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## SECTION ACRONYMS/ABBREVIATIONS

| Acronym/<br>Abbreviation | Definition   |
|--------------------------|--|
| AF                       | Acre Feet  |
| AFY                      | Acre Feet per Year                                 |
| AST                      | Aboveground Storage Tank                           |
| BMPs                     | Best Management Practices                          |
| CCR                      | California Code of Regulations                     |
| CDWR                     | California Division of Water Resources             |
| CEQA                     | California Environmental Quality Act               |
| CTGs                     | Combustion Turbine Generator                       |
| DWR                      | State Department of Water Resources                |
| EDI                      | Electro Deionization                               |
| fbg                      | Feet Below Grade                                   |
| gpd                      | Gallons per Day                                    |
| gpm                      | Gallons per Minute                                 |
| gpm/ft                   | Gallons per Minute per Foot                        |
| gpd/ft <sup>2</sup>      | Gallons per Day per Square Foot                    |
| HA                       | Hydrologic Area                                    |
| HSA                      | Hydrologic Subarea                                 |
| mg/L                     | Milligrams per Liter                               |
| MCL                      | Maximum Contaminant Level                          |
| MS4                      | Municipal Separate Storm Sewer System              |
| MWD                      | Metropolitan Water District of Southern California |
| NOI                      | Notice of Intent                                   |
| NO <sub>x</sub>          | Nitrogen Oxides                                    |
| NPDES                    | National Pollutant Discharge Elimination System    |
| RMWD                     | Rainbow Municipal Water District                   |
| RO                       | Reverse Osmosis                                    |
| RWQCB                    | Regional Water Quality Control Board               |
| TDS                      | Total Dissolved Solids                             |
| SDCWA                    | San Diego County Water Authority                   |
| SDG&E                    | San Diego Gas and Electric                         |

| Acronym/<br>Abbreviation | Definition   |
|--------------------------|--|
| SDHBPA                   | San Diego Hydrologic Basin Region 9, Planning Area |
| SR                       | State Route  |
| SWMP                     | Stormwater Management Plan                         |
| SWPPP                    | Stormwater Pollution Prevention Plan               |
| SWRCB                    | State Water Resources Control Board                |
| SUSMP                    | Standard Urban Stormwater Mitigation Plan          |
| WDRs                     | Waste Discharge Requirements                       |
| WQCP                     | Water Quality Control Plan                         |

## 6.5 WATER RESOURCES

### 6.5.1 Existing Conditions

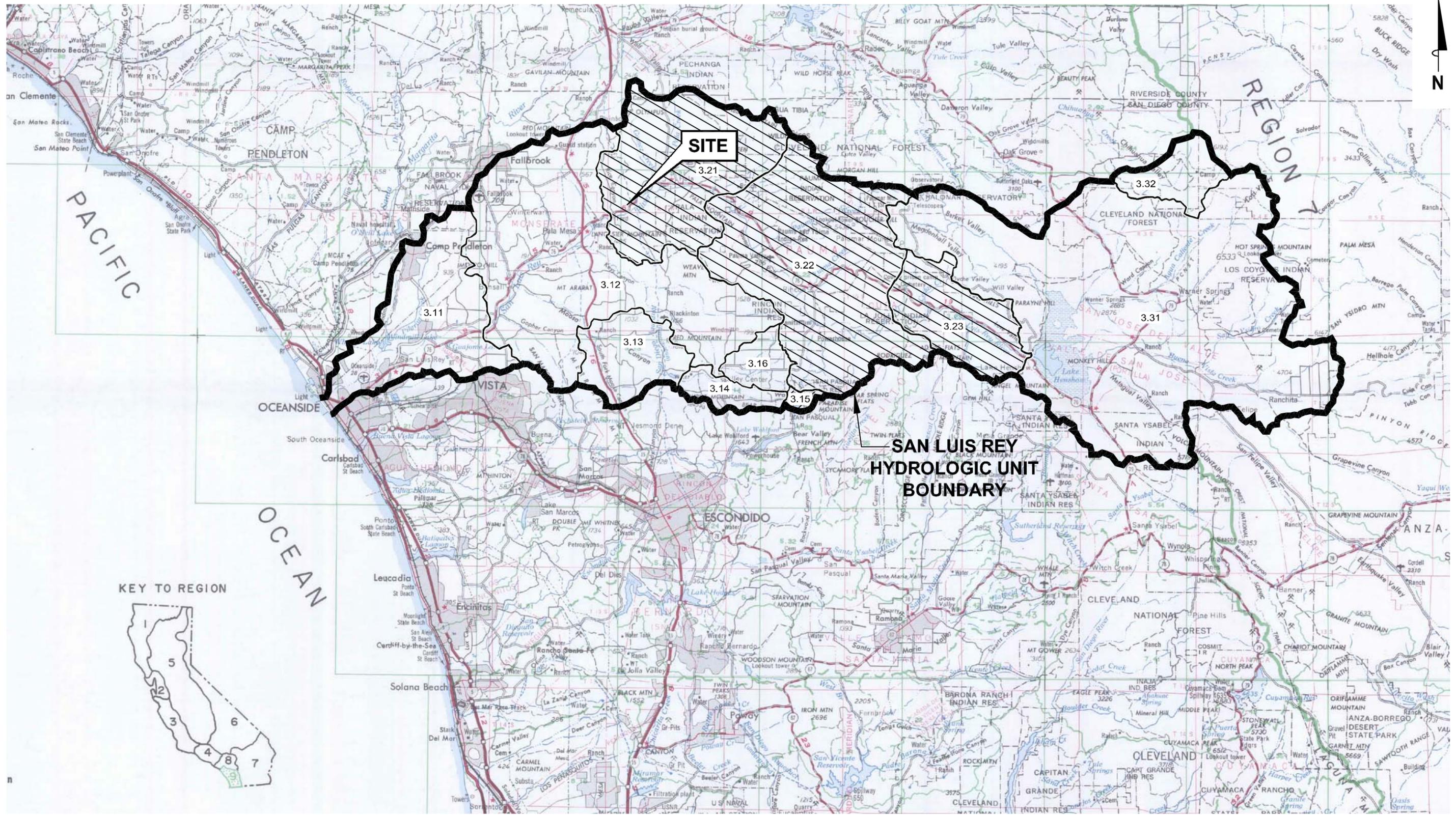
This section describes the existing water resources in the region and vicinity, and potential impacts of the Project on those resources.

The Project region is within the jurisdiction of the San Diego (Region 9) Regional Water Quality Control Board (RWQCB), in the San Luis Rey Hydrologic Unit (Figure 6.5-1). The San Luis Rey Hydrologic Unit is an east-west trending drainage area of about 565 square miles that is tributary to the Pacific Ocean. Inflow to the Hydrologic Unit is primarily from surface water runoff (SLRMWD, 2006). Average annual rainfall within the Hydrologic Unit ranges from approximately 11 inches at low elevations near the coast, to more than 45 inches in the highest elevations of the headwaters. The region is typically dry in the spring, summer and fall, with most of the precipitation occurring from December through March.

The Site is located on a Very Old (CDMG, 2000a) alluvial fan surface north of State Route (SR) 76. The Site is located on a former citrus orchard with a small upstream watershed. The Project has been located and designed to avoid disturbance to drainages. In addition, all construction and operations activities will occur in areas where natural conditions have been disturbed by past activities, so there will be no new ground disturbance. Surface drainage from the power plant will flow to an onsite retention/detention basin designed to contain storm water from storms with a recurrence interval of up to 50 years, and will thereby reduce erosion and sediment transport from the site compared to existing conditions.

The Site is located within the southeastern edge of the Rainbow Municipal Water District (RMWD). The Project will utilize water from the RMWD pipeline located on Pala Del Norte Road approximately 1 mile north of the Site. The Project will require installation of a new pipeline segment to bring water to the Site from the existing RMWD pipeline. Potential alternative sources of water for the Project were evaluated and found not to be feasible, as described in Chapter 5.0 of this Application. While there currently is no feasible alternative water source, Orange Grove Energy will continue to pursue potential alternative water sources as operations proceed.

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Hydrologic Area



= 3.20 Monserate - Hydrologic Area

3.21 = Pala Hydrologic Sub Area



APROX. SCALE



PROJECT: 29031902  
 FACILITY:  
 ORANGE GROVE PROJECT  
 SAN DIEGO COUNTY, CALIFORNIA

SAN LUIS REY HYDROLOGIC UNIT

FIGURE 6.5-1

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### 6.5.1.1 Surface Water

The major tributary in the San Luis Rey Hydrologic Unit is the San Luis Rey River. In the upper reaches of the Hydrologic Unit, river drainage is controlled by Lake Henshaw, one of the largest man-made water storage reservoirs in the San Diego region. The reservoir aids in the prevention of flooding in the lower reaches of the river. The San Luis Rey Hydrologic Unit is divided into three Hydrologic Areas (HA), with the Project being located in the Monserate HA as shown in Figure 6.5-1. This Project is located within the Pala Hydrologic Subarea (3.21) of the Monserate HA.

Figure 6.5-2 shows the Existing Regional Surface Drainage and Topography in the Project area. Figure 6.5-3 shows the Existing Site Drainage. Results of a preliminary drainage study are provided in Appendix 2-D. The Site and surrounding lands drain generally southward to culverts crossing SR 76. The Site is located on a former orchard located between two drainages. The orchard is on a gently convex slope that disperses runoff, so there is minimal run-on to the Site footprint. The drainages that occur to the east and west of the Site are normally dry, but can have surface flow in response to precipitation events.

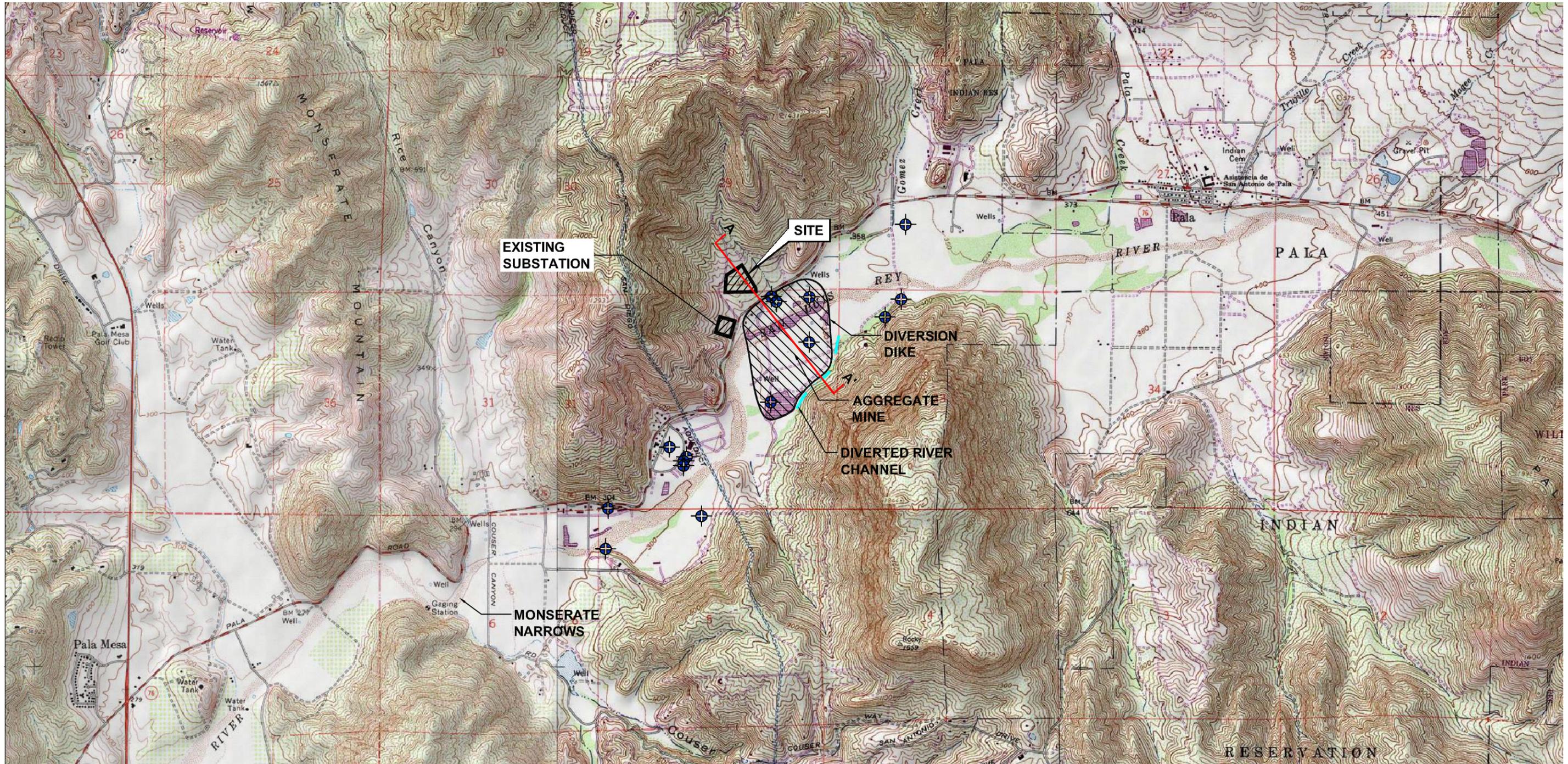
The San Luis Rey River runs south of SR 76. Near the Site, the San Luis Rey River was diverted southward by mining operations and is now confined to a diked channel located approximately 0.5 mile south of SR 76 (Figure 6.5-2). In the project vicinity, flow in the San Luis Rey River is intermittent, responding to seasonal precipitation. The closest perennial surface waters to the Site are ponds that occur in the riverbed where past mining has exposed the water table in the alluvial aquifer (Figure 6.5-2 and 6.5-3). Water quality in these ponds is expected to be generally representative of the local ground water quality described in Section 6.5.1.2.

The Site is located outside the 100-year flood zone (FEMA, 2007).

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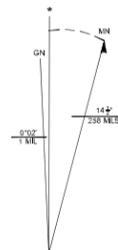


SOURCE:

United States Geological Survey  
7.5 Minute Topographic Map:  
Pala Quadrangle



QUADRANGLE  
LOCATION



UTM GRID AND 1968 MAGNETIC NORTH  
DECLINATION AT CENTER OF STREET

**LEGEND**

- A A' Geologic Cross Section  
(See Figure 6.5-4)
- Groundwater Well Location



PROJECT: 29031902

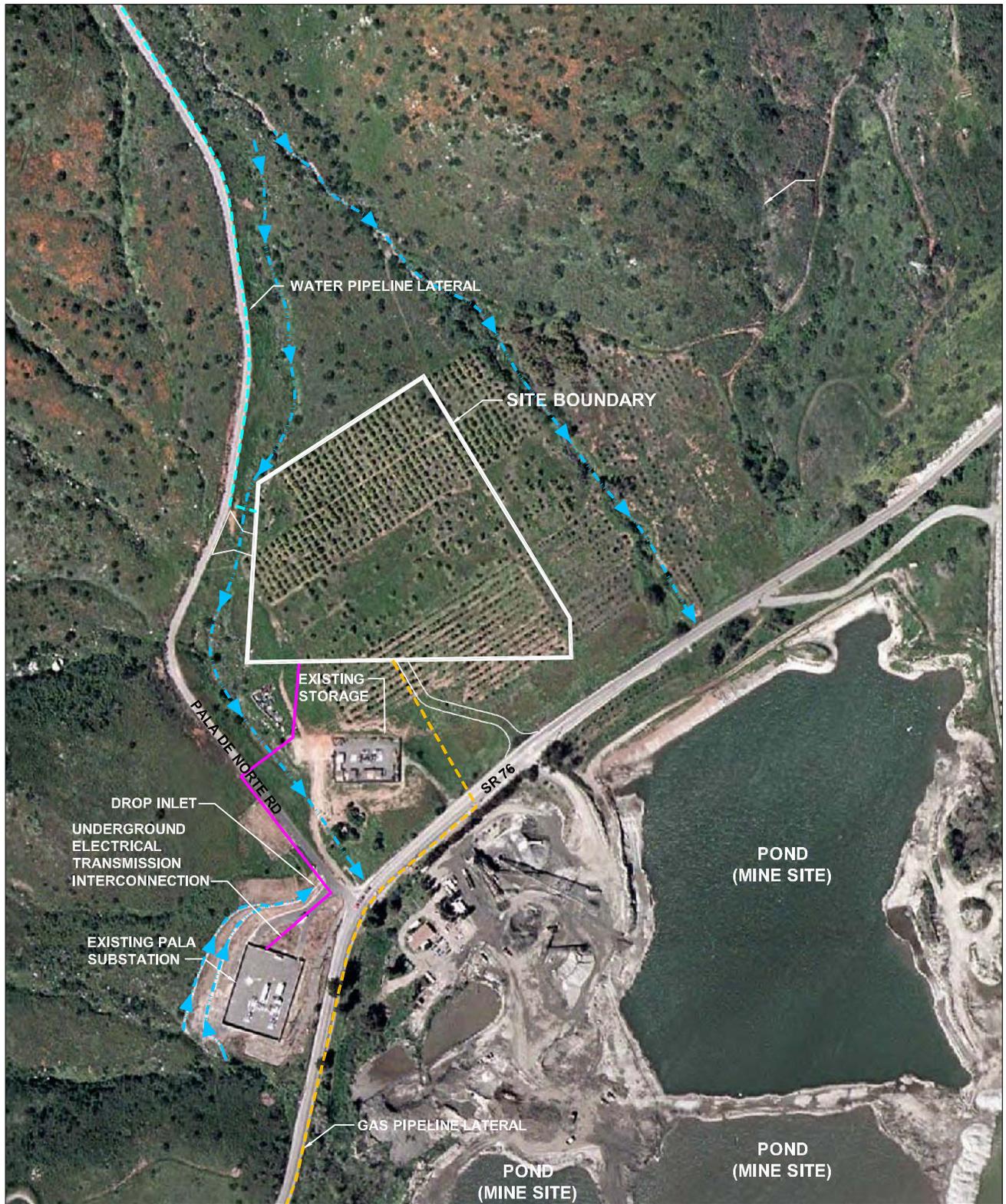
FACILITY:

ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

**EXISTING REGIONAL SURFACE DRAINAGE  
AND TOPOGRAPHY**

**FIGURE 6.5-2**

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**SOURCE:**

Google Earth Professional, 2005.

**LEGEND**

—●—●—●—●— Drainage Path

**APPROXIMATE SCALE (FEET)**



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

**EXISTING SITE DRAINAGE**

**FIGURE 6.5-3**

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### 6.5.1.2 Ground Water

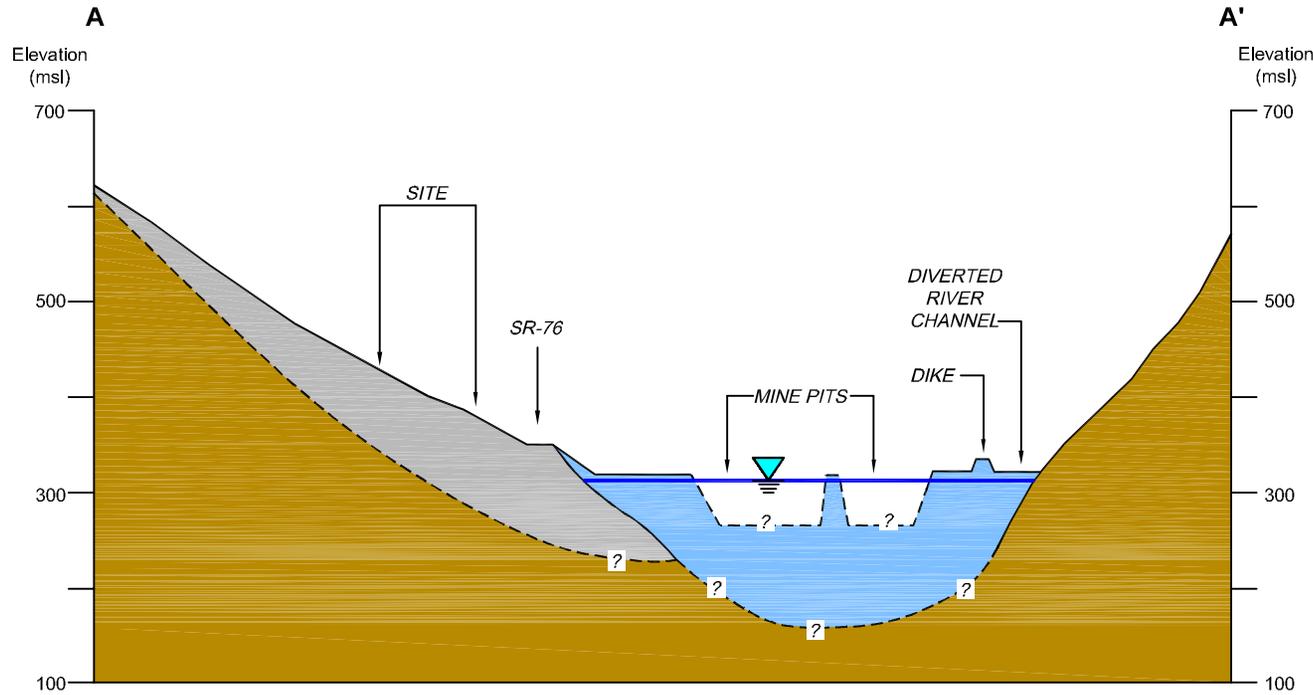
Section 6.3 of this Application describes the geology of the Project region. The rock and sediment lithologies described in that section control the occurrence and movement of ground water. As described in that section, plutonic basement rock is exposed at the ground surface over much of the region. The basement rock can have secondary (fracture) permeability but even where it contains water it is not thought to be a significant source (San Luis Rey Municipal Water District, 2006). Very Old (approximately 500,000 to 2 million years old) alluvium overlies the basement rock in the Site vicinity that also does not yield significant ground water (SLRMWD, 2006; Moreland, 1974). With the non-water-bearing rock that underlies it, the Site is located is not within any ground water basin.

The San Luis Rey Valley Ground Water Basin (California Department of Water Resources Basin 9-7) is located on the south side of SR 76. This basin is an alluvial aquifer extending along the San Luis Rey riverbed, (CDWR, 2003), comprised primarily of alluvial deposits that are younger than 10,000 years old. Ground water in the San Luis Rey Valley Ground Water Basin flows westward toward the Pacific Ocean. The ground water basin is divided into several segments (subbasins). In the Project vicinity, the riverbed alluvium is within the Pala Subbasin (San Luis Rey Municipal Water District, 2005). The Pala Subbasin occurs over an approximately 7 mile segment of the San Luis Rey River, with the downstream terminus at a narrow constriction in the alluvial aquifer just downstream of Rice Canyon referred to as the Monserate Narrows (Figure 6.5-2).

The alluvial aquifer in the Pala Subbasin ranges from 0 feet in thickness along the basin margins to more than 100 feet (SLRMWD, 2006). The reported well yields for the alluvium in the Subbasin range from 10 to 400 gallons per minute (gpm) (CDWR 1971). In the Site vicinity, the alluvial aquifer of the Pala Subbasin occurs south of SR 76, where aggregate extraction has occurred in the river channel. North of SR 76, where the Site is located, geologic material above the basement rock consists of Very Old alluvium and the subbasin is not present. A hydrogeologic cross section through the Site is provided in Figure 6.5-4. Geotechnical borings were completed near the site for the recent construction of the San Diego Gas and Electric (SDG&E) Pala substation (GeoCon, 1994). Borings drilled to as much as 40 feet deep did not encounter groundwater. Groundwater beneath the Site is expected to occur at an elevation of approximately 330 feet, which is about 50 to 100 feet below the ground surface, depending on the location onsite. The closest known ground water wells are located in the alluvial aquifer within and around the mined area south of SR 76. Known ground water wells within a mile of the Site are shown in Figure 6.5-2.

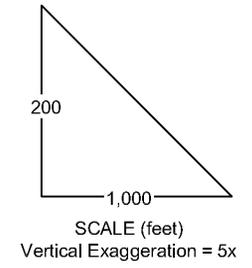
The groundwater quality in the Pala Subbasin is characterized by relatively high total dissolved solids (TDS) concentrations. Estimated average TDS concentrations in the Pala Subbasin are reported to be between 600 and 1,200 milligrams per liter (mg/L) (NBS/Lowry 1993). Chloride and sulfate concentrations are typically at or above secondary maximum contaminant levels (MCLs). Both chloride and sulfate have a recommended secondary MCL of 250 mg/L, and an upper limit secondary MCL of 500 mg/L.

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**LEGEND**

-  Plutonic Basemont Rock
-  Very Old Alluvium
-  Water-Bearing Alluvium (Aquifer)
-  Ground Water Table



**NOTES:**

- 1) Hydrogeologic units based on: California Division of Mines and Geology, 2000 and San Luis Rey Municipal Water District, 2006.
- 2) Vertical Exaggeration 5X  
Horizontal Scale 1:12,000 (1-inch = 1,000 feet)  
Vertical Scale 1:2,400 (1-inch = 200 feet)

|   |   |   |
|---|---|---|
|  | PROJECT: 125158   | <b>HYDROGEOLOGIC CROSS SECTION A-A'</b> |
|   | FACILITY:<br><br>ORANGE GROVE PROJECT<br>SAN DIEGO COUNTY, CALIFORNIA |   |

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### 6.5.1.3 Water Resource Policies and Plans

#### 6.5.1.3.1 Basin Plan

The RWQCB Basin Plan designates beneficial uses of groundwater in the Pala Hydrologic Subarea as municipal and domestic supply, agricultural and industrial service supply (San Diego RWQCB, 1994). The ephemeral San Luis Rey River and tributary intermittent streams in the Project region have designated beneficial uses for agricultural supply, industrial service supply, water contact recreation, non-contact water recreation, warm freshwater habitat, rare threatened or endangered species habitat and groundwater recharge. In accordance with Section 303 of the Clean Water Act, and the Porter-Cologne Water Quality Control Act, the Basin Plan includes water quality objectives and implementation policies to enhance beneficial uses and protect beneficial uses against water quality degradation. Water quality objectives are achieved primarily through the adoption of Waste Discharge Requirements (WDRs) (including National Pollutant Discharge Elimination System [NPDES] permits) and through enforcement orders.

This Project is consistent with the Basin Plan and will be protective to water quality, due, in part, to the following:

- The Project is designed for no discharge of process water.
- Sanitary wastewater discharge will be to a county-permitted septic system onsite. However, if geotechnical testing shows that adequate percolation will not be achievable, then sanitary waste will be stored in a holding tank and periodically trucked offsite to a licensed wastewater treatment facility.
- The Project will implement storm water quality Best Management Practices (BMPs) to protect water quality. The Project will be required to submit a detailed storm water management program to the County of San Diego Department of Planning and Land Use (DPLU), including final grading plans. Storm water discharges will be required to meet DPLU performance criteria identified in Section 6.5.1.3.4. For construction, the Project will also comply with the State General Permit for storm water discharges from construction sites (WQO 99-08-DWQ).
- Storm water runoff from the power plant will be collected and routed to an evaporation pond where it will percolate and evaporate. The evaporation pond will be sized to contain runoff from the 50-year storm.

#### 6.5.1.3.2 Water Quality Control Policy on the Use and Disposal of Inland Waters Used for Power Plant Cooling (Resolution No. 75-58)

The Project is consistent with the use preference hierarchy and water quality protection measures of the Water Quality Control Policy on the use and disposal of Inland Waters Used for Power Plant Cooling (SWRCB 1975). This policy is provided for planning of new power generating facilities to protect beneficial uses of the state's water resources and to keep the consumption of fresh water for power plant cooling to that minimally essential for the welfare of the citizens of the State. The Project conforms to this guidance by limiting the use of fresh water to only the air

inlet chiller system and it will not discharge cooling water or otherwise impact beneficial uses. Air inlet cooling is essential in that it will augment power output of the units. Chapter 5.0 of this Application addresses several air inlet cooling alternatives evaluated for this project. As found in the SWRCB Resolution No. 75-58, use of fresh water is approved for power plant cooling if site-specific environmental, technical or economic considerations make the use of ocean water, brackish water or waste water either environmentally undesirable or economically unsound.

#### ***6.5.1.3.3 California Energy Commission Policy of Fresh Water Use and Waste Water Discharge for Power Plant Cooling***

The CEC's integrated energy policy recognizes SWRCB Resolution 75-58 as reflective of the State's concerns over discharges from power plant cooling, as well as the conservation of fresh water for cooling purposes. The Warren-Alquist Act also encourages conserving water and using alternative sources of water supply. Consistent with Resolution 75-58 and the Warren-Alquist Act, the CEC has adopted a policy of approving the use of fresh water for power plant cooling purposes only where alternative water supply sources and alternative cooling technologies are shown to be "environmentally undesirable" or "economically unsound" (CEC, 2003).

The CEC interprets "environmentally undesirable" to mean the same as having a "significant adverse environmental impact" and "economically unsound" to mean the same as "economically or otherwise infeasible." "Feasible" is interpreted under this policy to be consistent with the California Environmental Quality Act (CEQA) and the CEC's siting regulations in Title 20 of the California Code of Regulations (CCR) and means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors" (CEC, 2003).

Orange Grove Energy has explored all identified potential alternative water supply sources, and the proposed source has been determined to be consistent with the CEC policy as described in Chapter 5.0 of this Application. During operations, Orange Grove Energy will continue to evaluate potential alternative water source opportunities and will implement an alternative water supply if an appropriate supply becomes available.

#### ***6.5.1.3.4 County of San Diego Storm Water Plans and Policies***

The Project will comply with the County of San Diego Standard Urban Stormwater Mitigation Plan (SUSMP) and the County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance (Ordinance No. 9424). The DPLU will require the applicant to submit a detailed design-level plan and report that includes a combination of source control and structural treatment BMPs that will, at a minimum:

- Control the post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion;
- Conserve natural areas;

- Minimize pollutants of concern from urban runoff through implementation of source control BMPs;
- Remove pollutants of concern from urban runoff through implementation of site design, source control, and structural treatment BMPs implemented close to pollutant sources and prior to discharging into receiving waters;
- Minimize directly connected impervious areas;
- Protect slopes and channels from eroding;
- Include storm drain stenciling and signage;
- Include properly designed outdoor material and trash storage areas;
- Ensure that post-development runoff does not contain pollutant loads that have not been reduced to the maximum extent practicable.

The Project will comply with these requirements. DPLU will assure compliance through review of final grading plans and storm water control design measures in conjunction with the Major Use Permit application process.

### **6.5.2 Impacts**

Significance criteria were determined based on CEQA Guidelines, 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:

- Violation of water quality standards or RWQCB Waste Discharge Requirements.
- Substantial alteration of existing drainage patterns, including alterations that would result in substantial flooding, erosion or siltation onsite or offsite.
- Creation of or contribution to runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional polluted runoff.
- Otherwise substantial degradation of water quality.
- Substantial depletion of groundwater supplies or substantial interference with groundwater recharge, such that there would be a net deficit in aquifer volume or lowering of the local groundwater table.
- Placement of housing or structures within the 100-year flood zone, or exposure of people or structures to significant loss or injury involving flooding.

#### **6.5.2.1 Construction Impacts**

##### **6.5.2.1.1 Water Use**

The construction contractor will be responsible for water supply during construction. Water will be trucked to the Site until the pipeline lateral is completed. The pipeline lateral will be installed

early in the construction schedule. The primary construction water needs include water for dust control, moisture conditioning for compaction, and hydraulic testing of fire and other water systems. The peak and average water use during construction are estimated at approximately 5,000 gallons per day (gpd) and 500 gpd, respectively. Water supply will be from an existing source so there will be no new pumping, diversion, or other potential depletion of ground water supplies.

#### **6.5.2.1.2 Surface Water**

The Site area is relatively dry with precipitation mostly occurring between December and March. The Project has been designed to avoid disturbances to drainages. The Site is situated on a gentle, relatively featureless slope that has a small upgradient watershed and dispersing sheet flow. Because of these conditions and Project storm water controls, the Project will not substantially alter existing drainage patterns. The Project will be constructed in compliance with County SUSMP requirements for controlling peak storm water runoff rates and velocities to maintain or reduce pre-development downstream erosion. These factors, and other county storm water performance criteria identified in Section 6.5.1.3.4, will limit impacts to existing drainage patterns to a level that is less than significant.

The Site and Project linear facilities are not located within the 100-year flood zone. The Project will not have structures located in the 100-year flood zone and will not result in personal or property flood risk.

Prior to construction, a Notice of Intent (NOI) will be submitted to the State Water Resources Control Board (SWRCB) to comply with the State General Permit for storm water discharges from construction activities (WQO 99-08-DWQ). Construction will occur under a Storm Water Pollution Prevention Plan (SWPPP) implementing BMPs that will be protective to water quality.

General Site and finish grading will establish a working surface for construction and plant operating areas, providing positive drainage from buildings and structures. The area inside the security fence will be surfaced with gravel that will minimize the impervious area, thereby reducing storm water runoff and promoting infiltration. Hazardous material storage and use areas will be constructed with drainage contained as required by the SWPPP.

There will be no discharges to water during construction except as authorized under the State General NPDES permit. During construction, temporary berms, surface grading, silt fences, sandbags, surface stabilizers (e.g., jute netting), and other BMPs will be implemented as needed to control erosion and reduce or prevent pollutants from entering the storm water system. The BMPs will include an erosion control plan and other measures that will be implemented in accordance with the State General NPDES permit for construction activity on the Site and Project linear corridors. These measures will address soil moving, equipment laydown, material handling and other relevant activities that occur during the construction period. Conformance with the State General NPDES permit and county SUSMP requirements will assure that runoff during construction does not substantially alter erosion or siltation or violate water quality standards. Because construction will comply with the State General NPDES Permit and county

requirements to not degrade water or violate water quality standards, the impact to surface water quality will be less than significant.

#### **6.5.2.1.3 Groundwater**

Ground water will not be used for construction and will not be impacted by construction. Hazardous materials used during construction will be managed in accordance with Laws, Ordinances, Regulations and Standards (LORS) to prevent the potential for impacts to ground water. No adverse impact to ground water is expected.

### **6.5.2.2 Operations Impacts**

#### **6.5.2.2.1 Water Use**

Project operations water use is described in Section 2.6.1. As described in that section, the estimated average operations water use rate is approximately 73 gpm. Water will be provided by the RMWD, which obtains its water from the San Diego County Water Authority (SDCWA). There will be no new pumping or diversion or other potential depletion of ground water supplies. The RMWD has indicated that they have the excess capacity within existing infrastructure to supply the Project. Orange Grove Energy will continue to pursue alternative water sources, as described in Section 5.0 of this Application.

#### **6.5.2.2.2 Surface Water**

As described in Section 6.5.2.1.2, the Project will not substantially alter existing drainage patterns. The drainage area contributing run-on to the Site is small. The sheet flow from this small area will be diverted to minimize run-on to the Site. Final Site grades are designed to direct drainage away from equipment and buildings. Areas inside the security fence not covered with structures, equipment or paving will be surfaced with gravel to reduce peak runoff and increase infiltration. Construction storm water BMPs will be maintained at other surfaces disturbed during construction until the surface is stabilized.

The Project will operate under the County MS4 permit for storm water discharges. Site drainage will be conveyed to an onsite retention basin sized to contain runoff from the 50-year, 24-hour storm event. At the retention basin, storm water will percolate and evaporate. BMPs will be implemented to minimize storm water contact with potential pollutants and to reduce or prevent pollutants from affecting retained storm water. The BMPs will include an erosion control plan and other measures that will be implemented in accordance with the County of San Diego MS4 permit. Areas around lubricated equipment and hazardous material storage and use areas will be constructed with contained drainage. Hazardous materials will be managed in accordance with LORS, including operating under a California Code of Regulations (CCR) Title 19 hazardous materials business plan and a 40 Code of Federal Regulations (CFR) Part 112 Spill Prevention, Control and Countermeasures (SPCC) Plan. The Project is designed with zero discharge of process water. Water treatment waste streams, cooling tower blow-down, turbine wash water, and other process wastewater will be trucked offsite to a licensed water treatment facility. Considering these factors, storm water runoff during operations will not substantially alter

erosion, siltation or violate water quality standards. Therefore, Project operations impacts to surface water drainage patterns and surface water quality will be less than significant.

#### **6.5.2.2.3 Ground Water**

Ground water will not be impacted by Project operations and maintenance. Ground water will not be used. Depth to ground water beneath the Site is estimated at 50 to 100 feet. Hazardous materials used during operations will be managed in accordance with LORS to prevent the potential for impacts to ground water. No adverse impact to ground water is expected.

Project operations will provide a minor beneficial ground water impact through increased infiltration over gravel-surfaced areas, and infiltration from the storm water retention basin. This will tend to reduce overall erosion and peak surface flows, and add recharge to the ground water basin, although the effect will be very small.

### **6.5.2.3 Cumulative Impacts**

#### **6.5.2.3.1 Surface Water**

The Project will have minimal impact on surface water runoff. Pursuant to County storm water performance requirements, the Project will control the post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. In addition, runoff from the Site will be diverted to a retention basin designed to contain the 50-year storm. Compliance with LORS for hazardous materials handling and storm water management will prevent water quality impacts. Considering these factors, Project impacts will be limited to the Site and immediate watershed. The Project will not change downstream erosion, and there are no other foreseeable actions that include substantial grading within the immediate Site watershed. Other projects identified in Section 6.1 are all outside the immediate Site watershed area, with the exception of the cell tower generator installation that will not impact surface water resources. Considering these factors, there will be no significant cumulative impact on surface water drainage.

#### **6.5.2.3.2 Ground Water**

The Project will not impact ground water. Therefore, there will be no cumulative impacts to ground water.

### **6.5.2.4 Design Features that Limit Impacts**

The following design and operational features of the Project avoid potentially significant environmental impacts:

- The Project has been designed to avoid disturbance to drainages. The northern Site driveway will be constructed as a free-span bridge across the small drainage path that occurs just west of the Site. The underground transmission line interconnection will be horizontal bored beneath this drainage to avoid impact to the drainage.

- Project surface disturbances will occur within areas that have been previously disturbed by agricultural use or roads. No natural ground surface will be disturbed.
- The Project is designed with no process water discharge. Cooling tower blow-down, water treatment waste water, turbine wash down and other process wastewater will be trucked offsite to a licensed waste water treatment facility.
- BMPs for protection of water quality will be implemented in accordance with the State General NPDES Permit for storm water discharges from construction sites, and in accordance with county SUSMP requirements for construction and operations.
- Site drainage features will be designed for the 50-year storm with runoff control for the 100-year storm.
- Runoff from the Site will be routed to a retention basin sized to contain the 50-year storm. Water in the retention basin will percolate and evaporate.
- Areas in the security fence that are not occupied by buildings or paving will be surfaced with gravel to reduce peak runoff and increase infiltration. Other surfaces disturbed by construction will also be stabilized. BMPs for erosion and sediment control during construction will be maintained in disturbed areas until the surface is stabilized.
- The Project will comply with applicable LORS related to water resources.

### **6.5.2 Mitigation Measures**

Based on the above analysis of impacts and the design and operational features that have been incorporated into the Project, no mitigation measures are required.

### **6.5.3 Significant Unavoidable Adverse Impacts**

There are no significant unavoidable adverse impacts to water resources from construction or operation of the Project.

### **6.5.4 Laws, Ordinances, Regulations and Standards (LORS)**

LORS related to water resources that are relevant to the Project are listed in Table 6.5-1, along with the names of the administering agencies and the Project approach to compliance. The Project will comply with applicable LORS during construction and operation.

The only permit specific to water resources that will be required for the Project is the State General NPDES permit for storm water discharges from construction sites. County storm water permitting requirements are expected to be integrated into the Major Use Permit process. A permit from County Department of Health will be required for the sanitary septic system. A schedule for permits is provided in Figure 2.15-1. Agency contacts related to water resource permits and approvals are provided in Table 6.5-2.

**Table 6.5-1 – Summary of Water Resources LORS and Compliance**

| JURIS-DICTION | AUTHORITY   | AGENCY   | REQUIREMENTS   | COMPLIANCE   | SPPE SECTION                    |
|---------------|---|--|--|--|---------------------------------|
| Federal       | Clean Water Act §402, 33 USC §1342; 40 CFR Parts 122-136.   | RWQCB with oversight by State Water Resources Control Board (SWRCB) and EPA Region IX. | NPDES permit for storm water discharge.  | The Project will file an NOI to comply with the State General NPDES permit for stormwater discharges from construction sites, and will prepare a SWPPP. During operations, the power plant will discharge storm water under the County MS4 permit identified below.  | 6.5.2.1.2, 6.5.2.2.2            |
|               | Clean Water Act § 311; 33 USC §1321; 40 CFR Parts 110, 112, 116, 117.                                     | RWQCB with EPA Region IX oversight.  | SPCC Plan for prevention, control and countermeasures, and reporting of oil or hazardous substance discharges. | The Project is designed to have no discharge of oil or hazardous substances. In the event of an accidental release, reporting will occur in accordance with applicable federal and state requirements and corrective measures will be implemented, as appropriate. An SPCC and Hazardous Materials Business Plan will be developed for the Project that will address these requirements. | 6.5.2.1.3, 6.5.2.2.2, 6.5.2.2.3 |
| State         | California Porter-Cologne Water Quality Control Act of 1972; California Water Code, §13000-14957, 23 CCR. | RWQCB.   | Authorizes the State to develop and implement a statewide program for water quality control.                   | The Project will be constructed and operated with BMPs to protect water quality in conformance with the Act and implementing regulations. The project is designed for no process water discharge.  | 6.5.2.1.2, 6.5.2.2.2            |
|               | California Water Code §13269; 23 CCR Chapter 9.   | RWQCB.   | Waste discharge requirements for waste that can affect the quality of waters of the state.                     | With the Project design, there will no discharge that would require Waste Discharge Requirements other than the State General NPDES permit for storm water discharges during construction. During operations, Site storm water discharges will occur under the County MS4 permit.  | 6.5.2                           |
|               | California Constitution, Article 10 §2.   | SWRCB.   | Avoid wasting or unreasonable uses of water. Regulates methods of water diversion and use.                     | The Project has been designed to minimize water use to the extent practical.   | 5.3, 6.5.1.3                    |

| JURIS-DICTION | AUTHORITY                 | AGENCY                                | REQUIREMENTS   | COMPLIANCE  | SPPE SECTION   |
|---------------|---------------------------|---------------------------------------|--|---|--|
| Local         | SUSMP and Ordinance 9424. | San Diego Department of Public Works. | Requires a storm water management plan and BMPs.                           | Project will submit final grading plans and storm water management plan to County in conjunction with Major Use Permit process. | 6.5.1.3.4,<br>6.5.2.1.2,<br>6.5.2.2.2<br>6.5.2.4,<br>6.5.4 |
|               | County MS4 Permit         | San Diego Department of Public Works. | County NPDES Permit.   | Project will discharge under the county NPDES permit during operations.   | 6.5.2.1.2,<br>6.5.2.2.2,<br>6.5.2.4,<br>6.5.4              |
|               | Water District Ordinances | Rainbow Municipal Water District      | Project water supply will be provided consistent with District ordinances. | Water supply will be in a manner consistent with District ordinances.   | 6.5.2.2.1,<br>6.5.4  |
| Industry      | None applicable.          | None applicable.                      | None applicable.   | None applicable.  | None applicable  |

**Table 6.5-2 – Agency Contacts For Water Resources**

| LOCAL AUTHORITY OVERSIGHT/ENFORCEMENT AND AGENCY CONTACTS   | AUTHORITY  |
|---|--|
| State Water Resources Control Board<br>Division of Water Quality<br>Storm Water Section, 15 <sup>th</sup> Floor<br>1001 I Street<br>Sacramento, California 95812-1977 | NOI Submittal.                                       |
| Susan Hoang<br>County of San Diego<br>Department of Public Works<br>(858) 505-6327  | Compliance with County MS4 storm water requirements. |
| Jarrett Ramaiya<br>County of San Diego<br>Department of Planning and Land Use<br>5201 Ruffin Road, Suite B<br>San Diego, CA 92123<br>(858) 694-2960                   | Major Use Permit application                         |

### 6.5.5 References

- California Department of Water Resources, Bulletin 118, California's Groundwater, Updated February 27, 2004.
- California Division of Mines and Geology, 2000a. Geologic Map of the Pala 7.5' Quadrangle, San Diego County, California: a Digital Database, Version 1.0.
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- San Diego Historical Society, University of San Diego. *The Journal of San Diego History*, Winter 2002, Volume 48, Number 1.
- San Luis Rey Municipal Water District (SLRMWD), Master Plan for Water and Wastewater Services, Municipal Review Study Area, August 2005.
- SLRMWD, Groundwater Resource Assessment, San Diego County, California, November 9, 2006.
- PCR Services Corporation, Gregory Canyon Landfill Final EIR, December 2002.
- Moreland, J.A. Hydrologic- and salt balance investigations utilizing digital models, Lower San Luis Rey River area, San Diego County, California: USGS Water Resources Bulletin 24-74. 1974.
- Regional Water Quality Control Board (RWQCB), Water Quality Control Plan for the San Diego Basin (9), 1994.