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## SECTION ACRONYMS/ABBREVIATIONS

ACRONYM/ ABBREVIATION	DEFINITION
BMPs	Best Management Practices
CDC	California Department of Conservation
CEC	California Energy Commission
CEQA	California Environmental Quality Act
DEH	County of San Diego Department of Environmental Health
DPLU	County of San Diego Department of Planning and Land Use
ESA	Environmental Site Assessment
FPUD	Fallbrook Public Utility District
LARA	Local Agricultural Resource Assessment
LIM	Land Inventory and Monitoring System
LORS	Laws, Ordinances, Regulations and Standards
$\mu\text{g}/\text{m}^3$	Micrograms per Cubic Meter
NOI	Notice of Intent
$\text{NO}_2$	Nitrogen dioxide
$\text{NO}_x$	Nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
$\text{O}_3$	Ozone
Project	Subject of this AFC, Orange Grove Project
Project Site	Approximately 8.5 acre parcel to be leased for the power plant Site (a.k.a. "Site")
ROC	Reactive Organic Compounds
SCS	Soil Conservation Service
Site	Approximately 8.5 acre parcel to be leased for the power plant Site (a.k.a. "Site")
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
USDA	United States Department of Agriculture

## 6.4 AGRICULTURE AND SOILS

This section describes the agriculture and soil resources in the vicinity of the Site. Based on the size and nature of the Project and existing conditions described in this section, the Project will have impacts on agriculture and soil resources that will be less than significant. The Site will occupy land that is designated and zoned A72 (Agriculture). The General Plan land use designation is General Agriculture determined by the 1979 County of San Diego General Plan. The ongoing update of the County General Plan currently anticipates changing the land use designation of the Site area to Public/Semi Public Facilities (DPLU, 2006a). A power plant is consistent with the current General Agriculture land use designation and the A72 zoning but, if not for the exclusive authority of the California Energy Commission (CEC) to certify power plant sites and related facilities, a power plant in A72 zoning would require issuance of a Major Use Permit from the County of San Diego Department of Planning and Land Use (DPLU). Therefore, there will not be a need to change the current agricultural zoning for the proposed Project. Agriculture practices in the surrounding area will not be affected by the construction or operation of the Project.

The Site occurs on a portion of a former citrus orchard that has not been maintained for at least 5 years (Sykes, 2007). The gas pipeline route traverses non-agricultural lands, former dairy farms that are no longer active, and lands adjacent to State Route (SR) 76 that are outside of active agricultural fields. Figures 6.4-1A, 6.4-1B and 6.4-1C show existing and selected former agricultural uses on the Site and within the vicinity of the linear facilities and water pickup station locations.

### 6.4.1 Existing Conditions

The Project area is located in north San Diego County in the foothills west of Aqua Tibia Mountain. Regionally, the area is predominantly moderately steep mountain slopes with bedrock at the surface or at shallow depth, with generally thin soil development. Deposits of alluvium and colluvium occur in and adjacent to drainage bottoms where slopes are less steep, such as at the Site location. The climate is mild in the winter, and warm and dry in summer. Rainfall statistics are provided in Section 6.5, Water Resources.

This area of San Diego County has a history of mining and raising livestock. Soils in the Site area are stony and low in fertility, and do not meet the criteria for Prime Farmland as defined by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) Land Inventory and Monitoring System (LIM) (CDC, 2006).

#### 6.4.1.1 Soil Resources

Maps prepared by the USDA SCS identify soil types and their distribution in the Project area (USDA, 1973). The Project is located in an area consisting primarily of moderately steep mountain terrain. Soils are formed in material weathered from basic igneous rocks and granitic alluvium. Soils at the Site and the surrounding area are Las Posas stony fine sandy loams that have clay subsoil. The distribution of these and other soils near the Site and the water and gas

pipelines are shown in Figure 6.4-2. The characteristics of those soil types within or adjacent to planned Project disturbances are summarized in Table 6.4-1.

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Table 6.4-1 – Summary of Soil Properties at or Adjacent to Areas of Planned Disturbance

MAP SYMBOL <sup>1</sup>	SOIL NAME	% SLOPE	DEPTH (inches)	USDA TEXTURE	UNIFIED SOIL CLASSIFICATION SYSTEM	EROSION FACTORS <sup>2</sup>		PERMEABILITY	DRAINAGE	EROSION HAZARD RATING	LAND CAPABILITY <sup>3</sup>
						K	T				
LrE	Las Posas Stony Fine Sandy Loam	9-30	0-4	Fine Sandy Loam, Clay Loam	CH	0.24	3	Moderately Slow	Well Drained	Moderate to High	VIe-7(19,20)
			4-33	Clay, Clay Loam	CH	0.24					
			33-37	Fine Sandy Loam, Loamy Fine Sand	CH	n/a					
LrG	Las Posas Stony Fine Sandy Loam	30-65	0-4	Fine Sandy Loam, Clay Loam	CH	0.24	3	Moderately Slow	Well Drained	High to Very High	VIIe-7 (19,20)
			4-33	Clay, Clay Loam	CH	0.24					
			33-37	Fine Sandy Loam, Loamy Fine Sand	CH	n/a					
TuB	Tujunga Sand	0-5	0-14	Coarse Sand, Loamy Fine Sand	SP	0.15	5	Very Rapid	Excessively Drained	Slight	IVs-4 (19)
			14-34	Sandy Loam, Fine Sandy Loam	SP	0.17					
			34-60	Coarse Sand	SP	.010					
Rm	Riverwash	n/a	0-6	Sandy, Gravely, Cobbly	n/a	0.05	n/a	Rapidly Permeable	Excessively Drained	Severe	VIIIw-4(19,20)
			6-60			0.05					

1 Map symbols refer to Figure 6.4-2.

2 K is a measure of relative susceptibility to sheet and rill erosion by water. It ranges from 0.02 to 0.69, with lower values representing a lower susceptibility to erosion. T represents soil loss tolerance, defined as the maximum amount of erosion at which the quality of the soil as a medium for plant growth can be maintained. Values range from 1 to 5 (tons per acre per year), with 5 representing soils less sensitive to degradation.

3 An indication of the suitability of soils for most kinds of field crops. Capability classes are I through VIII. Subclasses are letters e, w, s, or c. Units are 0 through 9.

**SECTION 6.4**

**AGRICULTURE AND SOILS**

MAP SYMBOL <sup>1</sup>	SOIL NAME	% SLOPE	DEPTH (inches)	USDA TEXTURE	UNIFIED SOIL CLASSIFICATION SYSTEM	EROSION FACTORS <sup>2</sup>		PERMEABILITY	DRAINAGE	EROSION HAZARD RATING	LAND CAPABILITY <sup>3</sup>
						K	T				
VaA	Visalia Sandy Loam	0-2	0-12	Sandy Loam	SM/SC	0.17	5	Moderately Rapid	Moderately Well Drained	Slight	I-1 (19)
			12-40	Sandy Loam		0.28					
			40-60	Loam		0.49					
CmrG	Cieneba Very Rocky Coarse Sandy Loam	30-75	0-8	Very Rocky Coarse Sandy Loam	SM	0.20	2	Moderate	Well Drained	High to Very High	VII-8 (19)
			8-12			n/a					
WmC	Wyman Loam	5-9	0-13	Loam	ML	0.24	5	Moderately Slow	Well Drained	Slight to Moderate	Iie-1(19)
			13-40	Clay Loam	CL	0.24					
			40-67	Clay Loam	CL	0.24					
			67-72	Clay Loam	CL	0.24					
StG	Steep Gullied Land	n/a	0-60	n/a	n/a	n/a	n/a	n/a	n/a	Severe	VIIIe-I(19,20)

Source: USDA, 1973.

-- Not available or not applicable.

Las Posas stony fine sandy loam (map symbol LrE) is a moderately deep, well-drained soil found on uplands and derived primarily from basic igneous rock. The permeability of this soil is moderately slow in the subsoil, and available water capacity is 4 to 6 inches. This soil unit has the characteristics of stony fine sandy loam to stony clay loam in the upper horizon, clay to clay loam in the mid horizon and sandy loam to loamy fine sand in the lower horizon, with its moderately slow permeability and good drainage. This soil covers the entire Site and adjacent areas and does not present any significant hazard to Site development. SCS identifies the shrink-swell potential of this soil as “high,” but results of geotechnical testing conducted for the Site and the adjacent Pala substation indicate that this will not be problematic for Site development, as described in Section 6.3.1.5.7.

SCS has mapped the drainage channels east and west of the Site as Steep Gullied Land (map symbol StG), consisting of strongly sloping to steep areas that are eroding into old alluvium or decomposed rock. The vegetation is sparse and runoff can be rapid. Small areas of this soil type would be disturbed for construction of Project access and for the transmission line interconnection to the adjacent Pala substation and the gas pipeline. This soil type does not present any significant hazard to development of these facilities.

The gas pipeline will also be constructed through areas with soils that include Las Posas stony fine sandy loam (map symbol LrG), Cieneba very rocky coarse sandy loam (map symbol CmrG), Visalia sandy loam (map symbol VaA) and Tujunga sands (map symbol TuB). Map unit LrG Las Posas stony fine sandy loam is the same soil type as the map symbol LrE that occurs at the Site, but it is mapped by SCS as a separate subunit for steeper slopes, where it has a slightly higher erosion hazard rating (Table 6.4-1). None of the soil types that occur along the pipeline pose any significant hazard to the pipeline or are particularly sensitive to erosion or degradation (Table 6.4-1). The Riverwash soil type (map symbol Rm) occurs in the active river channel and will not be disturbed by the Project.

The fresh water pickup station will be constructed on Wyman Loam (see Table 6.4-1 and Appendix 6.4-A). The soils present do not pose any significant hazard to the planned facility and are not particularly sensitive to erosion or degradation (Table 6.4-1).

The reclaim water pickup station is located approximately 8 miles west of the Site within the boundaries of an existing wastewater treatment plant facility. A soils map and soil characteristics are provided in Appendix 6.4-A. The reclaim water pickup station is on Cieneba coarse sandy loam (map symbol CID2). The existing gravel driveway that will be paved occurs on Fallbrook sandy loam (map symbol FaB). These soils do not present any significant hazard to the planned facility and are not particularly sensitive to erosion or degradation (Appendix 6.4-A).

#### **6.4.1.2 Agriculture and Prime Farmland**

Figure 6.4-3 provides an Important Farmland Map for the Project area. No Prime Farmland will be affected by the Project. Prime Farmland occurs adjacent to the westernmost end of the gas pipeline, but will not be affected by pipeline construction or operation because in this area, the pipeline will be constructed adjacent to SR 76 outside of the agricultural fields.

The only Project disturbance that will occur on land designated as Farmland of Statewide Importance is the freshwater pickup station. The fresh water pickup station location occurs on Wyman loam soil that is a qualifying soil for Farmland of Statewide Importance. However, there is no evidence that the area encompassed by the planned footprint of this facility has been cultivated any time in the recent past. Furthermore, the planned location for this facility is along an existing FPUD utility easement on disturbed land not currently being used.

The Site is located on lands formerly occupied by a citrus orchard. The orchard has not been irrigated or maintained for at least 5 years (Sykes, 2007) and is no longer viable. Therefore, while the area of the citrus orchard is still mapped as Unique Farmland on California Department of Conservation (CDC) maps, this designation is a relic of past years. The Unique Farmland designation excludes abandoned orchards (CDC, 2006). Therefore, the Site no longer meets criteria for the Unique designation. The CDC has the orchard area slated to be taken out of agricultural status in the 2006 update (not yet published) based on their aerial photo review (Kisko, 2007). Land is taken out of agricultural status after it is fallowed for three CDC biennial map update cycles (i.e., after 6 years of non-production).

The Site and adjacent lands are designated as agricultural preserve by San Diego County (DPLU, 2006b). The western portion of the gas pipeline route is also located on land designated as agricultural preserve (Figure 6.4-4). Neither the fresh water pickup station nor the reclaim water pickup station are on land designated as agricultural preserve (DPLU 2006b). The Agricultural Preserve designation indicates that the land is "...devoted to agricultural use, open space use, recreational use, or any combination of such uses, and compatible uses which are designated by the County" (DPLU, 2007). As described under Land Use in Section 6.9, the proposed Project is compatible with agriculture under County zoning ordinances.

The Agricultural Preserve designation by the County was established for the purposes of defining areas within which the County will be willing to enter into Williamson Act agricultural preserve contracts with land owners. Neither the Site nor any of the Project facilities occur on lands that are under a Williamson Act agricultural preserve contract. The Williamson Act states that "...the erection, construction, alteration, or maintenance of gas, electric, water, or communication facilities..." are compatible uses within any agricultural preserve (Government Code Section 51238). Therefore, the Project will be consistent with the provisions of the Williamson Act.

DPLU uses a Local Agricultural Resource Assessment (LARA) model to determine the importance of agricultural resources in assessing the impact of discretionary projects on agriculture. The LARA model is designed to comprehensively account for local agricultural conditions in San Diego County and evaluates agricultural resources based on three Required Factors and three Complementary Factors as follows:

<b><u>FACTOR</u></b>	<b><u>FACTOR TYPE</u></b>
Water	Required
Climate	Required
Soil	Required
Surrounding Land Uses	Complementary
Land Use Consistency	Complementary
Topography (slope steepness)	Complementary

The LARA model dictates a “low” Soils rating for the Site because the Site does not have any Prime Farmlands Soils or Soils of Statewide Significance. Under the LARA model used by DPLU, any land with one or more Required Factors rated as “low” is not an important agricultural resource (DPLU, 2007). Therefore, the Site does not qualify as an important agricultural resource because one of the three Required Factors has “low” rating.

Ongoing agricultural operations in the vicinity of the Project Site, and gas pipeline route are shown in Figure 6.4-1A at 1:24,000 scale. Agricultural operations within the vicinity of the Fallbrook Public Utility District (FPUD) water pickup stations are shown in Figures 6.4-1B and 6.4-1C at 1:24,000 scales. These agricultural uses are described in Section 6.9, Land Use. Figure 6.4-1 shows two former dairy farm areas that the gas pipeline will cross. The western dairy farm area was the Pete Verboom Dairy and ceased operation after 2002. The eastern dairy farm was the Lucio Family Dairy, which closed in 1986 (County of San Diego Department of Environmental Health, 2002). Both of these former dairy farms are on lands now owned by Gregory Canyon Landfill and further agricultural operations are not anticipated.

### **6.4.2 Impacts**

Significance criteria were determined based on California Environmental Quality Act Guidelines (CEQA), Appendix G, Environmental Checklist Form, and on performance standards or thresholds adopted by responsible agencies. An impact may be considered significant if the Project results in:

- Substantial soil erosion or loss of topsoil.
- Substantial conflict with agricultural activities in the Project area.
- Conversion of a consequential amount of important agricultural resources as defined by the LARA agricultural resource evaluation model used by DPLU.
- Conflict with existing zoning for agricultural use or a Williamson Act contract.
- Changes that could individually or cumulatively result in loss of lands zoned for agriculture to nonagricultural use.
- Changes that could result in the conversion of offsite agricultural resources to non-agricultural use or could adversely impact the viability of agriculture on land under a Williamson Act Contract.

### 6.4.2.1 Construction Impacts

Project construction has the potential to affect soils present in the Project disturbance footprint. Acreages of disturbance are provided in Table 2.2-1 in Section 2.0, Generation Facility Description, Design and Operation, and limits of disturbance are shown in figures and appendices accompanying that section. Project construction will include excavation, grading, equipment laydown, plant construction, installation of the transmission line interconnection, construction of the gas pipeline, and necessary supporting activities. Construction laydown will occur on the Site, and on a contiguous parcel to the south. Additional staging for gas pipeline construction will occur at two designated locations along the pipeline route (Figure 2.2-4). During the final stages of construction, disturbed soil surfaces will be stabilized. Onsite surface disturbance that is not covered by facilities will be stabilized by engineered storm water runoff controls, gravel surfacing and landscaping. The construction laydown and staging areas and linear facility construction disturbances will be stabilized by planting and seeding of native shrubs and grasses. Project design features will include moisture-conditioning of soils during grading and application of water on roads and active laydown areas (see Section 6.4.2.3.1) to reduce windblown dust during construction. The potential for soil erosion will be minimized through implementation of Best Management Practices (BMPs) in accordance with the State National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Construction Sites (Water Quality Order 99-08-DWQ) and the County Storm Water Ordinance. Considering these factors, the short-term construction impacts of dust and erosion to agriculture and soils will be less than significant. Drainage and erosion control measures are further described in Section 6.5, Water Resources.

Project grading is designed to balance the amount of cut and fill during construction (see Section 2.2.2). Therefore, import or export of soil for common grading is not anticipated. There are no fill disposal or fill procurement (borrow) sites proposed for Project construction. Appendix 6.4-B provides a summary of amounts of material that will be excavated or filled for the major Project construction components, the type and quantities of material to be excavated or filled for each element, whether the fill is temporary or permanent, and the amount of material to be imported or exported.

Disturbance for Site construction will occur primarily in Las Posas stony fine sandy loam soil on a slope of approximately 10 percent. This soil type is not designated as having high agricultural value. Considering the size of disturbance and the soils present, the impact of soil loss from grading will be less than significant.

Gas pipeline construction through the mountainous terrain will affect Las Posas stony fine sandy loam and Cieneba very rocky coarse sandy loam on variable slopes. These soil types have a thin topsoil layer and are not designated as having high agricultural value. The pipeline route through the mountainous terrain will primarily follow existing unpaved roads, but there will be some grading required for safe and efficient work, and side casting of material as the pipeline trench is excavated. Once the pipeline is laid and tested, the trench will be backfilled, the area will be graded for stability, and the disturbances off of the road will be reseeded with native grasses and shrubs. Outside of the mountainous terrain, the pipeline will affect Tujunga sand and Visalia

sandy loam in relatively flat terrain and primarily along existing roads. The trench excavation will be narrow and disturbance will be maintained to the minimum area practical for safe and efficient work. All construction work will include erosion control BMPs to minimize soil loss. Considering the size of disturbance and the soils present, the impact of soil loss from grading will be less than significant.

Only minimal grading is required for the reclaim water pickup station and the fresh water pickup station. The reclaim water pickup station will be located on disturbed lands within an existing water reclamation plant and will not affect agriculture. Approximately 450 feet of an existing gravel road will be paved, and less than 500 cubic meters of soil will be excavated to achieve a cut/fill balance and a graded turn-around for the water trucks. BMPs will be utilized during construction to minimize the potential for soil erosion, and disturbed areas will be stabilized upon completion of construction.

The fresh water pickup station will utilize less than one-half acre of land with soils qualifying as Farmland of Statewide Importance. However, this disturbance will be adjacent to an existing FPU D easement on a parcel in an area that shows no sign of having been cultivated in the recent past and, therefore, will not be a conversion of agricultural resources. Furthermore, the water pickup station would be compatible with agriculture if this parcel were ever to be cultivated in the future. BMPs will be utilized during construction to minimize the potential for soil erosion, and disturbed areas will be stabilized upon completion of construction.

Construction will be short term and will not conflict with agriculture in the area. None of the Project work areas are in active agriculture. Considering these factors, the impact of construction on agriculture will be less than significant.

There are no known contaminated soils that could be disturbed by Project construction. A Phase I Environmental Site Assessment (ESA) has been conducted for the Site and did not yield any evidence of contaminated soils. The Phase I ESA is presented in Section 6.14, Waste Management.

#### **6.4.2.2 Operations Impacts**

Engineering measures installed for soil erosion and storm water control will continue to be maintained after construction. Temporary silt fencing and soil stabilization measures will be maintained until soils are stabilized. Long-term controls such as engineered drainage features, gravel surfacing, and landscaping will be maintained for the life of the Project. Beyond these erosion control measures, an onsite detention pond will be provided to detain storm water runoff onsite. The pond will be designed to detain runoff from the 100-year storm event... Operations will occur under a Storm Water Management Plan that will include erosion control BMPs in accordance with the County Storm Water Ordinance. Drainage and erosion control measures are further described in Section 6.5, Water Resources. With these measures employed, the impact of the Project related to erosion of soils will be less than significant. An evaluation of the potential for accelerated soil loss due to wind and water erosion is provided in Appendix 6.4-C.

Ongoing agricultural operations in the Project area are described in Section 6.9, Land Use. Project operations will not conflict with agricultural operations in the vicinity, and will not result in the conversion of important agricultural land. The fresh water pickup station will utilize less than one-half acre of land with soils qualifying as Farmland of Statewide Importance. However, this disturbance will be on and adjacent to an existing FPUD easement on a parcel in an area that shows no sign of having been cultivated in the recent past and, therefore, will not be a conversion of agricultural resources. Furthermore, the water pickup station would be compatible with agriculture if this parcel were ever to be cultivated in the future. As described in Section 6.4.1.2, the Site is not located on Prime Farmland, Farmland of Statewide Importance, or important agricultural land as defined by the LARA model used by DPLU. As described in Section 6.4.1.2, none of the affected lands are under Williamson Act Contract and the Project will be consistent with the Williamson Act. For these reasons, Project operations will have a less than significant impact on agriculture.

Federal and state ambient air quality standards have been established to protect not only human health, but to prevent damage to plants and wildlife in both natural and agricultural ecosystems. The two Project-related criteria pollutants with the greatest potential for effects on ecosystems are ozone (O<sub>3</sub>) and nitrogen dioxide (NO<sub>2</sub>). Only NO<sub>2</sub> will be emitted directly, generated by the combustion of fuels. Ozone is generated over many hours and miles by a complex series of chemical reactions between nitrogen oxides (NO<sub>x</sub>) and reactive organic compounds (ROC). Additional detail is provided in Section 6.2, Air Quality.

For both O<sub>3</sub> and NO<sub>2</sub>, national secondary ambient air quality standards, specifically designated to protect against effects other than to human health, were set equal to primary ambient air quality standards. Studies have shown that concentrations of these pollutants in excess of ambient air quality standards are needed to produce significant impacts on sensitive plants (Heck and Brandt, 1977). For example, the lowest 4-hour average NO<sub>2</sub> concentration needed to affect sensitive plants is 3,760 micrograms per cubic meter (µg/m<sup>3</sup>). The California 1-hour NO<sub>2</sub> ambient air quality standard is 338 µg/m<sup>3</sup> (CARB, 2007). Based on results of the air quality analysis, maximum ground-level ambient concentrations of NO<sub>2</sub> due to Project operations will be lower than this most stringent ambient air quality standard. Therefore, no significant impacts to agricultural or natural plant species are expected to occur from Project emissions.

### 6.4.2.3 Cumulative Impacts

The list of activities with potential for cumulative impacts is provided in Section 6.1.

The Project will not conflict with agricultural activities in the area and will not convert important agricultural land or conflict with zoning or a Williamson Act contract. The Project will not involve any zoning change. The Project will not result in the conversion of offsite agricultural resources to non-agricultural use, or adversely impact the viability of agriculture on land under a Williamson Act Contract. Therefore, there will be no cumulative impacts in these areas.

The Project will implement BMPs to control erosion and minimize loss of topsoil. The Project will comply with San Diego County storm water performance criteria for erosion control implemented through the County Storm Water Ordinance and other Laws, Ordinances,

Regulations and Standards (LORS). BMPs will be required to control erosion to the maximum extent practical. Some of the other projects described in Section 6.1 that involve land grading activities also have some potential to result in soil erosion. However, each of the projects that involve substantial grading work will need to adhere to storm water quality BMPs that will limit cumulative impacts to a level that is less than significant.

#### **6.4.2.3.1 Project Design Features**

The following are design and/or operational features that have been incorporated into the Project that will reduce impacts to agriculture and soils to levels that are less than significant:

- Soils will be moisture-conditioned during grading, and roads and laydown areas will be watered during construction activities. This will minimize windblown dust and related soil loss.
- A detailed erosion control plan will be developed prior to Project construction as part of the Storm Water Pollution Prevention Plan (SWPPP) to be developed for compliance with the State General NPDES permit for construction sites. The plan will include BMP erosion and sediment control measures appropriate for the Site.
- Temporary soil stabilization measures installed for construction, such as straw bales and erosion blanketing, will be maintained until soils are stabilized.
- Plant grading is designed to achieve compliance with the County Storm Water Ordinance and other LORS. For operations, the power plant will implement a Storm Water Management Plan developed in accordance with County requirements.
- Long-term erosion controls such as engineered drainage features, gravel surfacing, and landscaping will be maintained for the life of the Project.
- An onsite detention basin is included in the Site grading plan to detain storm water runoff. The basin is designed to detain the 100-year storm to prevent increased erosion downstream.
- Air emission control equipment will be installed to control power plant emissions.

### **6.4.3 Mitigation Measures**

Based on the analysis of potential impacts and Project design and operational features, no mitigation measures are required.

### **6.4.4 Significant Unavoidable Adverse Impacts**

Based on the above analysis of impacts and Project design and operational features, no significant unavoidable adverse impacts will occur to agriculture or soils.

### 6.4.5 Laws, Ordinances, Regulations and Standards

LORS pertaining to agriculture and soils are identified in Table 6.4-2, along with names of the administrative agencies and the Project's approach to compliance. Construction and operation of the Project will comply with applicable LORS related to agriculture and soil issues through a three-fold process that includes a SWPPP for construction, a construction grading and drainage plan, and comprehensive erosion control measures and other storm water BMPs during operations. These measures will satisfy local requirements and state regulations for erosion control as summarized in Table 6.4-2. Section 6.5 discusses the schedule for filing a Notice of Intent (NOI) to comply with the State General NPDES Permits for storm water runoff from construction sites.

There are no permits or approvals required for the Project related to soils or agriculture. If not for the exclusive authority of the CEC to certify power plant sites and related facilities, the County would incorporate consideration of surrounding agricultural uses through the issuance of a Major Use Permit for the Project. Sections 5105 and 5110 in the County Zoning Ordinance would require that the County make the following findings for issuance of the Major Use Permit for the Project, since the Site is in an Agricultural Preserve:

- The proposed use complies with the provisions of the Williamson Act; and
- The proposed use would not be incompatible with the continued agricultural use of surrounding land within the agricultural preserve.

Information in Section 6.4.1 and 6.4.2 in this Application demonstrates support for these findings.

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**Table 6.4-2 – Agriculture and Soils LORS and Compliance**

JURIS-DICTION	AUTHORITY	AGENCY <sup>1</sup>	REQUIREMENTS	COMPLIANCE	AFC SECTIONS AND PAGES
Federal	U.S. Department of Agriculture, Soil Conservation Service, National Engineering Handbook (1983) §2 and 3.	National Resources Conservation Service (formerly Soil Conservation Service).	Standards for planning, design and construction of soil conservation practices.	SCS guidance is considered in project design. The soils that occur at the Site and linear corridors do not pose a hazard to the project.	6.4.1.1 Pages 6.4-1 to 6.4-5
State	Williamson Act (a.k.a. California Land Conservation Act of 1965), California Government Code Section 51200 et seq.	DPLU	Establishes state requirements and procedures for Agricultural Preserve lands.	The Project is consistent with these requirements and will be reviewed for consistency by the CEC using this Application.	6.4.1.2, 6.4.2, 6.4.5 Pages 6.4-5 to 6.4-11, 6.4-12 to 6.4-14
Local	County Zoning Ordinance	DPLU	Establishes local requirements and procedures for Agricultural Preserve lands and agricultural land use areas.	The Project is consistent with these requirements. If not for the exclusive authority of the CEC to certify power plant sites and related facilities, consistency with the County zoning ordinance would require issuance of a Major Use Permit by the County. The CEC will use this Application to ensure consistency with applicable zoning ordinance requirements related to agriculture.	6.4.1.2, 6.4.2, 6.4.5 Pages 6.4-5 to 6.4-11, 6.4-12 to 6.4-14
Industry	None applicable.	None applicable.	None applicable.	None applicable.	None applicable.

<sup>1</sup> Pursuant to 20 CCR Chapter 5 Appendix B Section (i)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified LORS and adopted local, regional and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the CEC to certify sites and related facilities.

Table 6.4-3 identifies agencies that have jurisdiction for enforcing LORS related to soils and agriculture.

**Table 6.4-3 – Agency Contacts for Agricultural Resources**

AGENCY	AUTHORITY
San Diego Agricultural Commissioner and Sealer of Weights and Measures 5555 Overland Avenue, Suite 3101 San Diego, California 92123 R. Atkins (858) 694-2741	Advisory.
San Diego County Department of Planning and Land Use 5201 Ruffin Road, Suite B San Diego, California 92123 J. Ramaiya (858) 694-2960	Compliance with County Zoning Ordinance and Williamson Act.

### 6.4.6 References

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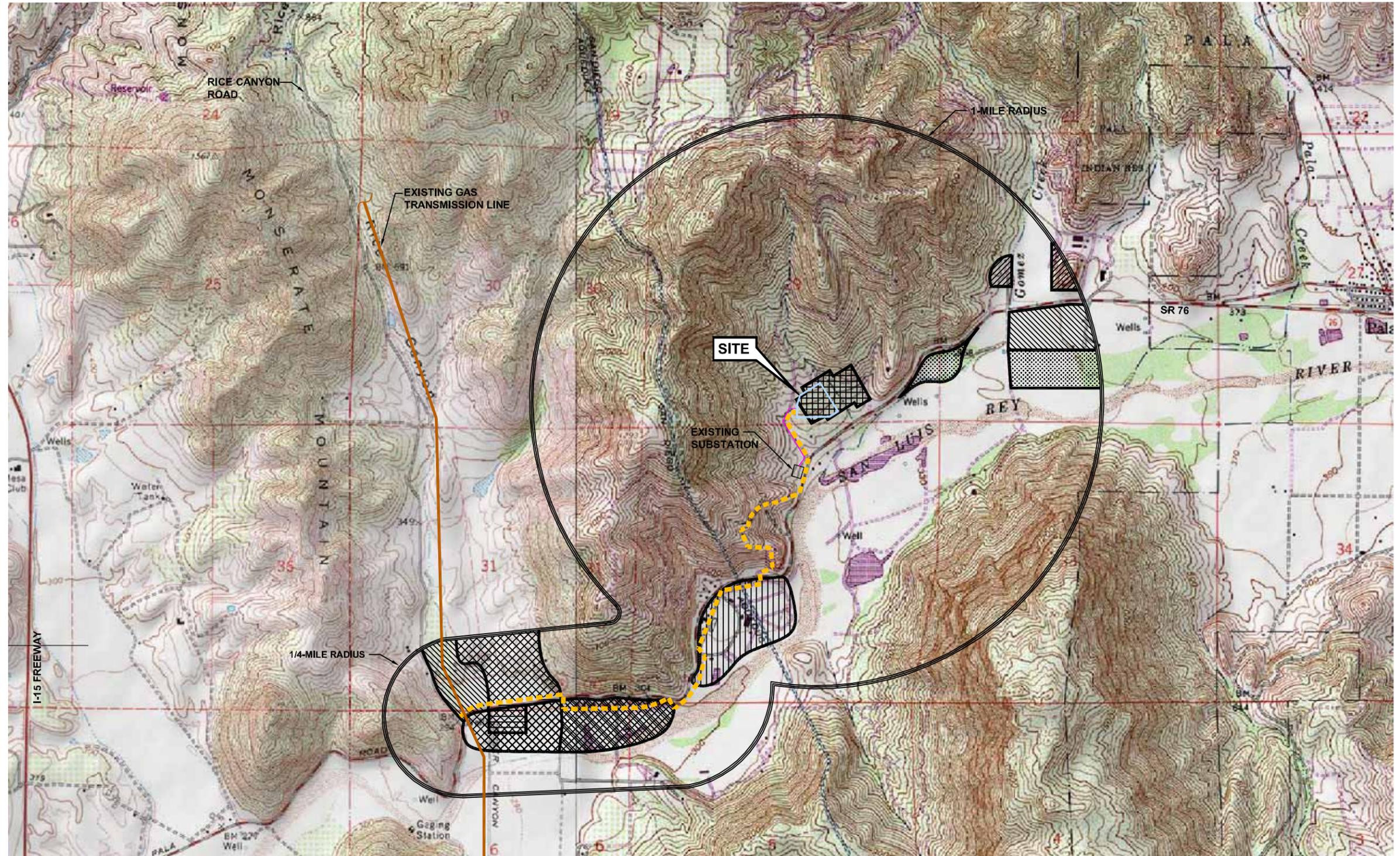
United States Environmental Protection Agency. *A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals*. Office of Air Quality Planning and Standards, EPA 450/2-81-078. December 12, 1980

**LEGEND**

-  Transmission Line Interconnection
-  Gas Pipeline
-  Existing Gas Transmission Pipeline
-  Site Boundary
-  Orchard
-  Former Dairy
-  Pasture
-  Row Crops
-  Nursery
-  Inactive Orchard
-  Field Crop

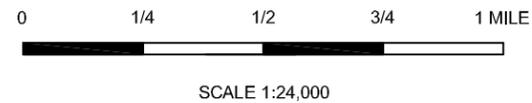
**NOTES:**

Agricultural identification map shows areas of past and present agricultural land use.



SOURCE:

United States Geological Survey  
7.5 Minute Topographic Map, 2000:  
Pala, Bonsall, Temecula,  
and Pechanga Quadrangles



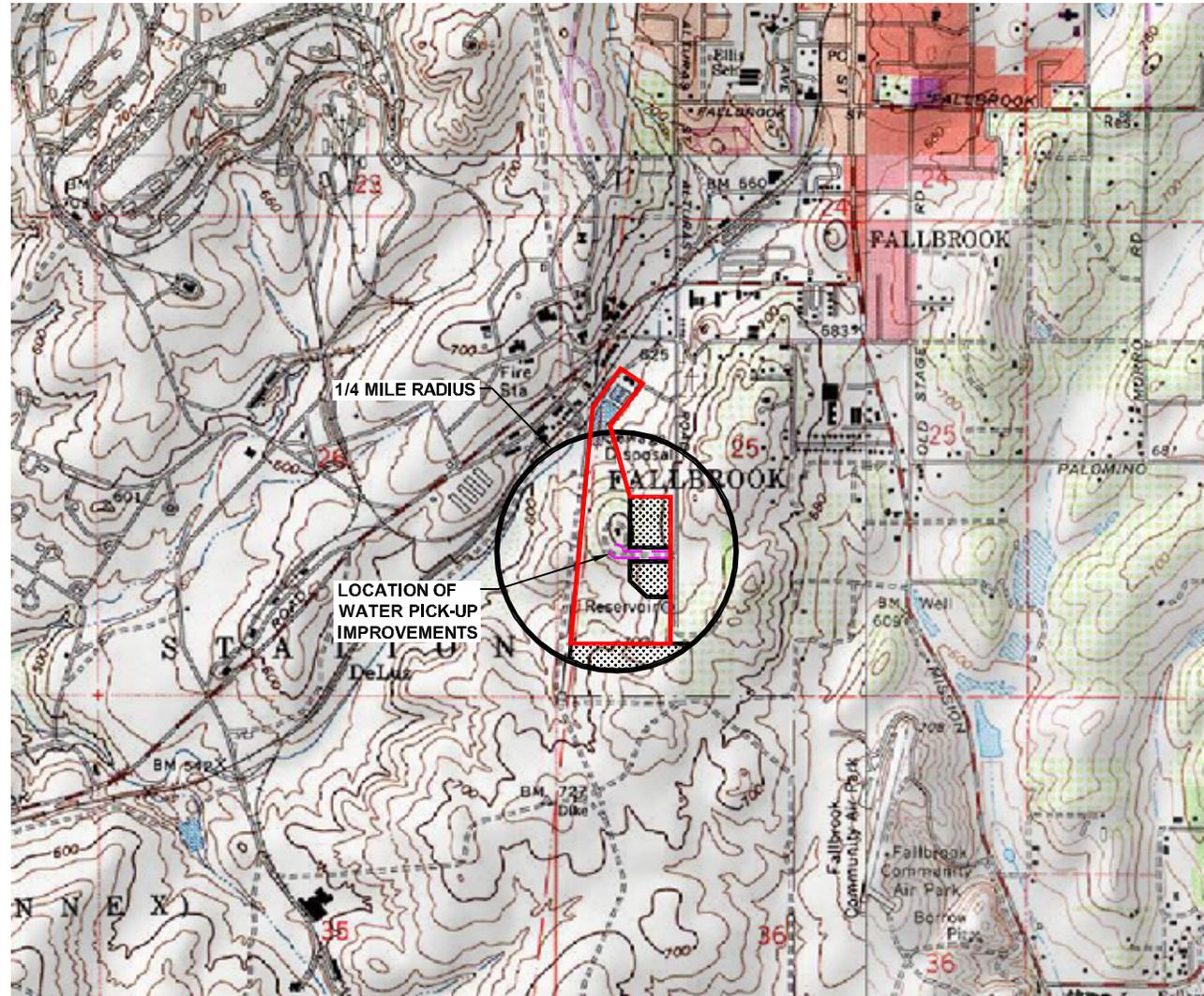
PROJECT: 125158  
FACILITY:  
ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

**AGRICULTURAL OPERATIONS IN THE  
PROJECT VICINITY**

**FIGURE 6.4-1A**

**LEGEND**

-  FPU D Wastewater Treatment Plant No. 1 Property
-  Nursery



0 1/4 1/2 3/4 1 MILE



SCALE 1:24,000

**SOURCE:**

United States Geological Survey  
7.5 Minute Topographic Map, 2000:  
Temecula and Fallbrook Quadrangles



PROJECT: 125158

FACILITY:

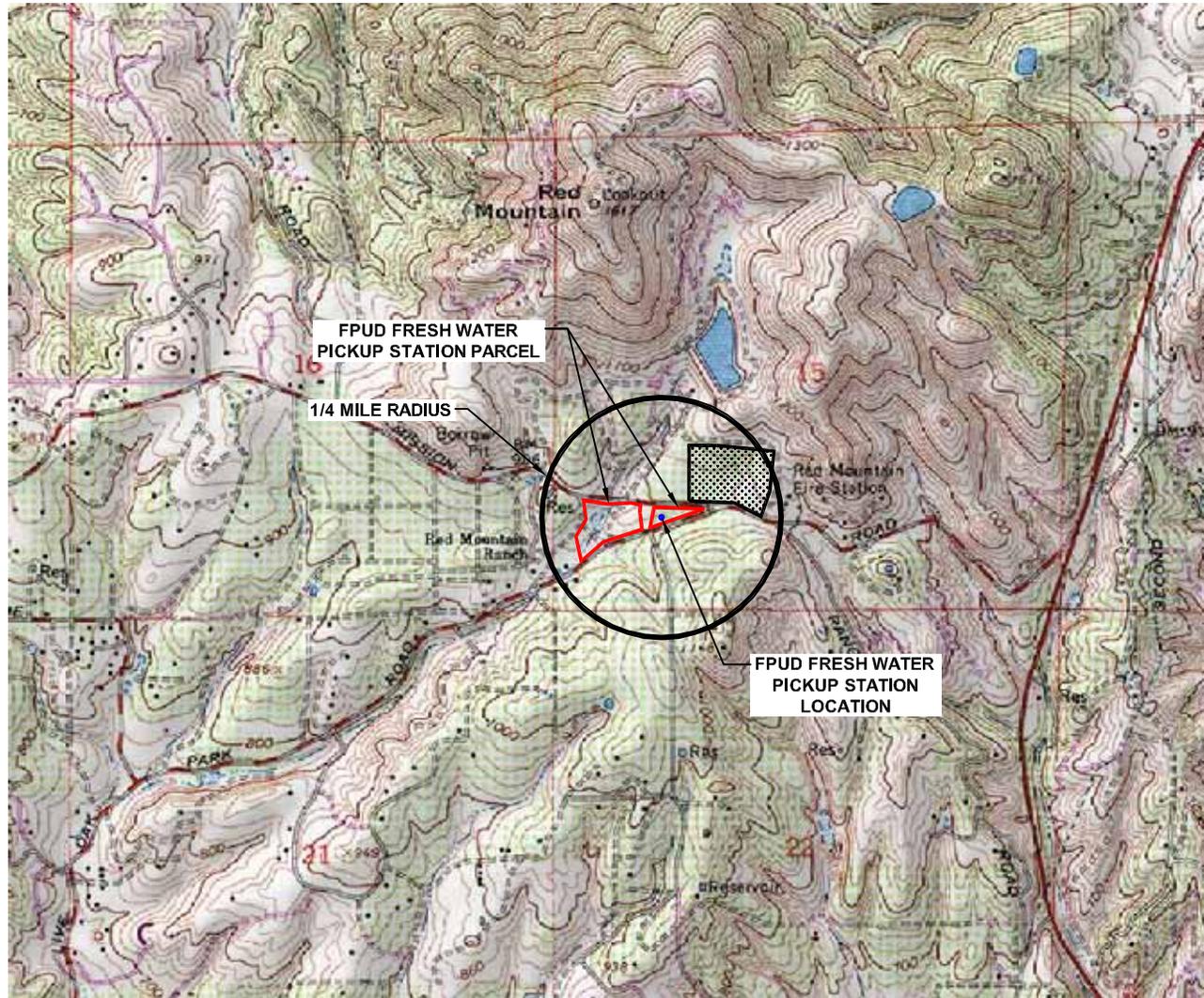
ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

**AGRICULTURAL OPERATIONS  
IN THE VICINITY OF THE  
RECLAIM WATER PICKUP STATION**

**FIGURE 6.4-1B**

**LEGEND**

 Nursery



0 1/4 1/2 3/4 1 MILE



SCALE 1:24,000

**SOURCE:**

United States Geological Survey  
7.5 Minute Topographic Map, 2000:  
Temecula and Fallbrook Quadrangles



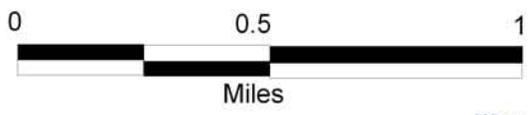
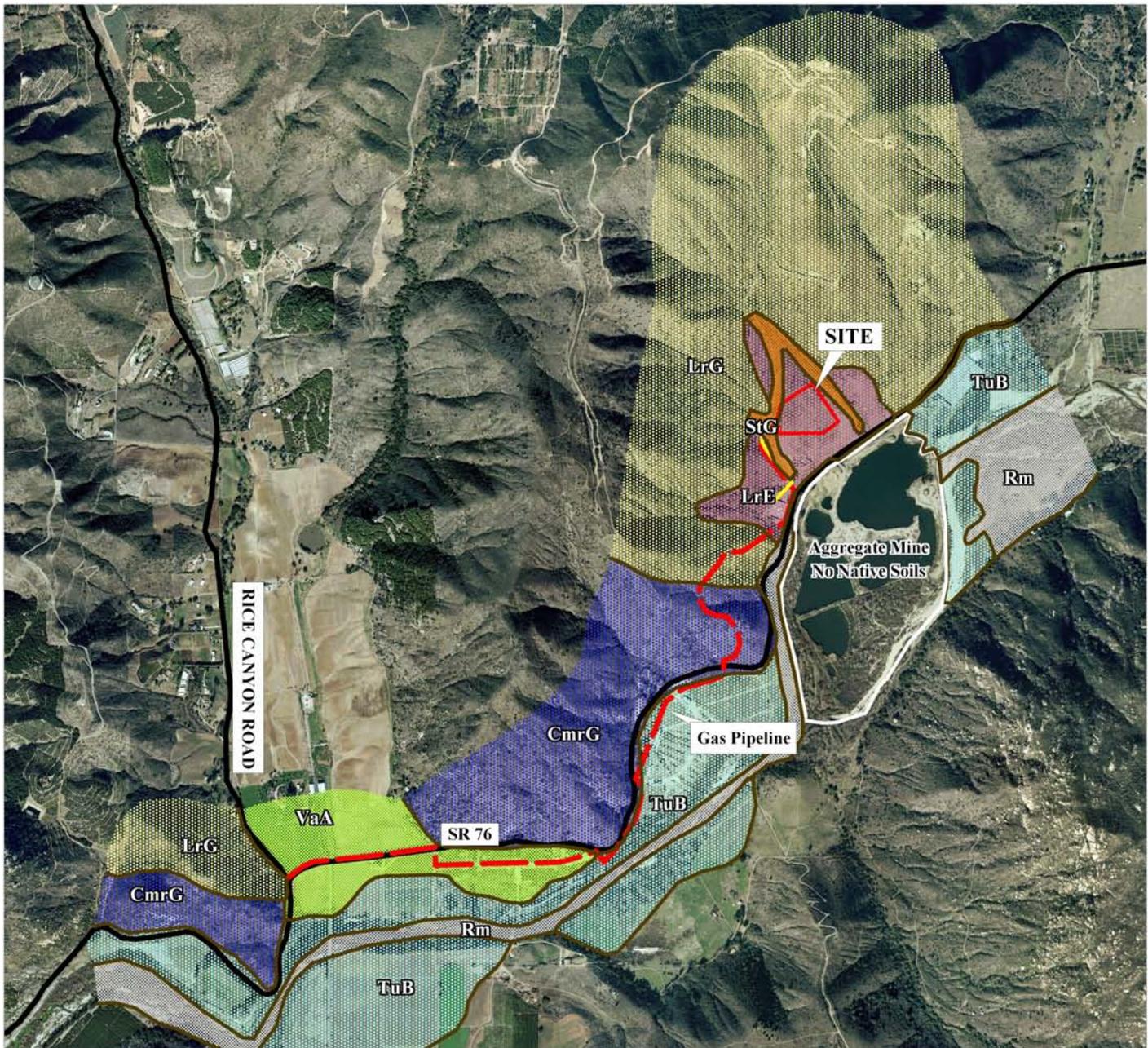
PROJECT: 125158

FACILITY:

ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

**AGRICULTURAL OPERATIONS  
IN THE VICINITY OF THE FPUD  
FRESH WATER PICKUP STATION**

**FIGURE 6.4-1C**



SCALE 1:24,000



**SOURCE:**

US Department of Agriculture  
 Soil Conservation Service,  
 Soil Survey of San Diego County  
 1973. Digital layer of soil survey  
 was obtained from :  
 URL: <http://SoilDataMart.nrcs.usda.gov/>  
 Aerial : AirPhoto USA 2006

**LEGEND**

- CmrG - Cienega Very Rocky Coarse Sandy Loam
- LrE - Las Posas Stony Fine Sandy Loam 9-30% Slope
- LrG - Las Posas Stony Fine Sandy Loam 30-65% Slope
- Rm - Riverwash
- StG - Steep Gullied Land
- TuB - Tujunga Sand 0-5% Slope
- VaA - Visalia Sandy Loam 0-2% Slope

*NOTE : Only soil units that occur at or near Project features are shown in this figure.*



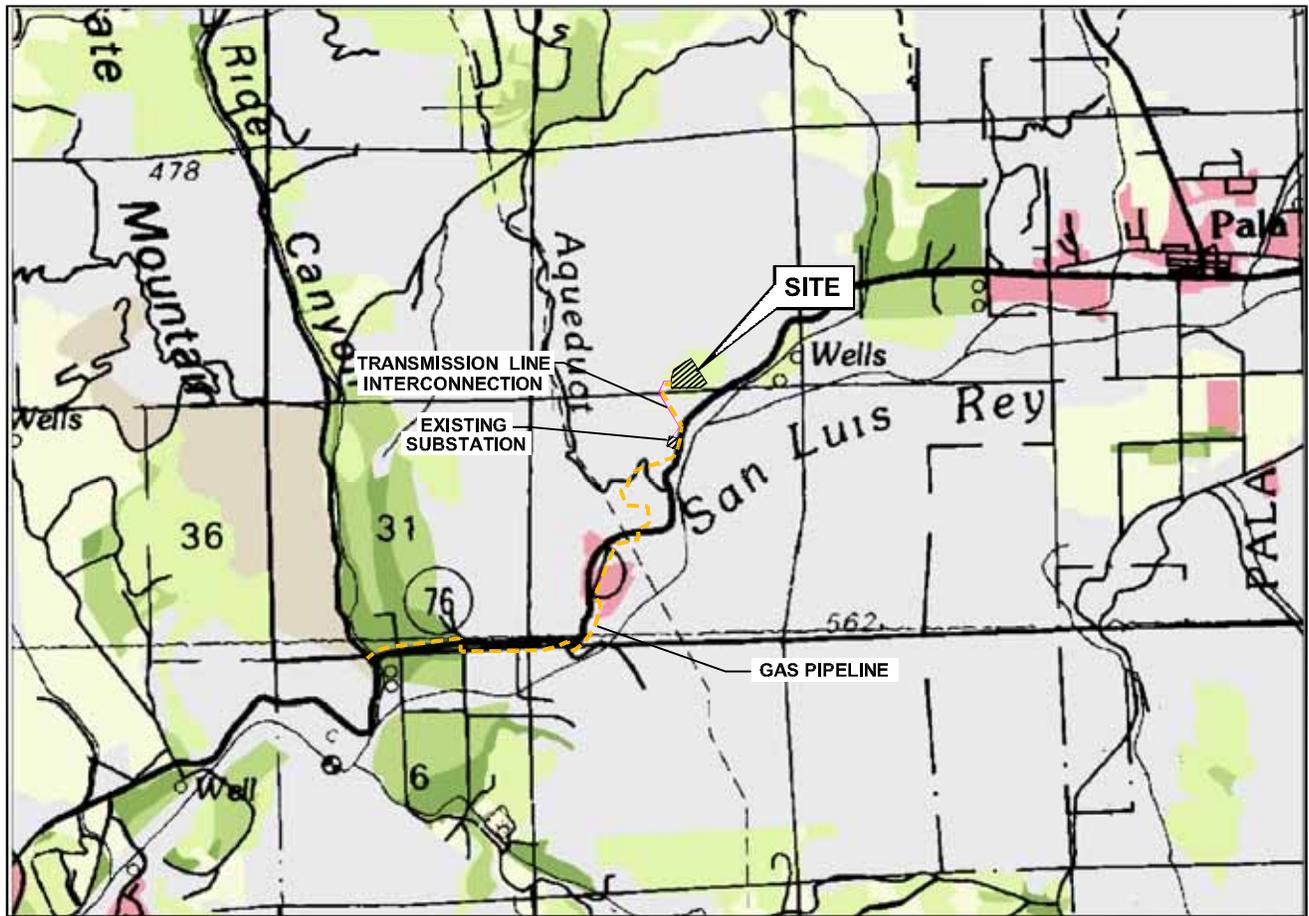
PROJECT: 125158

FACILITY: ORANGE GROVE  
 PROJECT  
 SAN DIEGO COUNTY, CALIFORNIA

SOIL UNIT LOCATION MAP

FIGURE 6.4-2

TRC Irvine/San Diego County/Agg Soils/Land Use Soil Map 2 wor



0 1/2 1 1 1/2 2 MILES



SCALE 1:48,000



SOURCE:

Department of Conservation, Division of Land Resource Protection, 2006.

**LEGEND**

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Grazing Land
- Urban and Built-Up Land
- Other Land



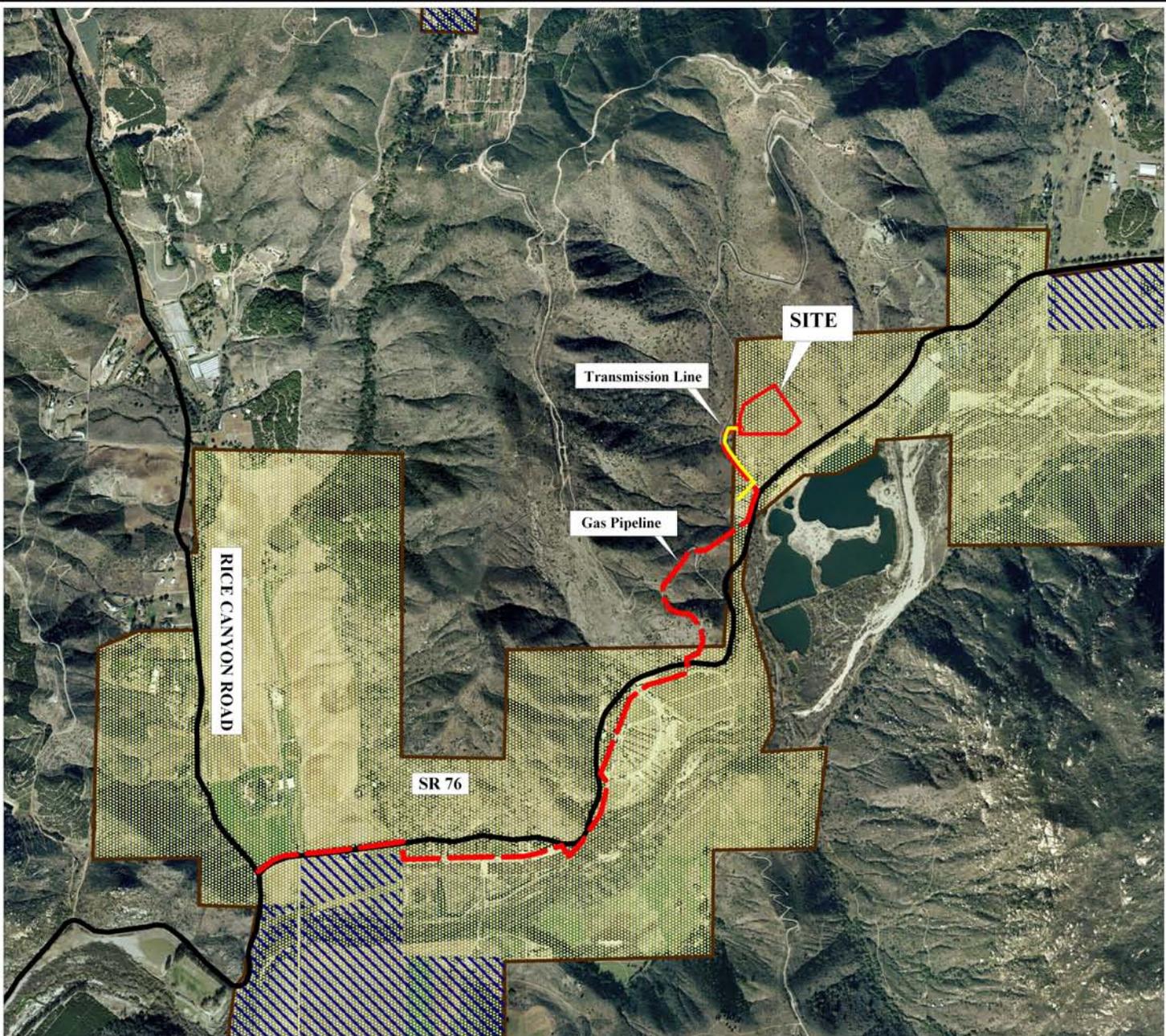
PROJECT: 125158

FACILITY:

ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

**IMPORTANT FARMLAND MAP**

**FIGURE 6.4-3**



Miles  
SCALE 1:24,000

-  - Agricultural Preserve
-  - Williamson Act Contract Lands
-  - Gas Pipeline
-  - Transmission Line Interconnection

**SOURCE:**

Agriculture Preserve and Williamson Contract Lands GIS  
Data from San Diego GIS:  
<http://www.sangis.org/>  
Aerial : AirPhoto USA 2006



**PROJECT : 125158**

**FACILITY: ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA**

**WILLIAMSON ACT CONTRACT LANDS**

**FIGURE 6.4-4**