soils, as defined in the County Conservation and Open Space Element (2011).

Agricultural Element Policy 24 (AGP 24), *Conversion of Agricultural Land*, provides direction to "Discourage the conversion of agricultural lands to non-agricultural uses". However, AGP 24 also states that, should it be necessary to change the designation of land from Agriculture to non-agricultural designations or uses, clear criteria should be established.

Criteria that are listed in the Agriculture Element as part of AGP 24 for making the finding of approval in the re-designation of agriculture to non-agriculture, as well as findings specific to the expansion site and proposed project, are listed below:

- Agricultural production is not feasible due to some physical constraint or surrounding incompatible land uses.

Finding: The feasibility of agricultural production on the proposed expansion site is currently limited due to two primary factors: 1) the Materials Recovery Facility (permitted by the County in 1997) is located over approximately 12 acres of the southeast corner of the site, and 2) the existing Landfill is located adjacent to and along two-thirds of the northern boundary of the proposed expansion parcel. These two existing uses result in an increased potential for incompatibility issues to arise (e.g., dust, noise, non-agricultural traffic, disease) and fragmentation of the site. Given that these existing uses are currently being implemented by the owner of the expansion parcel (i.e., Landfill), the feasibility of the expansion site to be used for agricultural purposes in the long-term is considered to be significantly reduced.

- Adjacent lands are already substantially developed with uses that are incompatible with agricultural uses;

Finding: As stated above, the parcel to the north of the expansion site is used for a regional landfill facility. This 121 acre parcel is designated Public Facility. Lands designated Public Facility are intended to meet regional and community needs such as those provided by a landfill. Adjacent lands to the west, east, and south are a combination of lands designated Agriculture or Rural Lands and are currently used for a number of small scale agricultural uses and residential uses. The use of the site for expansion of the landfill would not affect the continuance of the adjacent uses, nor would those uses prevent the use of the proposed site for agriculture. Considering all these factors, and the potential for conflicts between residential uses and agricultural uses, surrounding uses are considered incompatible with agricultural uses.

- The conversion to non-agricultural uses shall not adversely affect existing or potential agricultural production on surrounding lands that will remain designated Agriculture; and,

Finding: Use of the expansion site as an extension of the existing landfill as well as associated proposed uses (e.g., expansion of the MRF and relocation of the Resource Recovery Park [RRP]) has the potential to result in compatibility issues (e.g., dust, lights, noise, and disease vectors). These compatibility issues are evaluated in detail below (refer to Section V.B.5.d). It has been determined in the referenced discussion that the potentially significant compatibility impacts associated with the Landfill expansion, through implementation of mitigation measures recommended in the Noise, Air Quality, and Hazards sections of the FEIR would reduce these impacts to a less than significant level. These measures would for instance include implementation of a dust control program, a night lighting plan, a litter control plan, and a noise barrier contingency plan.

The proposed project would utilize 0.9 AFY of groundwater at a point when the Landfill is at full operating capacity (five or ten years into the future, or more) until the proposed expanded disposal area has been filled, which would be a period of approximately 25 years. The increased demand of 0.9 AFY represents 0.2% of the overall 399.2 AFY future groundwater basin demand and the maximum future Landfill demand of 10.2 AFY represents 2.5% of the overall future groundwater basin demand. If taken as a range (i.e., 0.2% to 2.5%), these percentages are not cumulatively considerable because it represents: less than 10 percent of the existing demand (164.3 AFY); less than 10 percent of the annual yield of water which may still be available in the basin (281 AFY); and, less than 10 percent of the future increase in demand (234.9 AFY). Given that this is the case, it is not expected that the proposed project would adversely affect existing or potential agricultural production on surrounding land.

- There is an overriding public need for the conversion of the land that outweighs the need to protect the land for long-term agricultural use.

Finding: The existing Landfill is expected to reach maximum capacity in approximately 2018. Expansion of landfill capacity is considered an essential service and benefit to the public that relies on the Landfill for waste disposal. As such, it would appear that conversion of the land for a beneficial use outweighs the need to protect the land for potential agricultural uses in the long-term.

- Additionally, approval of land conversions from agriculture to non-agricultural land uses will include a finding that the conversion of will not materially reduce groundwater recharge.

Finding: Currently, approximately 10% of the 88-acre expansion site is covered by impervious surfaces. The proposed expansion would result in an additional approximately 45% of the 88 acre site being used for expansion of the Landfill, relocation of the RRP, relocation of the entrance driveway and scalehouse, expansion of the MRF, and an increased use of 0.9 AFY of groundwater. All of these proposed uses would increase impervious surface and alter groundwater recharge as it currently occurs. However, the project would also include construction of two basins that would be used to manage stormwater runoff. One of the basins would be a detention basin and the other (formerly referred to as the compost runoff basin) would be a retention basin. These basins, plus retention and restoration of the drainage corridor that transects the expansion site in an east-west direction, would contribute to percolation of runoff and provide increased opportunity by the Landfill to re-use captured runoff for dust control and habitat restoration. Therefore, although the project would result in an increase in impervious surfaces on the expansion site, the resulting effects on groundwater recharge would be countered by proposed stormwater management in addition to the proposed reduction in the need for use of 0.9 AFY of groundwater use. Based on the surface water detention/retention elements of the project, it is projected that the conversion of the expansion site would not materially reduce groundwater recharge.

Based on the assessment above, the proposed project would meet the criteria identified in the Agricultural Element for consideration of conversion of agricultural land. This assessment is

provided for review by the public and decision-makers when considering the project and associated mandatory findings.

In addition, the groundwater analysis (refer to Water Resources, Section V.K.6.a), determined that available water resources would not support a 40 acre vineyard operation on Important (Productive) Soils. For these reasons, the project-specific conversion of agricultural land to non-agricultural use resulting from the proposed project is considered *less than significant (Class III)*. No mitigation is required.

~~Implementation of the proposed project would result in non-agricultural development on potentially productive soils. The proposed project would directly convert approximately 35 acres of Farmland of Local Potential (soil number 102, Class 4), or encroach upon it such that it would leave those remaining fragments too constrained by roads, structures, ponds, noise berms, or similar, for productive use. It would also directly convert approximately 20 acres of Grazing Land (soil number 189, Class 7) that has previously supported a vineyard, and an additional 20 acres of Grazing Land on similar soils. Therefore in total, the proposed project would convert approximately 75 acres of potentially productive soils. With appropriate water resources, a parcel of this size, containing these soils, could be commercially viable.~~

~~The site does have the water resources onsite necessary to support a 20 acre vineyard, as there was one located in the expansion area until 2006. An additional 55 acres of vineyard would require 66 afy of water based on County standards. To support a 40 acre vineyard onsite (generally the minimum parcel size for a commercially viable operation on these soils), approximately 48 afy of water would be necessary.~~

~~Based on the Water Resources section, the groundwater basin would sustainably yield 391 afy, with approximately 342 afy already in demand by the Landfill, domestic and agricultural users. This would leave 49 afy available basin wide for use on this site approximately the same number necessary to irrigate 40 acres of vineyard. Therefore there would appear to be enough water to support a 40 acre vineyard on this site, however intensification of 40 acres of vineyard would essentially require all remaining water that the basin could sustainably yield. As a result, there would not be a sustainable supply of groundwater for agricultural intensification anywhere else in the basin. In addition, the development of onsite infrastructure capable of supplying the additional 48 afy (deeper wells and/or intensified pumping nearly 5 times that analyzed in the Water Resources section) would most likely affect groundwater levels in neighboring agricultural wells.~~

~~Because the local groundwater basin can only support additional intensification of approximately 40 acres of agriculture, and because the groundwater basin area includes at least an additional 100 acres of land which could be planted with row crops (refer to Water Resources section) and an additional 450 which could support a vineyard, the project specific conversion of agricultural soils to non agricultural use resulting from the proposed project is considered *less than significant (Class III)*. No mitigation is required.~~

b. Conversion of Williamson Act Lands

The proposed project would not require the removal of any parcels under Williamson Act contract. Lands currently under contract in the area are located to the north and east of the proposed project. The proposed project would expand the landfill boundary to the south. As a result, the proposed expansion is not expected to directly impact any agricultural lands under Williamson Act contract.

As the Landfill expansion is occurring in the opposite direction from existing Williamson Act lands, it is not expected that the expansion would encourage landowners with land under contract to prematurely cancel their contracts in anticipation of future expansions or incompatibilities. Direct and indirect impacts to Williamson Act lands would be *less than significant*, (Class III). No mitigation is required.

c. Water Usage

The Agriculture Element of the County's General Plan, Policy 11 (AGP11), states that the County should maintain water supplies for production agriculture (i.e., quantity and quality), so that agriculture is not lost due to competition for water with urban or suburban uses.

Based on information in Section V.K., Water Resources, once at maximum capacity, the Landfill would increase water consumption at the facility ~~by nine afy~~ 0.9 afy to a total of ~~44~~ 10.2 afy. The section concluded that this project-specific increase in consumption would have an insignificant effect on groundwater supply and well levels in the local groundwater basin

Section V.K. concluded that drawdown of neighboring wells ~~at the nearest property boundary, approximately 80 feet to the south would be less than significant~~ 32 feet, 20 years of pumping at a rate necessary to satisfy average daily Landfill demand (refer to Figure V.K. 8). It also concluded that this estimate may be high because it assumes that the wells have not been pumped historically, which isn't the case. Groundwater data from groundwater monitoring wells at the Landfill support this, as they have shown little significant change in groundwater levels since monitoring began in 1989 (refer to Appendix B, Plate 5). Therefore the project would not significantly reduce water available for agricultural intensification. The impact would be less than significant (Class III).

~~Potential drawdown at neighboring wells may be insignificant; however the groundwater basin has been shown to be nearing its sustainable yield. There is currently approximately 49 afy of groundwater available to support intensification of agricultural parcels in the basin. This would supply approximately 40 acres of vineyard and most likely even fewer acres of irrigated row crops. Therefore all water used by the Landfill would be water that would not be available for agricultural use, resulting in an inconsistency with AGP 11 and a potentially significant impact to the local agricultural water supply.~~

AG Impact 1 ~~The proposed project would reduce the water available for intensifying local agricultural production in the local groundwater basin.~~

~~Implement AQ/mm 7 and WR/mm 3 and 4.~~

~~*Residual Impact* — As discussed in the Water Resources section, it is unclear how much water may be saved after implementation of these mitigation measures. The largest single water demand is from the irrigation of the compost windrows. Utilizing the covered ASP compost method may result in a water savings, although there is no data to suggest that substantial (afy) water reductions are possible. After implementation of these mitigation measures, the proposed project would still result in a *significant, unavoidable adverse impact (Class I)* to the local agricultural water supply.~~

d. Compatibility

Industrial uses such as a municipal landfill have the potential to be incompatible with agricultural operations. The noise and lights can affect livestock, traffic can make it more difficult to move farm equipment from location to location, and dust can impact crop productivity. Because the Landfill accepts greenwaste that may be infected with pathogens, it may act as a source of disease that could affect neighboring agricultural operations. These impacts, which may result in the Landfill being incompatible with agriculture, have been considered in other sections of the EIR; however, they are discussed below as well, in the context of agriculture.

1) Dust

Numerous different types of daily operations associated with the expansion would result in the creation of dust. These include module excavation, sorting at the Resource Recovery Park (RRP), ~~the Compost Operation (CO)~~, application of daily and intermediate covers, vehicle traffic on unpaved roads, and construction projects. Dust leaving the site would potentially create a nuisance for farm workers, and settle on neighboring crop land, thereby potentially reducing productivity. Section V.C., Air Quality, includes a discussion of potential dust sources and requires multiple mitigation measures intended to reduce dust creation to less than significant levels. These measures include AQ/mm-2 and 3, and control dust through use of water trucks, speed control, re-seeding disturbed areas, and minimizing disturbed areas, for example, and are considered adequate to mitigate compatibility issues related to dust. No additional mitigation measures are required.

2) Lights

Bright lights at night have the potential to disturb livestock. Very little lighting has been proposed for nighttime operations at the MRF, which will operate until 10 p.m. Other lights may be required for the entrance, scalehouse parking areas and work areas. Section V.A., Aesthetic Resources, considers night lighting, and mitigation measure AES/mm-12³ was developed to minimize negative impacts associated with night lighting at the Landfill. This mitigation requires the applicant to submit a lighting plan showing that light shall be shielded from offsite views, and that light shall not illuminate beyond the property line, or slopes and hills visible from offsite, for example, and is considered adequate to mitigate compatibility issues related to lighting. No additional mitigation measures are required.

3) Noise

Noise also has the potential to affect livestock. Livestock not accustomed to noise levels can be startled and injure themselves or destroy agriculture infrastructure, such as fencing or pens. Given that the project would potentially increase noise levels to the south, closer to the existing equestrian facility, noise impacts as they relate to agriculture are particularly relevant.

The stables at the equestrian facility are located approximately 800 feet from the closest proposed Landfill Module, 12. At this distance, based on the section V.I., Noise, proposed Landfill activities would be audible and may potentially exceed County noise thresholds (these thresholds do not apply to agricultural operations, but are provided for context). However, the proposed project would not produce these noises after 5 p.m. when noises would be potentially more disruptive to sleeping livestock. In addition, based on site visits and aerial photos, it appears that grazing activities have consistently occurred as close as 200 feet from the active Landfill. In addition, portions of the expansion area are periodically grazed. This is an indication that livestock have not historically been affected by landfill activities during the day. Noise mitigation measures have been developed for residences in the vicinity of the landfill. These measures include construction of a noise berm along the southeastern boundary, and minimize the amount of time that doors will be open at the MRF. These measures are considered adequate to mitigate compatibility issues related to noise. No additional noise mitigation measures are necessary to address agricultural compatibility.

4) Disease Vectors

In a landfill setting, vectors can spread disease by carrying waste containing bacteria, viruses, and other organisms off-site or by becoming infected themselves and coming into contact with humans, plants, and animals in surrounding areas.

Disease could be spread as infected materials that have been transported to the Landfill from other locations. At the same time, however, it is recommended in some cases that infected materials be transported to disposal facilities, where they can be permanently disposed of or composted. For example, the California Department of Forestry and Fire Protection (CAL FIRE) recommends that green waste infected by Pine pitch canker that are removed from a site be “tightly covered with a tarp during transit and taken to the nearest landfill or designated disposal facility for prompt burial, chipping and composting, or burning” (FRRP, 2001). Fully composted material at the Landfill has been tested and is free of pathogens. As a result of this EIR, the applicant would also be required to develop education materials regarding plant pathogens for distribution to public and private customers, in coordination with the County Department of Agriculture ~~cover composting material~~, which would further reduce the potential for the spread of disease offsite. The EIR has ultimately concluded that Pine pitch canker impacts are significant and unavoidable, although this disease is not considered a threat to agricultural production.

Recent regulations, enforced by the California Highway Patrol and the applicant require tarping/coverage of all loads transported to the Landfill, including greenwaste haulers. This would assist in reducing the potential spread of disease through the transport of infected green materials to the Landfill. Section V.H., Hazards and Hazardous Materials, more fully discusses the potential impacts associated with disease vectors, and concluded that measures ~~beyond the~~

~~processes~~ that already occur at the Landfill, including nightly covering of refuse and enforcement of regulations requiring that loads be tarped adequately, in addition to proposed measures, mitigate any potential impacts associated with the transmission of disease off the Landfill site. These measures are considered adequate to mitigate compatibility issues related to disease vectors. No additional mitigation measures are required.

For purposes of this EIR, impacts associated with the compatibility of the proposed project with agricultural operations include dust, night lighting, noise, and disease transmission. These issues have been considered in other sections of this EIR. In most cases, the impacts are considered *significant and require mitigation (Class II)*. The mitigation developed in this section is considered adequate to mitigate the issues as they relate to agricultural compatibility.

AG Impact 2 Implementation of the proposed project would result in compatibility impacts relating to dust, lights, noise, and disease vectors.

Implement AQ/mm-2 and 3, AES/mm-12, NS/mm-1, and HAZ/mm-6 and -7.

6. Cumulative Impacts

The proposed project is located in the Edna Valley, an area that has been characterized as semi-rural and has seen an increase in residential development in recent years. Many of these developments result in the loss of potentially productive agricultural soils. The development of the proposed project would further impact the agricultural potential of the area by contributing to the cumulative loss of potentially productive soils and finite groundwater resources.

Conversion of this property to a more intensive use, such as the Landfill, would increase the likelihood of conflicts between the facility and agricultural uses in the area. The proposed project, along with anticipated additional residential development (based on land use designations and local demand for rural housing in San Luis Obispo County, not on specific proposed projects) would contribute cumulatively to the encroachment of non-agricultural uses in traditionally agricultural areas. Implementation of mitigation measures in this EIR would reduce potential project specific incompatibilities to a less than significant level; however, the proposed project would contribute cumulatively to *significant unavoidable adverse impacts (Class I)* resulting from conversion of potentially productive soils, ~~loss of groundwater resources,~~ and agricultural incompatibilities.

AG Impact 23 Implementation of the proposed project could result in a cumulatively significant, adverse effect on nearby potentially productive agricultural soils, ~~finite groundwater resources.~~

Implement AQ/mm-2, 3 ~~and 7~~, AES/mm-13 ~~12~~, NS/mm-1, and HAZ/mm-6 and 7 ~~WR/mm 3 and 4.~~

Residual Impact With implementation of the above mitigation measure, impacts resulting from potential incompatibilities ~~and the use of groundwater for nonagricultural purposes~~ would be reduced; however, residual impacts could be considered *significant, adverse, and unavoidable (Class I)*.