

- **Board of Directors**  
**Engineering and Capital Programs Committee**

November 20, 2007 Board Meeting

---

8-1

---

**Subject**

---

Appropriate \$1.41 million; and authorize final design of the Skinner Solar Power Generation Facility (Approp. 15391)

---

**Description**

---

**Background**

In 2006, staff completed a study to assess the feasibility of constructing a solar power generation facility at the Skinner plant. The study concluded that such a facility is feasible and would help offset power purchased from the local provider, Southern California Edison (SCE). In June 2007, Metropolitan's Board authorized preliminary design of the Skinner Solar Power Generation Facility. The project will be executed in phases, with the initial phase encompassing a one-megawatt solar power plant, capable of generating up to 2 million kWh of power annually. A one-megawatt solar power plant could meet up to one-sixth of the average energy demand for the Skinner plant following completion of ozonation facilities. The solar power plant will require an area of approximately five to six acres, which is available to the north of the Skinner plant. With this initial phase of the solar power plant, Metropolitan would reduce greenhouse gas (GHG) emissions by nearly 2.5 million pounds annually.

**Business Case**

The Skinner Solar Power Generating Facility will support statewide objectives to reduce GHG emissions per AB 32, and will support Governor Schwarzenegger's 2004 "Green Building Initiative" Executive Order. In addition, the project will demonstrate large-scale solar generation technology and confirm capital costs, maintenance needs, and equipment reliability for potential future application throughout Metropolitan's treatment plants and distribution system.

Staff recommends proceeding with the project at this time to take advantage of California Public Utility Commission rebate incentives, which were reserved by Metropolitan in March 2007. Metropolitan will receive a monthly credit from SCE on its Skinner plant electrical bill, equal to \$0.46 per kilowatt-hour (kWhr) for every kWhr generated by the solar power generation facility. The Skinner Solar Power Generation Facility will produce approximately 2 million kWhrs annually, which would result in nearly \$5 million in rebate incentives over a five-year period. Based on these incentives, the project has a favorable payback within eight to ten years.

**Skinner Solar Power Generation Facility - Final Design (\$1.41 million)**

Primary elements of this project include the photovoltaic panels and ancillary equipment, civil site work, and interconnection with the Skinner plant's electrical system. The solar panels will be ground-mounted and will include a single-axis tracking system to allow the panel arrays to track the sun's path from east to west on a daily basis. Approximately five to six acres will be required for the initial installation. The recommended location of the facility is within the Skinner plant's operational area north of Tualota Creek ([Attachment 2](#)). This location is preferable as it is near the Skinner plant's future switchgear building (which will be the point of connection), and because portions of the site have been cleared of vegetation. The area is currently being used for temporary contractor storage for ongoing construction projects at the Skinner plant.

As construction of the solar generation facility will overlap with ongoing construction of the Skinner Oxidation Retrofit Program (ORP), staff is investigating cost-saving opportunities for completion of the civil and electrical

site work by the Skinner ORP contractor. Such work may include grading, placement of electrical duct banks and water lines, fence installation and roadway construction. Staff will return to the Board at a later date to report on any cost-saving opportunities.

Final design of the Skinner Solar Power Generation Facility is recommended to be performed by MWH Americas, Inc., as discussed below. Metropolitan staff will perform project management, coordination with SCE regarding incentives and electrical interconnections, and coordination with other activities underway at the Skinner plant.

Environmental permitting support is recommended to be performed by Jones & Stokes Associates, Inc., as discussed below. Metropolitan staff will provide primary coordination with regulatory agencies. As part of the project scope, wetland delineation studies will be performed, as well as preparation of regulatory permit applications.

This action appropriates \$1.41 million and authorizes final design of the Skinner Solar Power Generation Facility. The appropriated funds include \$1.03 million for final design; \$125,000 for environmental permitting and agency coordination; \$170,000 for all other staff and consultant support; and \$85,000 for remaining budget. Support activities include project management, coordination with other ongoing construction work at the Skinner plant, and the bidding process.

The anticipated cost of final design is approximately 11.4 percent of the estimated construction cost. Engineering Services' goal for design of projects with estimated construction cost greater than \$3 million is 9 to 12 percent. The construction cost for this project is anticipated to range from \$8 million to \$10 million. Metropolitan has reserved rebate incentives from SCE, and up to \$5 million in rebate incentives could be realized over the first five years of operation. As such, a payback period of eight to ten years is expected for the Skinner Solar Power Generation Facility.

Staff plans to return to the Board in mid-2008 for award of the construction contract.

#### **Final Design & Environmental Permitting Agreements (No Action Required)**

Final design of the Skinner Solar Power Generation Facility is recommended to be performed by MWH under an existing board-authorized agreement. Vector Delta Design, a subconsultant to MWH, will perform the specialized solar power generation design, including design of the solar panels, tracking system, and inverters required for connection to Metropolitan's electrical system. MWH was selected through a competitive process via Request For Qualifications No. 575. For this agreement, Metropolitan established a Small Business Enterprise participation level of 20 percent. No amendment to the existing MWH agreement is required for this work.

Environmental permitting for the Skinner Solar Power Generation Facility is recommended to be performed by Jones & Stokes, Inc. under an existing board-authorized agreement. Due to the specialized nature of the work, no SBE participation was established by Metropolitan for this agreement. No amendment to the existing Jones & Stokes agreement is required for this work.

The Skinner Solar Power Generation Facility has been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included in the fiscal year 2007/08 capital budget. See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for the Location Maps, [Attachment 3](#) for the Negative Declaration, and [Attachment 4](#) for Comments from Public Review.

#### **Project Milestones**

May 2008 – Completion of final design

#### **Policy**

---

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

## California Environmental Quality Act (CEQA)

---

### CEQA determination for Option #1:

The environmental effects from the funding, design, procurement of equipment, construction, and operation of the Skinner Oxidation Retrofit Program (Program) were evaluated in the Robert A. Skinner Filtration Plant Reliability and Quality Program Final Program Environmental Impact Report (Final PEIR). The Final PEIR was certified by the Board on July 8, 2003. The Board also approved the Findings of Fact (findings), the Statement of Overriding Considerations (SOC), the Mitigation Monitoring and Reporting Program (MMRP), and the Program itself. The environmental effects of subsequent activities for the Program, including the additional 10.3-acre-construction-use area north of Tualota Creek and the temporary crossing of the creek to the ORP construction site, were evaluated in the 2003 Mitigated Negative Declaration (MND) entitled "Robert A. Skinner Filtration Plant Reliability and Quality Program, Additional Construction-Use Area and Creek Crossing," which was adopted by the Board on April 13, 2004. Subsequent to the certification of the 2003 Final PEIR and the adoption of the 2003 MND for the Program, additional activities were proposed, thus modifying the original Program's description. To comply with CEQA and the State CEQA Guidelines, Metropolitan as the Lead Agency prepared a Negative Declaration (ND) entitled "Robert A. Skinner Water Treatment Plant Solar Power Generation Facility." (See [Attachment 3](#).) The ND was distributed for a 30-day public review period beginning on August 23, 2007 and ending on September 21, 2007. The ND includes the Initial Study and Environmental Checklist form.

[Attachment 4](#) contains two comment letters received during the public review period along with a response to those comments. As stated in the State CEQA Guidelines (Section 15074), the Board is required to review and consider the ND, the Initial Study, and the comments received during the public review period prior to the adoption of the ND. Adoption of the ND is dependent on the finding by the Board that, based on the whole record before it, there is no substantial evidence that the proposed project will have a significant impact on the environment and that the ND reflects the Lead Agency's independent judgment and analysis. All of the above documentation, including other materials that constitute the record of proceedings upon which the Lead Agency decision is based, has been and will be on file at Metropolitan's headquarters located at 700 North Alameda Street, Los Angeles, CA 90012.

### CEQA determination for Option #2:

None required

## Board Options

---

### Option #1

Adopt the CEQA determination and

- a. Appropriate \$1.41 million; and
- b. Authorize final design of the Skinner Solar Power Generation Facility.

**Fiscal Impact:** \$1.41 million in budgeted funds (Approp. 15391)

**Business Analysis:** This option would allow Metropolitan to continue its efforts to reduce operating costs and increase efficiency under the Energy Management Program. The project will reduce power purchases for the Skinner plant and provide an alternate source of power in emergency situations, while providing renewable green energy that will reduce Metropolitan's overall carbon emissions. Metropolitan will receive up to \$5 million in rebate incentives from SCE over a five-year period.

### Option #2

Do not authorize final design of the Skinner Solar Power Generation Facility.

**Fiscal Impact:** None

**Business Analysis:** This option would suspend efforts on the Solar Power Generation Facility. All electrical power used at the Skinner plant would continue to be purchased from Southern California Edison, and Metropolitan would forfeit its rebate reservation secured through the CPUC, as well as the \$50,000 reservation payment that was authorized by the Board in June 2007. In addition, this option would not

support the objectives of AB 32 nor of Governor Schwarzenegger's 2004 "Green Building Initiative" Executive Order.

**Staff Recommendation**

---

Option #1

  
\_\_\_\_\_  
Roy L. Wolfe  
Manager, Corporate Resources

10/30/2007  
Date

  
\_\_\_\_\_  
Jeffrey Kightlinger  
General Manager

10/31/2007  
Date

- Attachment 1 – Financial Statement**
- Attachment 2 – Location Maps**
- Attachment 3 – Negative Declaration**
- Attachment 4 – Comments from Public Review**

## Financial Statement for Power Reliability and Energy Conservation Program

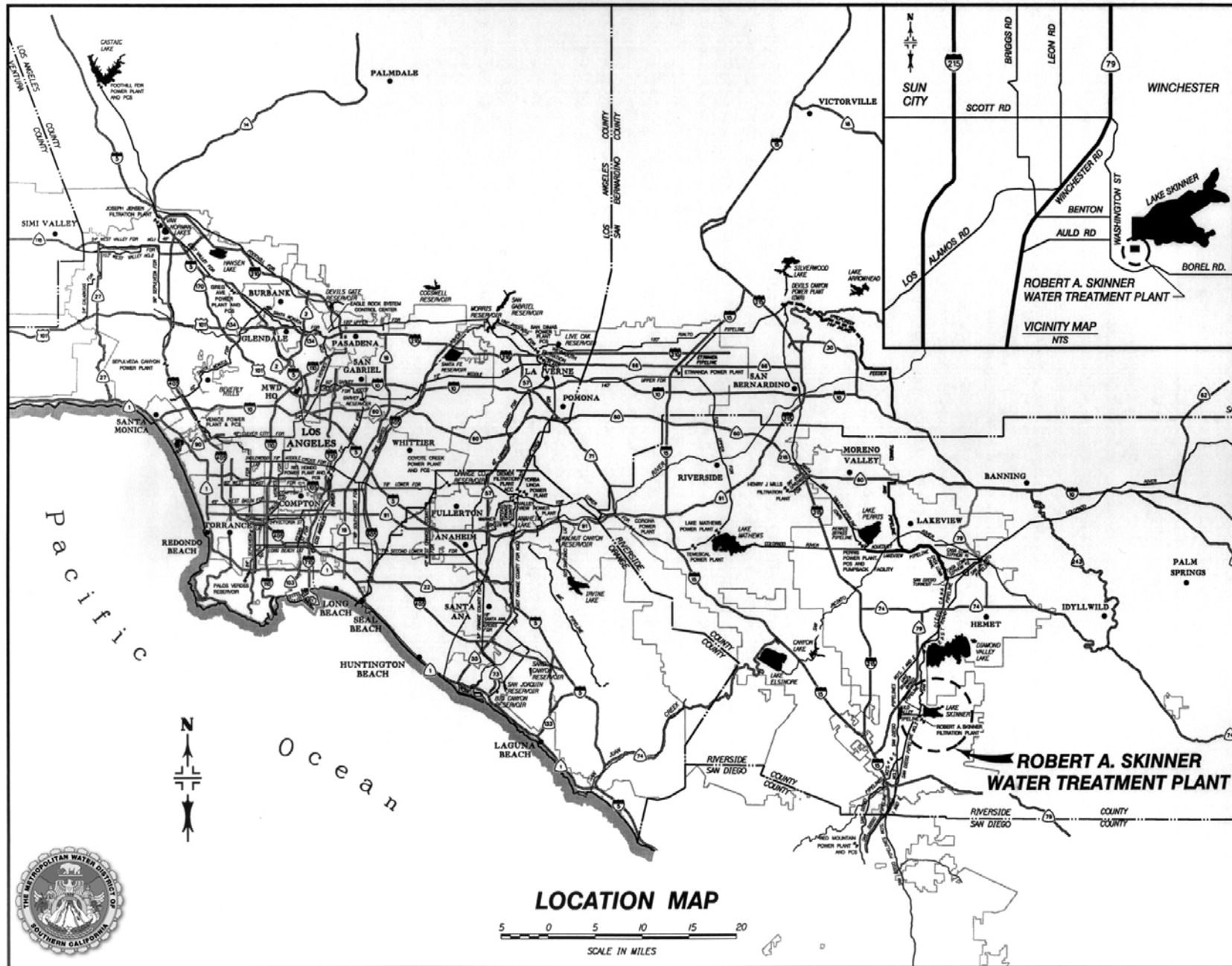
A breakdown of Board Action No. 5 for Appropriation No. 15391 is as follows:

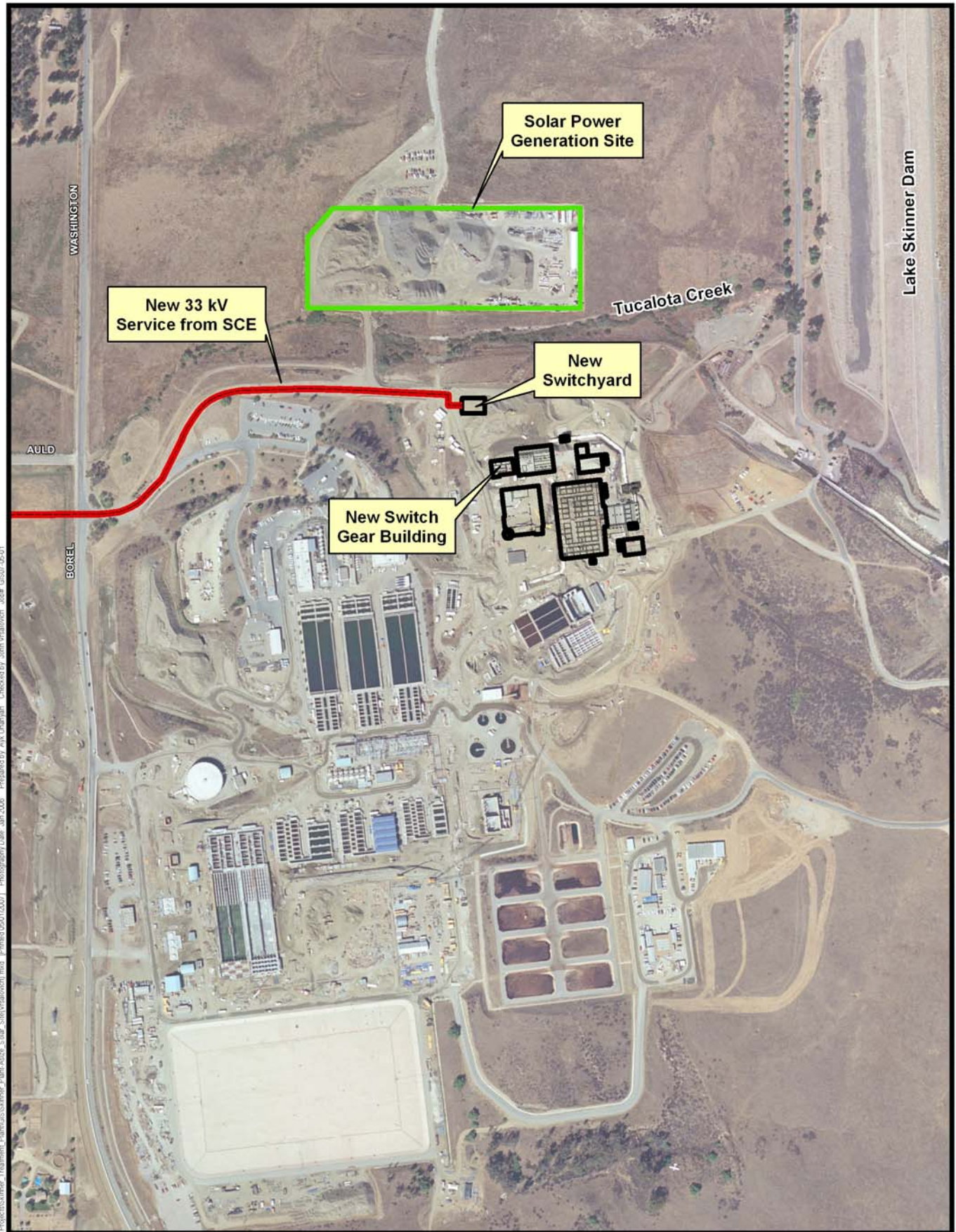
	<b>Previous Total Appropriated Amount (June 2007)</b>	<b>Current Board Action No. 5 (Nov. 2007)</b>	<b>New Total Appropriated Amount</b>
Labor			
Owner costs (Project mgmt rebate coordination, bidding process) \$	615,700	\$ 170,000	\$ 785,700
Studies and Investigations	175,000	-	175,000
Final Design	700,000	80,000	780,000
Submittal Review	420,000	-	420,000
Control Systems Integration	128,000	-	128,000
Construction Inspection & Support	1,822,250 *	-	1,822,250
Water Systems Operations	391,000	-	391,000
Materials and Supplies	1,020,000	-	1,020,000
Incidental Expenses	65,105	-	65,105
Professional Services			
MWH Americas	390,000	950,000	1,340,000
Jones & Stokes	-	125,000	125,000
Equipment Use	15,000	-	15,000
Contracts	9,845,000	-	9,845,000
Remaining Budget*	637,945 *	85,000	722,945
<b>Total</b>	<b>\$ 16,225,000</b>	<b>\$ 1,410,000</b>	<b>\$ 17,635,000</b>

\* Reflects reallocation of \$500,000 from Remaining Budget to Construction Inspection Support for the OC-88 Energy Modifications project, in order to meet critical deadlines and water deliveries during construction of the energy modifications.

### Funding Request

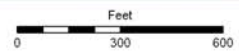
<b>Program Name:</b>	Power Reliability and Energy Conservation Program		
<b>Source of Funds:</b>	Revenue Bonds, Replacement and Refurbishment or General Funds		
<b>Appropriation No.:</b>	15391	<b>Board Action No.:</b>	5
<b>Requested Amount:</b>	\$ 1,410,000	<b>Capital Program No.:</b>	15391-E
<b>Total Appropriated Amount:</b>	\$ 17,635,000	<b>Capital Program Page No.:</b>	E-52
<b>Total Program Estimate:</b>	\$ 29,500,000	<b>Program Goal:</b>	E- Cost Efficiency / Productivity





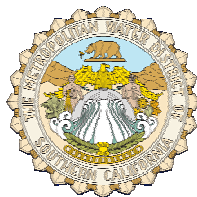
Project: Skinner\_Treatment\_Plant; Plant: Skinner; Plant Assoc.: Solar; Site: Skinner; Job#: 0507-25-01  
Printed: 05/01/2007; Photography Date: Jan 2006; Prepared by: A.V. Uthman; Checked by: Jim Vraslovich

Skinner Plant Site Map



# **Robert A. Skinner Water Treatment Plant Solar Power Generation Facility**

## **Proposed Negative Declaration**



**Report No. 1390**

**August 2007**





**The Metropolitan Water District  
of Southern California**

**Proposed Negative Declaration**

**Robert A. Skinner Water Treatment Plant  
Solar Power Generation Facility**

**For additional information  
regarding this document, contact:**

**The Metropolitan Water District of Southern California  
Environmental Planning Team  
P.O. Box 54153  
Los Angeles, California 90054-0153**

**Dr. Debbie Drezner**

**(213) 217-5687**

**E-mail: [DDrezner@mwdh2o.com](mailto:DDrezner@mwdh2o.com)**

**Metropolitan Report No. 1390**

**August 2007**



## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>iii</b>
<b>1 PROJECT DESCRIPTION.....</b>	<b>1-1</b>
1.1 Location .....	1-2
1.2 Project Background and Tiering of the Environmental Document .....	1-2
1.2.1 Need for the Proposed Project .....	1-2
1.2.2 Tiering of the Environmental Document .....	1-6
1.2.3 Incorporation by Reference.....	1-7
1.3 Project Description.....	1-9
1.3.1 Project Construction.....	1-11
1.3.2 Project Operation and Maintenance.....	1-13
1.4 Surrounding Land Uses.....	1-13
1.5 General Plan and Zoning .....	1-14
<b>2 INITIAL STUDY .....</b>	<b>2-1</b>
2.1 Introduction.....	2-1
2.2 Draft Initial Study and Environmental Checklist Form.....	2-1
2.3 Environmental Factors Potentially Affected.....	2-4
2.4 Determination .....	2-4
<b>3 EVALUATION OF ENVIRONMENTAL IMPACTS.....</b>	<b>3-1</b>
<b>4 REFERENCES.....</b>	<b>4-1</b>
<b>5 LIST OF PREPARERS.....</b>	<b>5-1</b>

## APPENDICES

**APPENDIX A:** Air Quality Data Sheets

**APPENDIX B:** Biological Resources Evaluation

**APPENDIX C:** Cultural Resources Memo

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
Table 3-1 Forecast of Regional Construction Emissions .....	3-12
Table 3-2 Forecast of Localized Construction Emissions.....	3-13
Table 3-3 Project Construction Noise Levels at Nearest Receiver (dBA).....	3-30
Table 3-4 Vibration Source Levels for Construction Equipment.....	3-31

## LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 1-1 Regional Location Map.....	1-3
Figure 1-2 Local Vicinity Map.....	1-4
Figure 1-3 Site for Proposed Solar Power Generation Facility .....	1-5
Figure 1-4a Solar Panel Design.....	1-10
Figure 1-4b Mega-Module Design .....	1-10
Figure 3-1 Key Observation Points (KOP).....	3-2
Figure 3-2a KOP 1 – Panoramic View toward Proposed Site (looking west). .....	3-3
Figure 3-2b KOP 2 – Panoramic View toward Proposed Site (looking west).....	3-3
Figure 3-2c KOP 3 – Panoramic View toward Proposed Site (looking west) .....	3-4
Figure 3-2d KOP 4 – Panoramic View toward Proposed Site (looking west).....	3-4
Figure 3-2e KOP 5 – Panoramic View toward Proposed Site (looking southeast).....	3-5
Figure 3-2f KOP 6 – Panoramic View toward Proposed Site (looking east) .....	3-5
Figure 3-2g KOP 7 – Panoramic View toward Proposed Site (looking east) .....	3-6
Figure 3-2h KOP 8 – Panoramic View toward Proposed Site (looking east-southeast). ....	3-6
Figure 3-2i KOP 9 – Panoramic View toward Proposed Site (looking southeast).....	3-7
Figure 3-2j KOP 10 – Panoramic View toward Proposed Site (looking east-northeast) ....	3-7
Figure 3-2k KOP 11 – Panoramic View toward Proposed Site (looking east) .....	3-8

## ACRONYMS AND ABBREVIATIONS

AC	alternating current
AQMP	Air Quality Management Plan
Basin	South Coast Air Basin
BMPs	best management practices
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CPUC	California Public Utilities Commission
dBA	decibels, adjusted
DC	direct current
EMP	Energy Management Program
FPEIR	Final Program Environmental Impact Report
HCP	Habitat Conservation Plan
KOP	key observation point
kV	kilovolt
kWh	kilowatt hours
LST	Localized Significance Threshold
Metropolitan	Metropolitan Water District of Southern California, The
MMPR	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
MSHCP	Multiple Species Habitat Conservation Plan
MW	megawatt
ND	Negative Declaration
NGVD	National Geodetic Vertical Datum
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	ozone
ORP	Oxidation Retrofit Program
PM <sub>10</sub>	particulate matter smaller than or equal to 10 microns in diameter
PM <sub>2.5</sub>	particulate matter smaller than or equal to 2.5 microns in diameter
RCGP	Riverside County General Plan
RCPG	Regional Comprehensive Plan and Guide
ROC	reactive organic compounds
R-R	Rural Residential
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
Skinner Plant	Robert A. Skinner Water Treatment Plant
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SO <sub>x</sub>	oxides of sulfur
SWRC MSHCP	Southwestern Riverside County Multi-Species Habitat Conservation Plan
USGS	U.S. Geological Survey
VdB	vibration decibels
V	volt
WRC MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan



## SECTION 1 PROJECT DESCRIPTION

The Metropolitan Water District of Southern California (Metropolitan) is proposing to construct a 1-megawatt (MW) solar power generation facility at the Robert A. Skinner Water Treatment Plant (Skinner Plant). Metropolitan initiated an Energy Management Program (EMP) in fall 2006. The goal of the EMP is to allow Metropolitan to design and operate its facilities in the most energy-efficient and cost-effective manner while demonstrating leadership in the emerging field of energy management. Under the EMP, Metropolitan will consider renewable energy projects in addition to energy conservation or reduction projects. In its evaluation of renewable energy projects, such as solar, wind, and hydroelectric projects, Metropolitan's goal will be to balance the capital cost and return on investment with the other, subtler benefits derived from the projects. These benefits may include demonstrating leadership in the areas of conservation and energy management, reducing carbon emissions, demonstrating readiness to employ emerging technologies, reducing long-term dependence on purchased electricity, and moving toward long-term stabilization of energy costs through the use of sustainable energy sources (e.g., solar, wind, and hydroelectric power).

Water treatment at the Skinner Plant is an energy-intensive process; it consumed more than 11.1 million kilowatt hours (kWh) of electricity during 2006. This level of consumption reflects an expense for Metropolitan of nearly \$1.4 million at current Southern California Edison (SCE) electrical rates; this expense will increase over the next several years as SCE rates continue to increase. Furthermore, the plant's ongoing expansion and the addition of ozone disinfection technology are expected to increase the plant's energy usage in 2009 to several times that of the current usage level. As such, the solar power generation facility would provide an alternate source of power for the Skinner Plant while providing renewable green energy that would help reduce Metropolitan's overall carbon emissions. With implementation of the facility, Metropolitan would indirectly reduce carbon emissions by nearly 2.5 million pounds annually.

The conceptual design for the Skinner Plant recommends a 1 MW solar power generation facility that could generate up to 2 million kWh of power annually. A 1 MW solar power generation facility could meet up to one-sixth of the average energy demand at the Skinner Plant after installation of ozonation facilities. The solar power generation facility would be ground mounted, with a single- or dual-axis tracking system to allow the solar panel arrays to track the sun's path from east to west on a daily basis. Approximately 5 to 6 acres would be required for the facility.

The recommended location for the facility is within the Skinner Plant's operational area, north of Tocalota Creek. This location was chosen because it is near the Skinner Plant's future switchgear building (which would be the point of electrical connection) and it has already been cleared of vegetation. The site is currently being used by contractors as a temporary storage area to accommodate ongoing construction projects at the Skinner Plant associated with the approved Oxidation Retrofit Program (ORP). Upon completion of construction, the cleared site would be well suited for the proposed solar power generation facility.



The ORP facilities were previously addressed as part of an overall improvement plan in the Robert A. Skinner Filtration Plant Reliability and Quality Program Final Program Environmental Impact Report (FPEIR) prepared in 2003. Use of the site for construction and materials staging was addressed in the Robert A. Skinner Filtration Plant Reliability and Quality Program, Additional Construction-Use Area and Creek Crossing, Mitigated Negative Declaration (MND) prepared in December 2003.

Once the site is no longer required for construction and materials staging for the ORP facilities, the solar power generation facility would be constructed on the site. It is estimated that construction would begin in fall 2008 and continue for up to 9 months. The solar power generation facility would be constructed within the limits of the existing ORP construction and material staging area. This area consists of approximately 11 acres of disturbed land. Approximately 5 to 6 acres of the disturbed 11 acres would be required for the solar power generation facility.

## **1.1 Location**

The 396-acre Skinner Plant is located southwest of Lake Skinner in an unincorporated section of southwestern Riverside County, approximately 10 miles southwest of Hemet, 5 miles east of Murrieta, and 5 miles northeast of Temecula (see Figure 1-1, Regional Location Map). Lake Skinner Dam forms a portion of the eastern boundary of the site. The Skinner Plant is found on Bachelor Mountain, 7.5-minute U.S. Geological Survey (USGS) quadrangle T7S R2W, east of Winchester Road, at the east end of Auld Road (see Figure 1-2, Local Vicinity Map).

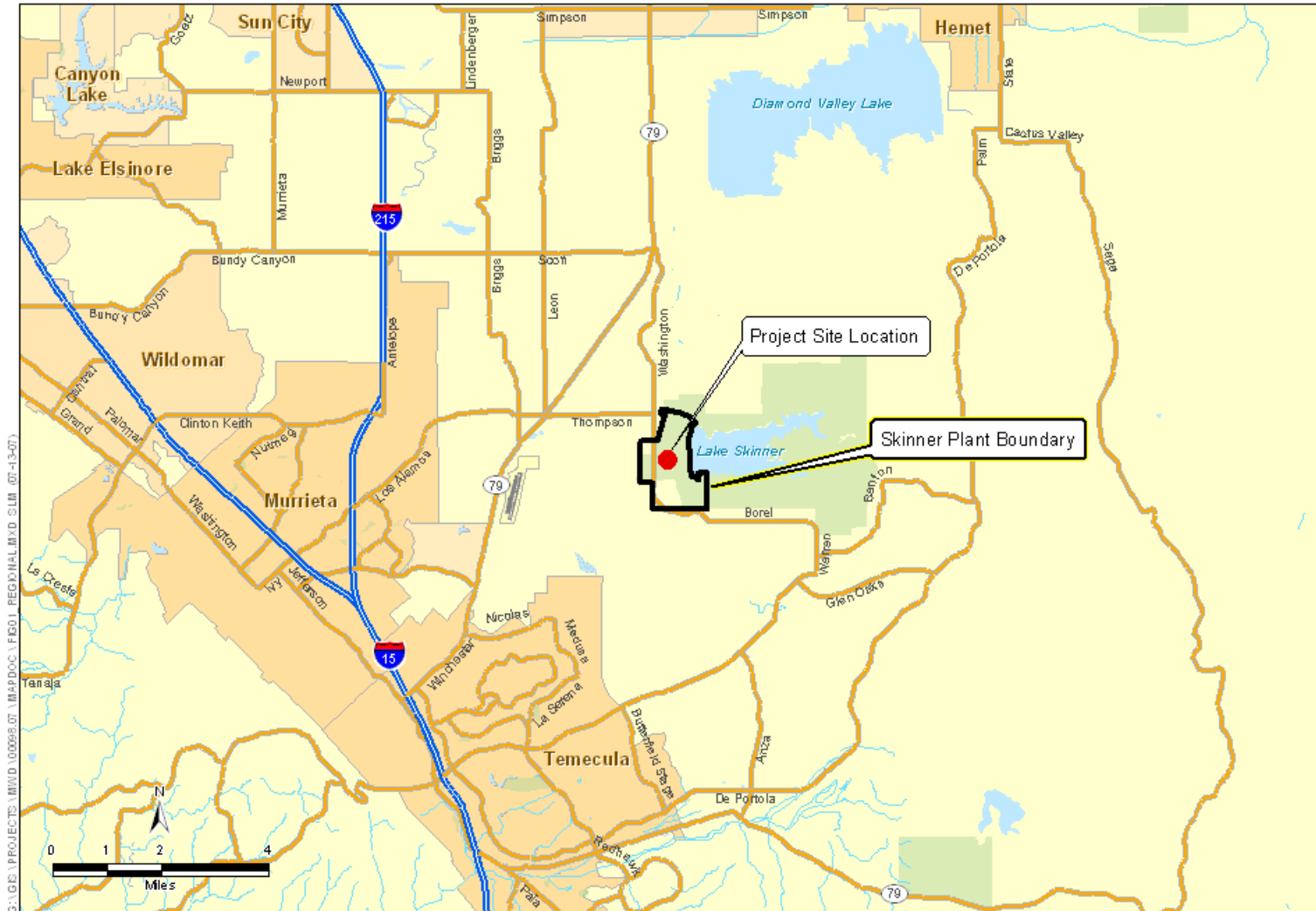
The solar power generation facility would be located approximately 1,100 feet west of Lake Skinner Dam, north of Tualota Creek, and within the Skinner Plant boundaries, just north of the existing plant facilities. The terrain on the proposed site is relatively flat. The incised Tualota Creek drainage borders the site to the south. This drainage usually has some minor year-round flow fed by small amounts of water released from the reservoir. An existing temporary access road that crosses over Tualota Creek would be widened and paved to serve as the main access road to the proposed solar power generation facility. The locations of the proposed solar power generation facility and the access road are shown in Figure 1-3, Site for Proposed Solar Power Generation Facility.

## **1.2 Project Background and Tiering of the Environmental Document**

### **1.2.1 Need for the Proposed Project**

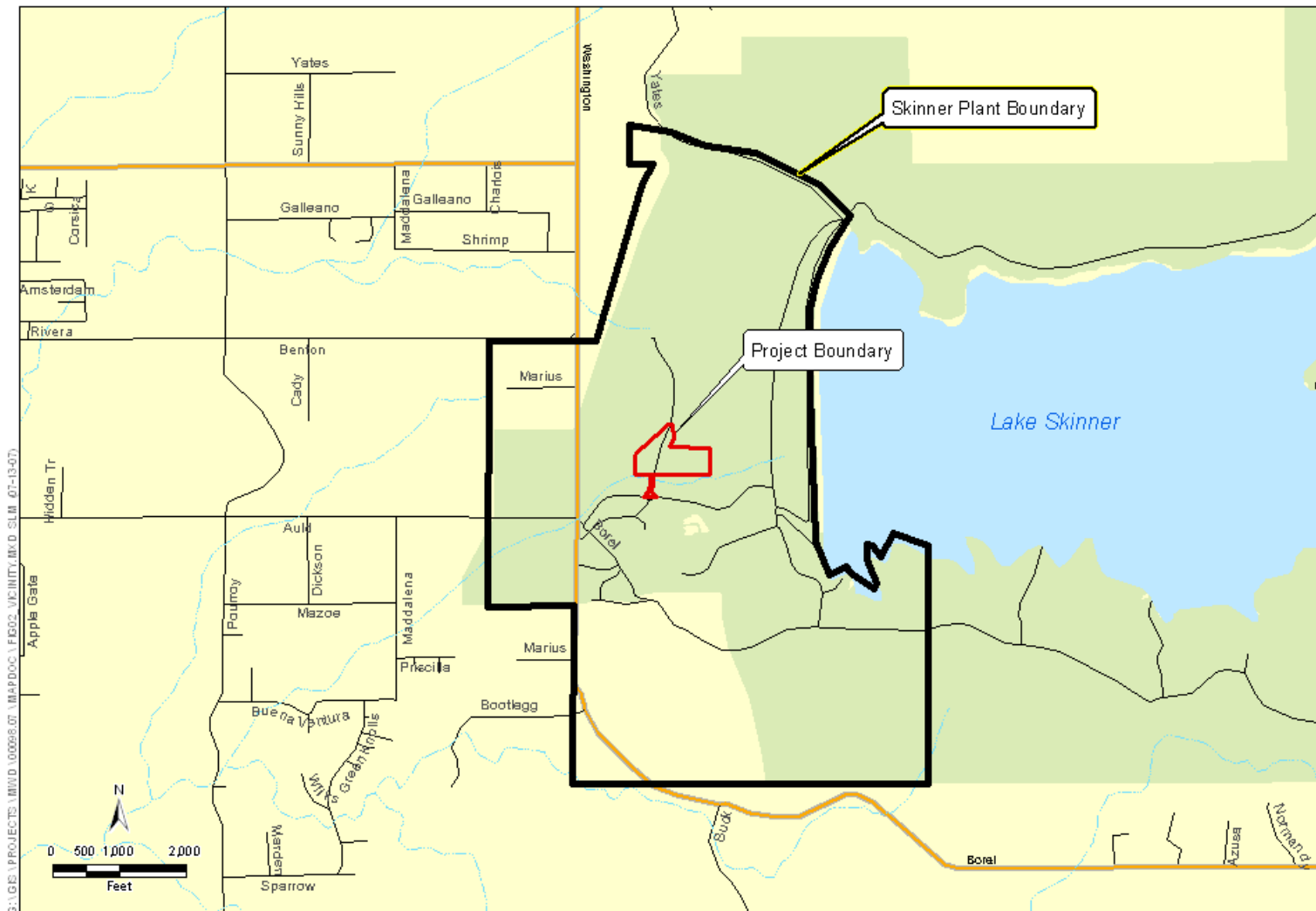
Metropolitan's mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way. Metropolitan is committed to use of innovative environmentally friendly technology at its facilities whenever possible. The proposed project meets this need by providing a solar power generation facility at the Skinner Plant that would provide renewable green energy while reducing carbon emissions.

Figure 1-1. Regional Location Map



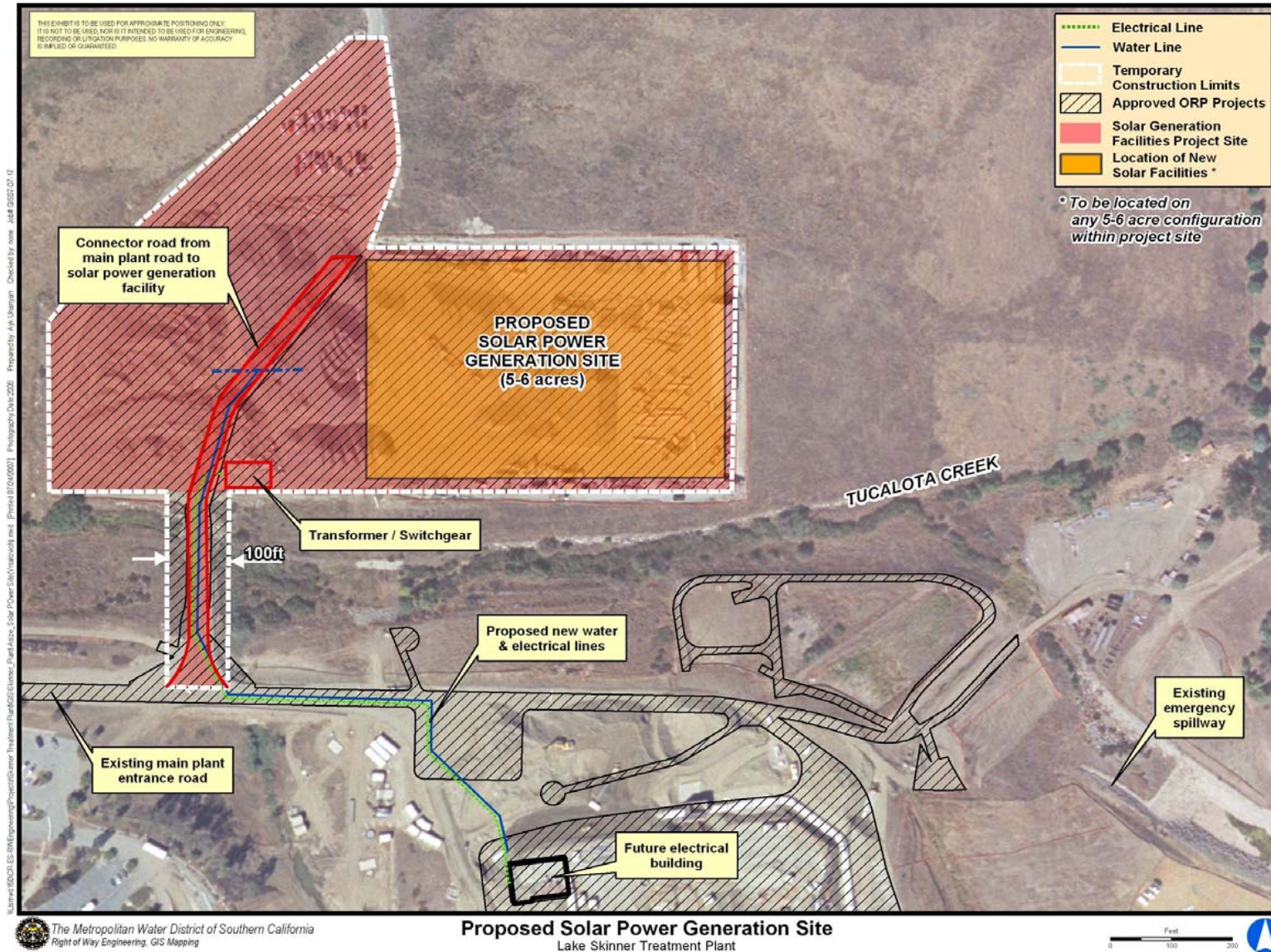
SOURCE: ESRI Streetmap US A(2006)

Figure 1-2. Local Vicinity Map



SOURCE: ESRI Streetmap USA (2006)

**Figure 1-3. Site for Proposed Solar Power Generation Facility**



Source: The Metropolitan Water District of Southern California, 2007

## California Solar Initiative

The proposed project is consistent with the goals and objectives of the California Solar Initiative. On January 12, 2006, the California Public Utilities Commission (CPUC) approved the California Solar Initiative, authorizing the state to invest \$3.2 billion in small-scale solar electric power systems over 11 years and establishing the statewide goal of building one million solar electric roofs, or 3,000 MWs of solar electric power. Six months later, on August 21, 2006, Governor Arnold Schwarzenegger signed the Million Solar Roofs Bill (Senate Bill 1) into law, establishing much-needed policies that complement the California Solar Initiative. The proposed project would also respond to statewide initiatives to harness renewable energy.

### Objectives of the Project

Metropolitan is proposing the following objectives for the proposed project:

- Improve reliability of the power supply and reduce power costs at the Skinner Plant by providing a secondary source of power (the main source is through SCE);
- Reduce carbon emissions at the Skinner Plant by utilizing renewable green energy; and
- Support and comply with recent legislation passed by the State of California (i.e., the California Solar Initiative).

### 1.2.2 Tiering of the Environmental Document

On July 8, 2003, Metropolitan's Board of Directors certified the FPEIR for the Robert A. Skinner Filtration Plant Reliability and Quality Program and approved the program itself. The FPEIR analyzed numerous program components for the Skinner Plant. The Board also adopted the Findings of Fact, a Statement of Overriding Considerations regarding significant unavoidable adverse air quality impacts, and a Mitigation Monitoring and Reporting Program (MMRP).

Section 15152 of the *State CEQA Guidelines* deals with "tiering," or using the analysis of general matters contained in a broader EIR with later EIRs and negative declarations (NDs) for narrower projects, incorporating by reference the general discussions from the broader EIR. Section 15152(b) states that "[a]gencies are encouraged to tier the environmental analyses which they prepare for separate but related projects."

The discussion contained in this proposed Negative Declaration (ND) focuses on those potential impacts that were not assessed previously in the FPEIR and other tiered documents, including the 2003 MND, making reference to the previous documents where necessary. This proposed ND document is a tiered document to the FPEIR and 2003 MND in accordance with 15152 of the *State CEQA Guidelines*. This proposed ND analyzes specific changes concerning the manner in which the approved program is being implemented, changes that were not known at the time the FPEIR was certified. The specific changes being analyzed are fully described below in Section 1.3, Project Description.

### 1.2.3 Incorporation by Reference

Consistent with Section 15150 of the *State CEQA Guidelines*, the following documents were used in the preparation of this proposed ND and are incorporated herein by reference:

- Robert A. Skinner Filtration Plant Reliability and Quality Program, Draft Program Environmental Impact Report, The Metropolitan Water District of Southern California, May 2003;
- Robert A. Skinner Filtration Plant Reliability and Quality Program, Final Program Environmental Impact Report, The Metropolitan Water District of Southern California, July 2003;
- Robert A. Skinner Filtration Plant Reliability and Quality Program, Additional Construction-Use Area and Creek Crossing, Mitigated Negative Declaration, The Metropolitan Water District of Southern California, December 2003;
- Robert A. Skinner Filtration Plant Reliability and Quality Program, Refinements to the Program, Negative Declaration, The Metropolitan Water District of Southern California, August 2004; and
- Addendum No. 1 to the Robert A. Skinner Filtration Plant Reliability and Quality Program, Additional Use Area and Creek Crossing, Mitigated Negative Declaration, The Metropolitan Water District of Southern California, May 2006.

#### Previous Documentation for the Proposed Site

The proposed site is currently a construction-use area, providing storage space for materials and equipment and a parking area for construction workers, during construction of the ORP facilities. An MND (hereafter referred to as the 2003 MND) was prepared for use of this site as an additional construction-use area for the ORP facilities project, and the subsequent Addendum No. 1 to the 2003 MND was prepared for minor modifications to the additional construction-use area through installation and use of a material storage building during construction.

The construction-use project discussed in the 2003 MND included improvements to and an expansion of the approximately 17-foot-wide access road from the south, which crosses Tualota Creek. A 40-foot-wide and approximately 330-foot-long temporary access road was constructed for the construction-use area. Five 30-inch corrugated metal pipes were placed beneath the temporary roadway, within the area of the streambed. To prevent the compacted fill around the pipes from eroding during a storm event, riprap was applied to the sides of the compacted fill. The 2003 MND committed to removal of all improvements made within the additional construction-use area at the conclusion of construction of the ORP facilities. The area would be allowed to revegetate on its own and return to its previous condition. The construction of the road temporarily affected

approximately 80 linear feet of Tualota Creek, and the base of the roadway permanently affected an area approximately 60 feet wide within the creek bed. Regulatory permits from the U.S Army Corps of Engineers and the California Department of Fish and Game (CDFG) were obtained for these impacts to Tualota Creek.

No unavoidable significant impacts were identified in the 2003 MND. The 2003 MND outlined a total of seven mitigation measures to reduce the severity of environmental impacts, these mitigation measures were:

- Biological Resources Mitigation Measure IV-1: Prior to use of the additional construction area, its limits shall be fenced to avoid adverse impacts to sensitive plants, riparian habitat, and alkali meadow area outside of the construction lay down site;
- Cultural Resources Mitigation Measure V-1: For all ground disturbances in previously undisturbed Holocene-age soils, work shall be monitored as appropriate by a qualified archaeologist. For any cultural materials that are observed during ground disturbance, all construction activity at the location shall be immediately suspended and the area shall be clearly staked and flagged. The material shall be evaluated for potential significance in accordance with the *State CEQA Guidelines*. If determined not to be significant, construction shall be allowed to resume. If determined to be significant, a treatment plan shall be prepared and implemented as described in mitigation measure CR-2 in the adopted MMRP for the FPEIR prior to resuming construction;
- Cultural Resources Mitigation Measure V-2: All excavations within previously undisturbed alluvium will be monitored for paleontologic resources;
- Cultural Resources Mitigation Measure V-3: If fossils are identified during construction activities, the area will be flagged for evaluation and recovery of specimens by a professional paleontologist;
- Cultural Resources Mitigation Measure V-4: All recovered specimens will be documented, analyzed, and prepared to a point of identification and permanent storage;
- Cultural Resources Mitigation Measure V-5: All recovered specimens will be permanently stored in a repository, with retrievable storage and access for research and interpretation; and
- Cultural Resources Mitigation Measure V-6: For the discovery of human remains during construction, notification of the coroner and designated Native American representatives shall proceed in accordance with Public Resources Code Section 5097.98, Health and Safety Code 7050.5, and *State CEQA Guidelines*.

Addendum No. 1 to the 2003 MND was prepared in 2006 to address proposed minor modifications to the program, which involved the installation and use of a material storage building within the boundaries of the previously approved additional construction-use area. The 15,000-square-foot, 27-foot-high material storage building is

currently used for storage of construction materials for the ORP facilities construction project. The material storage building was constructed to meet Seismic 4 requirements (the highest seismic risk classification under the Uniform Building Code for areas in proximity to major fault lines). The storage building was also constructed to conform to the 2005 California Building Code. The building may be used for storage of solar panels and other equipment during and after construction of the proposed solar power generation facility.

### **1.3 Project Description**

The proposed project would involve construction of a 1 MW solar power generation facility (i.e., photovoltaic power) within the Skinner Plant. The system would be ground mounted and built with a single- or dual-axis tracking system to allow the solar panel arrays to track the sun's path from east to west on a daily basis. Metropolitan would employ one of two technologies for the proposed solar power generation facility: standard-module solar panels (see Figure 1.4a) or mega-module solar panels (see Figure 1.4b). Metropolitan would determine which methodology to use during final design. Both technologies would be laid out on approximately 5 to 6 acres. The solar panels would be constructed in compliance with applicable building codes.

The standard-module solar panel array would be located approximately 6 feet above the ground (in a horizontal position). During tracking operations, the array could be as high as 15 feet off the ground (from the highest edge of the solar panel to the ground). Standard-module solar panels would be mounted on wooden telephone/electric poles. Up to 7,000 solar panels would be installed as part of the standard-module array; the dimensions of each solar panel would be 5.5 feet by 3 feet, and the distance between each row of solar panels would be approximately 20 feet from center to center. Up to 40 rows would be installed, depending upon the finished configuration of the facility.

The mega-module solar panel array would be located approximately 20 feet above the ground (in a horizontal position). During tracking operations, the array could be as high as 40 feet off the ground (from the highest edge of the solar panel to the ground). Mega-module solar panels would be mounted on 30-inch-diameter steel pipes that would extend approximately 15 to 20 feet below the surface. Each steel pipe would be embedded in a concrete foundation. Up to 50 solar modules would be installed as part of the mega-module array; the dimensions of each solar module would be 60 feet by 45 feet, and the distance between each row of solar panels would be approximately 60 feet from center to center. Up to 10 rows would be installed, depending upon the finished configuration of the facility.

As many as five electrical inverters would be required to convert the direct current (DC) power to alternating current (AC). A small switchyard, to allow a transformer to step up the voltage from 480 V to 4.16 kV, would be installed near the roadway, at the entrance to the proposed facility. The switchyard would be 20 by 20 feet in size. A new switchgear building, approved in the FPEIR as part of the ongoing ORP at the Skinner Plant, would serve as the point of connection for the proposed solar power generation facility.



**Figure 1-4a. Standard Module Design**



Source: MWH Americas, 2007.

**Figure 1-4b. Mega-Module Design**



Source: MWH Americas, 2007.

Although the total site is 11 acres, only 5 to 6 acres would be utilized for installation of solar panels at this time. In the future, it is envisioned that more solar panels would be installed on the remaining portion of the site. The 11-acre site would accommodate all construction and materials staging, and no additional construction staging areas would be required.

The existing temporary construction road, completed as part of ORP, would be maintained, improved, and paved and would serve as the internal access road to the proposed solar power generation facility via the main gate. Guardrails would be installed on both sides of the road where it crosses Tualota Creek. The proposed creek crossing would be built level with the ground surface at its northern and southern ends. It would include installation of large concrete pipe culverts that would allow a 25-year storm to flow unencumbered beneath the road. In addition, the side slopes of the road crossing (upstream and downstream) would have grouted riprap at the entrance and exit to the culverts to assist in channeling flow beneath the road. The creek crossing would be designed as a semi-dip crossing at the creek to allow flows greater than a 25-year storm to pass over the road. The grouted riprap and paved road section would act together as an armoring system so the road is not washed away or damaged. The improvements would result in a road that would be 40 feet wide (two 14-foot-wide paved lanes and two 6-foot-wide shoulders on each side) and approximately 300 feet long from the main plant entrance road to the entrance of the solar power generation facility. The road would be further extended approximately 500 feet through the solar power generation facility boundaries, terminating near the contractor's work and storage area. Maintaining and improving the construction road would permanently affect up to 40 linear feet of Tualota Creek. Regulatory permits would be sought from the U.S Army Corps of Engineers, the California Department of Fish and Game, and the Regional Water Quality Control Board for any additional impacts to Tualota Creek not previously addressed in the 2003 MND.

In addition to the extension of an electric line to the site, a 3-inch potable water line would be installed to support maintenance activities (e.g., washing of panels).

The existing storage facility, which was constructed to store building materials, etc., during construction of the ORP facilities, may be retained on-site (the environmental impacts of construction of this storage facility were previously addressed in Addendum No. 1 to the 2003 MND). This building would be used for storage of solar panels and other equipment during and after construction of the proposed solar power generation facility.

### **1.3.1 Project Construction**

Construction of the proposed project would involve 1) site grading/improvements; 2) widening and paving the access road, improvements to the drainage crossing, and the extension of utilities (water and electric); and 3) installation of solar panels. Project construction would last up to 9 months; it is expected to begin by fall 2008. No more than 100 truck trips would be required during the construction period.

Construction traffic, including material deliveries and construction workers' vehicles, would use the north gate along Benton Road and the main plant entrance. The project construction hours would comply with Riverside County Code, which limits construction to the hours between 6:00 a.m. and 6:00 p.m. June through September and 7:00 a.m. and 6:00 p.m. October through May.

Typical best management practices (BMPs) for erosion control would be implemented during construction pursuant to any applicable National Pollutant Discharge Elimination System (NPDES) requirements. These BMPs may include, but would not be limited to, the use of mulch, plastic sheeting, erosion control blankets, or sandbags to control erosion caused by rainfall. Check berms and desilting basins may be developed during construction to prevent off-site sediment transport.

A qualified archaeologist would be present during any trenching in the proposed project area. If cultural materials, whether historic or prehistoric, are encountered during construction, a qualified archaeologist would examine the materials and determine appropriate treatment, if any. For the discovery of human remains during construction, notification of the coroner and designated Native American representatives would proceed in accordance with Public Resources Code Section 5097.98, Health and Safety Code Section 7050.5, and *State CEQA Guidelines*.

Consistent with the requirements of the Migratory Bird Treaty Act, if any construction work is to be initiated within the nesting period for migratory birds, a pre-construction survey for active nests for migratory birds would be conducted.

### **Site Grading/Improvements**

Minimal site grading would be required because the site would be left flat after the ORP construction is complete. The 2003 MND committed to removal of all improvements made within the additional construction-use area at the conclusion of construction of the ORP facilities. In the 2003 MND, it was stated that the area would be allowed to revegetate on its own and return to its previous condition. However, since the solar power generation facility is now proposed for this area, the area will not be returned to its previous condition. A 2- to 2.5-inch bed of crushed rock aggregate would be laid on the 6-acre site. Grading would occur over a 2-week period. Up to two bulldozers would be utilized to rough grade the site over this 2-week period. Placement of crushed rock aggregate would also occur via bulldozer. Two workers would be employed, and the work would occur over 1 week. The site grading and improvements would be completed within 1 month.

### **Widening and Paving the Access Road, Improvements to the Drainage Crossing, and the Extension of Utilities**

The existing temporary access road would be widened to 40 feet, and approximately 32,000 square feet, or 0.74 acre, of road surface would be paved. The existing corrugated metal pipe culverts would be removed and replaced with reinforced concrete pipe culverts. Grouted riprap would be installed upstream and downstream to protect against erosion.

Improvements at Tualota Creek would require placement of up to 750 cubic yards of soil within the creek. This soil would be obtained from excess soil on-site at the Skinner Plant. In addition, approximately 350 cubic yards of riprap would be placed on the roadside slopes. The road and drainage improvements would likely take up to 2 months to complete. It is assumed that a maximum of four pieces of construction equipment (a paver or other paving equipment, a roller, and a loader) would be operating each day. A 3-inch waterline and electrical conduits would be extended via a trench in conjunction with improvements to the access road.

### **Installation of Solar Panels**

Installation of the solar panels would begin by placing telephone/electric poles or steel pipes in the ground with use of a truck-mounted auger. The telephone/electric poles would be kept in place by sand and compacted crushed rock aggregate or by concrete in the case of steel pipes. Special trucks with compartments for holding the panels would be used for transportation and installation. The panels would be placed on the tracking system using an automated process. Installation of solar panels would take up to 6 months. A total of six workers would be present on-site during this period.

### **1.3.2 Project Operation and Maintenance**

The solar power generation facility would require very little maintenance once the system is installed and only on an as-needed basis (such as to replace any malfunctioning parts). The life span of the installed panels is 25 years. Periodic washing of the panels, once every 3 months, with water is recommended (no cleaning agent required). Employees are not required to be present at the proposed solar power generation facility. Occasional weed abatement, as is performed for other facilities at Skinner Plant, would be carried out at the proposed solar power generation facility. The use of crushed rock aggregate material as the base would serve as a weed deterrent. No aspect of the proposed project would result in either an increase in population or the number of employees.

### **1.4 Surrounding Land Uses**

The 396-acre Skinner Plant is located in an unincorporated area of southwestern Riverside County, immediately west of Lake Skinner. The Skinner Plant is bordered to the north and south by primarily open space, to the east by Lake Skinner Dam and Reservoir, to the north and southeast by the Southwestern Riverside County Multi-Species Reserve, and to the west by Washington Street/Borel Road where low-density single-family residential homes are interspersed with open space and residential areas farther to the west (see Figure 1-3).

The proposed project site is in the northern part of the Skinner Plant and bounded by open space within the plant boundaries to the west, north, and east and by Tualota Creek to the south. The main plant facilities are across Tualota Creek, to the south. The closest residential use is located on the west side of Washington Street, just south of Benton Road, approximately 1,000 feet from the proposed project site. The nearest

housing development is located farther west along Maddalena Road between Auld and Benton Roads. The proposed solar power generation facility would be within the limits of the existing ORP construction and materials staging area.

The Skinner Plant is located on a small dissected plateau above the Auld Valley-Tucalota Creek area. The plateau consists of small hills dissected by several slightly to moderately sloped drainages. The margin of the plateau for the Skinner Plant site consists of steeper dissected topography that goes down into the drainage area of Tucalota Creek. The Auld Valley-Tucalota Creek area generally consists of a broad flat valley that contains a series of terraces and small hills just north and outside the main drainage area. These terraces are dissected by several steeply sided ephemeral drainages and small knolls.

## **1.5 General Plan and Zoning**

The existing Riverside County General Plan land use designation for the Skinner Plant is Public Facilities, and the zoning designation for the Skinner Plant site is Rural Residential (R-R).

## SECTION 2 INITIAL STUDY

### 2.1 Introduction

This proposed ND complies with Section 15071 of the *State CEQA Guidelines* for the implementation of the California Environmental Quality Act (CEQA). The following Initial Study, Environmental Checklist, and evaluation of the potential environmental effects were completed in accordance with Section 15063(d)(3) of the *State CEQA Guidelines* to determine if the proposed project could have any potential significant effect on the physical environment. A discussion of previous CEQA documentation for related actions at the Skinner Plant is presented in Section 1 of the proposed ND under “Project Background and Tiering of the Environmental Document.”

A “No Impact” or “Less-than-Significant Impact” determination indicates that the proposed project would not have a significant effect on the physical environment for that specific environmental category. No environmental category was found to have a potentially significant adverse impact with implementation of the proposed project.

### 2.2 Draft Initial Study and Environmental Checklist Form

1. **Project Title:** Robert A. Skinner Water Treatment Plant Solar Power Generation Facility
2. **CEQA Lead Agency Name and Address:** The Metropolitan Water District of Southern California  
P.O. Box 54153  
Los Angeles, CA 90054-0153
3. **Contact Person and Phone Number:** Dr. Debbie Drezner, (213) 217-5687
4. **Project Location:** The Robert A. Skinner Water Treatment Plant (Skinner Plant) is located southwest of Lake Skinner in unincorporated southwestern Riverside County, approximately 10 miles southwest of Hemet, 5 miles east of Murrieta, and 5 miles northeast of Temecula (see Figure 1-1, Regional Location Map). The proposed solar power generation facility would be located north of Tocalota Creek, within the Skinner Plant’s operational area and within Metropolitan’s fee-owned property boundaries.
5. **Project Proponent’s Name and Address:** The Metropolitan Water District of Southern California  
P.O. Box 54153  
Los Angeles, CA 90054-0153

- 6. General Plan Designation:** The existing general plan land use designation for the Skinner Plant is Public Facilities.<sup>1</sup>
- 7. Zoning:** The zoning designation for Skinner Plant is Rural Residential.
- 8. Description of the Project:** The proposed project would involve construction of a 1 MW solar power generation facility (i.e., photovoltaic power) at the Skinner Plant. The system would be ground mounted and built with a single- or dual-axis tracking system to allow the solar panel arrays to track the sun's path from east to west on a daily basis. Please see Section 1.3 for a detailed project description.

#### *Construction*

The site is currently disturbed and being used as a contractor's work and storage area for an ongoing construction project at the Skinner Plant. The proposed project would involve minimal site preparation activities. Once the site is graded, vertical metal or wooden poles and movement joints would be installed, and prefabricated and prewired solar panels would be mounted.

The proposed project would be constructed within an approximate 9-month timeframe, beginning in fall 2008.

#### *Operational and Maintenance Characteristics*

The solar power generation facility would require very little maintenance once the system is installed. Periodic washing of the panels, once every 3 months, with water would be adequate (no cleaning agent required) for maintenance purposes. No staff personnel would be required to be present at the solar power generation facility.

---

<sup>1</sup> Riverside County Land Information System Report for assessor's parcel number 964-030-010. Available: <[www3.tlma.co.riverside.ca.us](http://www3.tlma.co.riverside.ca.us)>.

**9. Surrounding Land Uses and Setting:**

The 396-acre Skinner Plant is located in an unincorporated area of southwestern Riverside County, immediately west of Lake Skinner. The Skinner Plant is bordered to the north and south by primarily open space, to the east by Lake Skinner Dam and Reservoir, to the north and southeast by the Southwestern Riverside County Multi-Species Reserve, and to the west by Washington Street/Borel Road where low-density single-family residential homes are interspersed with open space and residential areas farther west. The proposed solar power generation facility is located within the Skinner Plant boundaries and is surrounded by various facilities associated with plant functions. Tocalota Creek borders the proposed solar power generation facility to the south. The closest residential areas are to the west along Washington Street just south of Benton Road, approximately 1,000 feet from the proposed project site.

**10. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement):**

- California Regional Water Quality Control Board, San Diego Region: issuance of NPDES permit; issuance of Clean Water Act, Section 401 certification;
- U.S. Army Corps of Engineers: issuance of Clean Water Act, Section 404 Nationwide Permit;
- California Department of Fish and Game: issuance of Lake and Streambed Alteration Agreement, Section 1602;
- Riverside County Flood Control District;
- Riverside County Public Works Department;
- California Public Utilities Commission; and
- Southern California Edison.<sup>2</sup>

---

<sup>2</sup> Southern California Edison is a privately held company.



### 2.3 Environmental Factors Potentially Affected

The environmental factors checked below (☒) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hazards & Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems
- Mandatory Findings of Significance

### 2.4 Determination: On the basis of this initial evaluation

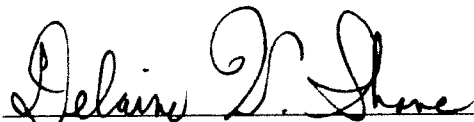
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
Signature

8-22-2007  
Date

Delaine W. Shane, Interim Team Manager,  
Environmental Planning

### SECTION 3 EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
<b><u>I. AESTHETICS.</u></b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

***Discussion:***

a) *Have a substantial adverse effect on a scenic vista?*

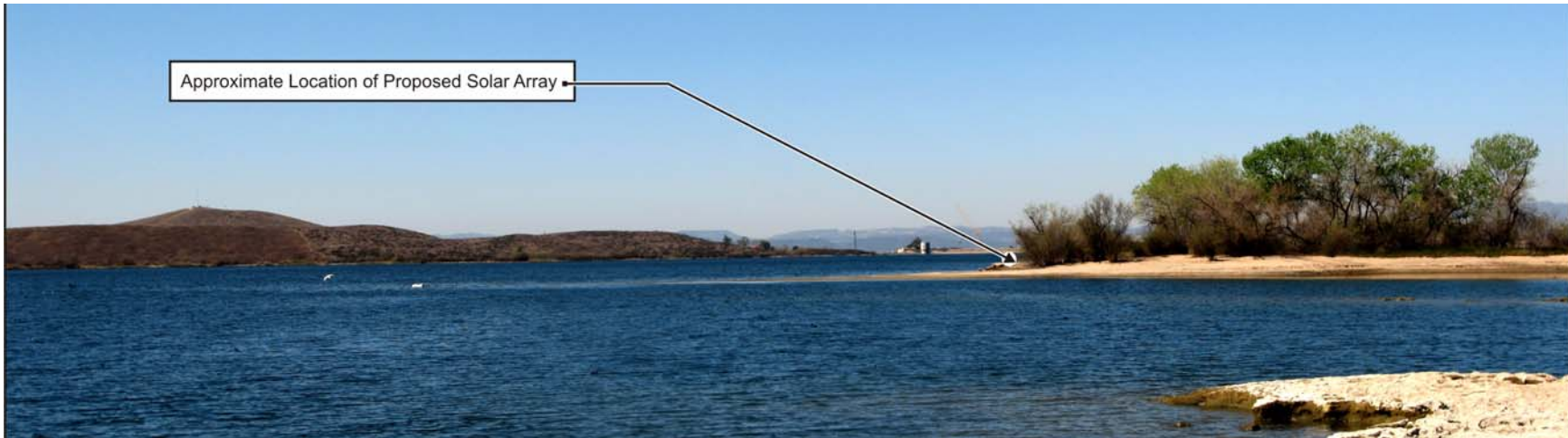
**No Impact.** A site visit and photographic survey were conducted on March 13, 2007, to establish the proposed project’s viewshed, identify sensitive visual receptors, and photograph key observation points. Please see Figure 3-1 for the location of the key observation points (KOPs) from which photographs were taken. Also see Figures 3-2a to 3-2k for views from these KOPs. There are no designated scenic highways that overlook the proposed site (California Scenic Highway Mapping System). The solar power generation facility would be constructed on approximately 6 acres of land within the existing 396-acre Skinner Plant. The site for the proposed solar power generation facility is in a low-lying valley area, which is currently being used as a construction staging area for the ORP facilities at the Skinner Plant. The nearest public thoroughfare is Washington Street, approximately 1,050 feet to the west of the proposed site. There is only one residential structure adjacent to Washington Street, across from the proposed site; large, mature trees and shrubs exist on that property and shield the view toward the proposed solar power generation facility. The nearest residential development is located approximately 0.25 mile west along Maddalena Road between Auld and Benton Roads. No scenic views were identified from the residences looking in the direction of the proposed site. Depending on the type of technology that is chosen during final design, the maximum height of the solar panels from the ground would vary. The standard-module solar panel array would be no more than 15 feet from the ground during its tracking operation, whereas the mega-module solar panel array would be as high as 40 feet during its tracking operation. The existing use at the site (construction staging area) generates stockpiles of earth 25 to 35 feet in height; the solar arrays at their maximum height would not be substantially higher than the stockpiles on the site. Also, the existing buildings/facilities at the Skinner Plant range from 2- to 4-stories in height, therefore, the height of the solar arrays would be comparable to existing plant facilities. Given the large intervening distance to the proposed site and the low-lying topography, any views of the solar arrays available to the residents would be far-off views and a small part of their viewshed. Motorists using Washington Street, who would be focusing on driving and reaching their destinations, would potentially see the proposed project for a very short duration. Construction and operation of the proposed solar power generation facility and associated improvements to the road and creek crossing would not obstruct any far-off views to or from the site. Since there are no designated scenic highways that overlook the proposed site, no adverse effect on a scenic vista would result.

**Figure 3-1. Key Observation Points**



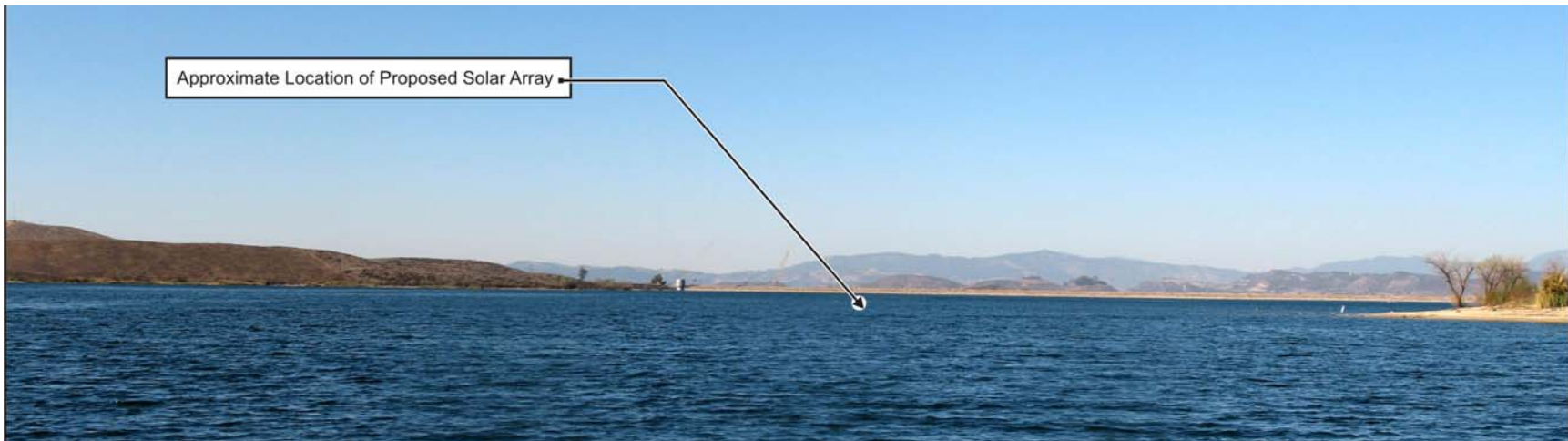
Source: MWD, 2007; Jones & Stokes, 2007.

**Figure 3-2a. KOP 1 – Panoramic View toward the Proposed Project Site (looking west) from the Skinner Recreation Area, near Central Picnic Area. Lake Skinner Dam and Impoundment Obscures the Proposed Solar Array.**



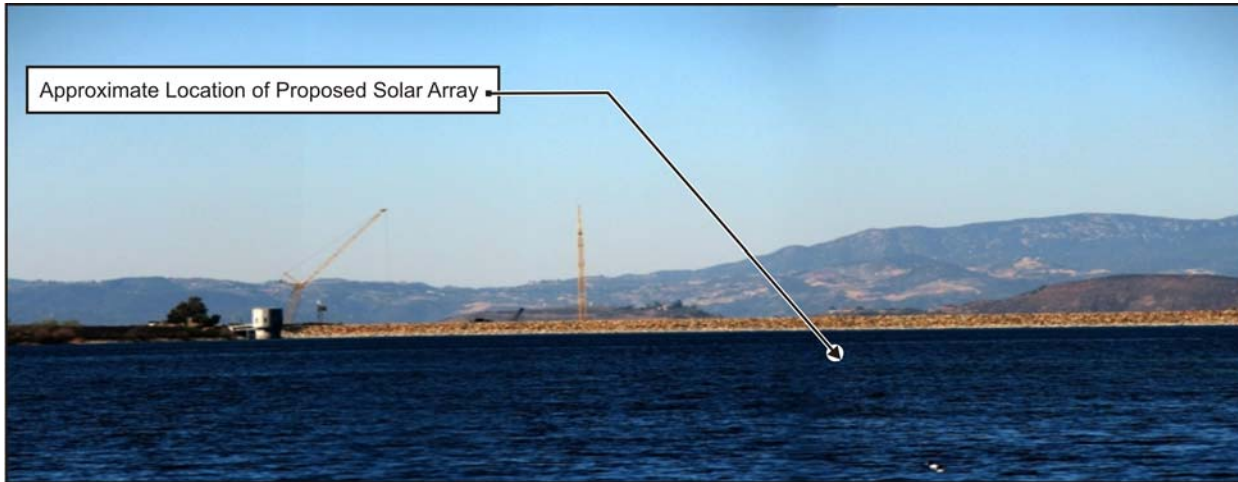
Source: Jones & Stokes, 2007.

**Figure 3-2b. KOP 2 – Panoramic View toward the Proposed Project Site (looking west) from the Skinner Recreation Area, Picnic Area near Boat Ramp 2. Lake Skinner Dam and Impoundment Obscures the Proposed Solar Array.**



Source: Jones & Stokes, 2007.

**Figure 3-2c. KOP 3 – Panoramic View toward the Proposed Project Site (looking west) from the Skinner Recreation Area, Shore Fishing Area North of Boat Ramp 2. Lake Skinner Dam and Impoundment Obscures the Proposed Solar Array.**



Source: Jones & Stokes, 2007.

**Figure 3-2d. KOP 4 – Panoramic View toward the Proposed Project Site (looking west) from the Skinner Recreation Area, Shore Fishing Trail on the Lake's South Shore. Lake Skinner Dam and Impoundment Obscures the Proposed Solar Array.**



Source: Jones & Stokes, 2007.

**Figure 3-2e. KOP 5 – Panoramic View toward the Proposed Project Site (looking southeast) from near the Low-Density Residential Area on Washington Street.**



Source: Jones & Stokes, 2007.

**Figure 3-2f. KOP 6 – Panoramic View toward the Proposed Project Site (looking east) from East Side of Washington Street.**



Source: Jones & Stokes, 2007.

**Figure 3-2g. KOP 7 – Panoramic View toward the Proposed Project Site (looking east) from the West Side of Washington Street.**



Source: Jones & Stokes, 2007.

**Figure 3-2h. KOP 8 – Panoramic View toward the Proposed Project Site (looking east-southeast) from End of Moser Street.**



Source: Jones & Stokes, 2007.

**Figure 3-2i. KOP 9 – Panoramic View toward the Proposed Project Site (looking southeast) from Washington Street.**



Source: Jones & Stokes, 2007.

**Figure 3-2j. KOP 10 – Panoramic View toward the Proposed Project Site (looking east-northeast) from Auld Street.**



Source: Jones & Stokes, 2007.



**Figure 3-2k. KOP 11 – Panoramic View toward the Proposed Project Site (looking east) from Residential Area on Maddalena Road.**



Source: Jones & Stokes, 2007.

b) *Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?*

**No Impact.** The proposed project would not remove any scenic resources such as buildings, trees, or rock outcroppings. In addition, according to the California Scenic Highway Mapping System, there are no designated State Scenic Highways located in the vicinity of the Skinner Plant. The County of Riverside Southwest Area Community Plan also indicates that the Skinner Plant site is not located near or within a state scenic highway. No impacts would occur.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

**No Impact.** The overall visual character of the Skinner Plant is industrial in appearance. The proposed project site is used as a construction staging area and has piles of earth, construction materials, and large pieces of construction equipment staged at the site. Given the existing visual appearance of the site and the overall industrial appearance of the Skinner Plant, the visual quality of the site is low. The solar arrays would not deviate from the industrial appearance of the Skinner Plant. The proposed site would be visible from a residence approximately 1,000 feet west of the site along Washington Street as well as residential areas farther west. However, these views would be distant, and the proposed project would be a small part of their viewshed. Also, given that the site is in a low-lying area, views to the site would be largely shielded. Therefore, no impacts would occur.

d) *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?*

**No Impact.** No safety and security lighting would be installed as part of the proposed project. Since construction would occur during daytime hours, use of lighting during construction is not anticipated. The solar panels are designed to absorb light; they do not reflect light that could result in glare. Additionally, given the large intervening distance between the proposed project site and nearest sensitive viewer, the tracking movement of the solar panels, and the small scale of the proposed project, there is a low potential for glare for nearby residents and motorists. Therefore, no impacts would occur.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
----------------------------	----------------------------------------------------------------	-------------------------------------	--------------

**II. AGRICULTURE RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a) *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

**No Impact.** According to the farmland maps produced by the California Department of Conservation, the proposed solar power generation facility site and the Skinner Plant do not contain any prime farmland, unique farmland, or farmland of statewide importance (California Department of Conservation, 2004a). The proposed site does not contain unique agricultural uses because it is within a treatment plant facility and provides support for that particular land use. Therefore, no impacts would occur.

b) *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**No Impact.** The current zoning designation for the proposed solar power generation facility site is Rural Residential (Riverside County, 2007); it is not designated under a Williamson Act contract (California Department of Conservation, 2004b). Therefore, no impact would occur.

c) *Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

**No Impact.** The proposed solar power generation facility site is currently utilized as a construction staging area. It does not support any agricultural resources, and no agricultural activity occurs at the Skinner Plant. Development of the proposed project would not create any changes to the existing environment that could result in the conversion of farmland to nonagricultural use. Therefore, no impact would occur.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
-------------------------	----------------------------------------------------	------------------------------	-----------

**III. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

- a) *Conflict with or obstruct implementation of the applicable air quality plan?*

**No Impact.** The proposed project site is located within the South Coast Air Basin (Basin). The South Coast Air Quality Management District (SCAQMD) is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the Basin is in nonattainment (i.e., carbon monoxide [CO], ozone [O<sub>3</sub>], particulate matter smaller than or equal to 10 microns in diameter [PM<sub>10</sub>] and particulate matter smaller than or equal to 2.5 microns in diameter [PM<sub>2.5</sub>]).<sup>3</sup> As such, the proposed project would be subject to the SCAQMD's Air Quality Management Plan (AQMP). The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG).

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties. It addresses regional issues relating to transportation, the economy, community development, and the environment.<sup>4</sup> With regard to air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide (RCPG), which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP. These documents are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. Both the RCPG and AQMP are based, in part, on projections originating with county and city general plans.

The proposed project would involve construction of a 1 MW solar power generation facility (i.e., photovoltaic power) at the Skinner Plant. The physical changes to the environment proposed by the project would involve minor site grading and the installation of solar panel arrays. It would not result in an increase in population or the number of new permanent employees in the area. Furthermore, the proposed project would require very little maintenance, thereby resulting in no net increase in employment in the region.

Because the proposed project is consistent with the local general plan and the Regional Growth Management Plan, pursuant to SCAQMD guidelines, the proposed project is considered consistent with the region's AQMP. As such, proposed project-related emissions are accounted for in the AQMP, which is crafted to bring the Basin into attainment for all criteria pollutants. No impacts would occur.

- b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

**Less-than-Significant Impact.** As discussed above, the proposed project site is located within the Basin. State and federal air quality standards are often exceeded in many parts of the Basin. A discussion of the proposed project's potential construction-period and operations-period air quality impacts is provided below.

**Regional Construction Impacts**

The SCAQMD has established methodologies to quantify air emissions associated with construction activities, such as air pollutant emissions generated by operation of on-site construction equipment, fugitive dust emissions related to site preparation activities, and mobile (tailpipe) emissions from construction workers' vehicles and haul/delivery truck trips. Emissions would vary from day to day, depending on the level of activity, the specific type of construction activity occurring, and, for fugitive dust, prevailing weather conditions.

With respect to the proposed project, construction activities are anticipated to start around fall 2008 and require approximately 9 months to complete. Construction would occur in three phases. Phase 1 would require approximately 1 month and would consist of minor site grading. Phase 2 would require 3 months and would consist of road and drainage crossing improvements. Phase 3 would require an additional 5 months and would consist of the installation of the footings, posts, and solar panels.

<sup>3</sup> The Basin has technically met the CO standards for attainment since 2002, but the official status has not been reclassified from "nonattainment" by the U.S. Environmental Protection Agency.

<sup>4</sup> SCAG serves as the federally designated metropolitan planning organization (MPO) for the Southern California region.

A construction-period mass emissions inventory was compiled based on an estimate of construction equipment, scheduling, and phasing assumptions. More specifically, the mass emissions analysis takes into account the following:

1. combustion emissions from operating on-site construction equipment, and
2. mobile-source combustion emissions from worker commuting and haul-truck travel.

Emissions for off-road construction equipment were calculated using the URBEMIS2002 emissions inventory model, fugitive PM<sub>10</sub> emissions were compiled using the calculation formulas provided in the *CEQA Air Quality Handbook* (appendix to Chapter 9), and fine particulate (PM<sub>2.5</sub>) emissions were compiled using the calculation formulas provided in the *CEQA Air Quality Handbook and Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* guidance document (October 2006). A conservative estimate of the proposed project's regional mass emissions during construction is presented in Table 3-1. As shown therein, all criteria pollutant emissions would remain below their respective thresholds. Thus, impacts would be less than significant, and no mitigation would be required.

**Table 3-1. Forecast of Regional Construction Emissions**

Construction Phase	Criteria Pollutant Emissions (pounds per day)					
	ROC	NOx	CO	SOx	PM <sub>10</sub> <sup>a</sup>	PM <sub>2.5</sub> <sup>a</sup>
Grading and Site Prep (1 month)	14.7	98.1	119.6	< 1	10.6	5.0
Road Improvements (3 months)	4.7	28.7	38.9	< 1	0.9	0.8
Solar Panel Array Installation (5 months)	6.2	45.8	47.3	< 1	1.6	1.4
<b>Maximum Regional Project Emissions</b>	<b>15</b>	<b>98</b>	<b>120</b>	<b>&lt; 1</b>	<b>11</b>	<b>5</b>
SCAQMD Regional Emissions Threshold (lbs/day)	75	100	550	150	150	55
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes:

<sup>a</sup> Fugitive PM<sub>10</sub> and PM<sub>2.5</sub> emissions estimates take into account compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.

URBEMIS 2002 outputs are provided in the Air Quality appendix.

ROC = reactive organic compounds; NOx = oxides of nitrogen; SOx = oxides of sulfur.

Source: Jones & Stokes, 2007.

**Localized Construction Impacts**

When quantifying mass emissions for localized analysis, only emissions that occur on-site are considered. Consistent with SCAQMD Localized Significance Threshold (LST) methodology guidelines, emissions related to off-site delivery/haul truck activity and employee trips are not considered in the evaluation of localized impacts. As shown in Table 3-2, localized emissions for all criteria pollutants would remain below their respective SCAQMD LST significance threshold. As such, localized impacts that may result from construction-period air pollutant emissions would be less than significant.

**Regional and Localized Operational Impacts**

Because the solar power generation facility would require very little maintenance once the system is installed and only on an as-needed basis (such as to replace malfunctioning parts, clean every 3 months, or conduct occasional weed abatement), emissions generated by operation of the facility would be minimal, and the impact would be less than significant. The proposed project would likely have a beneficial air quality impact due to a reduction in demand for electricity generated by more polluting methods.

**Table 3-2.** Forecast of Localized Construction Emissions

Construction Phase	Criteria Pollutant Emissions (pounds per day)					
	ROC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub> <sup>a</sup>	PM <sub>2.5</sub> <sup>a</sup>
Grading and Site Prep (1 month)	14.6	98.1	118.0	< 1	10.5	4.9
Road Improvements (3 months)	4.6	28.3	38.5	< 1	0.9	0.8
Solar Panel Array Installation (5 months)	5.1	30.3	43.0	< 1	0.9	0.8
<b>Worst Case On-Site Total</b>	<b>15</b>	<b>98</b>	<b>118</b>	<b>&lt; 1</b>	<b>11</b>	<b>5</b>
SCAQMD Localized Significance Threshold (lbs/day) <sup>b</sup>	–	1,657	27,729	–	207	105
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes:

<sup>a</sup> Fugitive PM<sub>10</sub> and PM<sub>2.5</sub> emissions estimates take into account compliance with SCAQMD Rule 403 requirements for fugitive dust suppression.

<sup>b</sup> These localized thresholds were taken from tables provided in the SCAQMD Localized Significance Thresholds Methodology guidance document based on the following: 1) The proposed project site is located in SCAQMD Source Receptor Area No. 26, 2) sensitive receptors are located within 500 meters of construction activity, and 3) the maximum site area disturbed per day is 5 acres.

URBEMIS 2002 outputs are provided in the Air Quality appendix.

Source: Jones & Stokes, 2007.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*

**Less-than-Significant Impact.** SCAQMD’s approach for assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state Clean Air Acts. As discussed earlier in response IIIa, the proposed project would be consistent with the AQMP, which is intended to bring the Basin into attainment for all criteria pollutants.<sup>5</sup> In addition, the mass regional emissions calculated for the proposed project and presented earlier in Table 3-1 (Forecast of Regional Construction Emissions) are less than the applicable SCAQMD daily significance thresholds, which are designed to assist the region in attaining the applicable state and national ambient air quality standards. As such, cumulative impacts would be less than significant.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

**Less-than-Significant Impact.** As described in response IIIb, construction, operation, and maintenance of the proposed project would not result in any substantial localized or regional air pollution impacts and, therefore, would not expose any nearby sensitive receptors to substantial pollutant concentrations. A less-than-significant impact would occur.

<sup>5</sup> State CEQA Guidelines Section 15064(h)(3) states “A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.”

e) Create objectionable odors affecting a substantial number of people?

**Less-than-Significant Impact.** According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting sites, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project does not include any uses identified by the SCAQMD as being associated with odors and, therefore, would not produce objectionable odors.

A potential source that may emit odors during construction activities is asphalt paving. SCAQMD Rule 1108 limits the amount of volatile organic compounds. Through mandatory compliance with SCAQMD rules, no construction activities or materials are proposed that would create a significant level of objectionable odor. As such, potential impacts during short-term construction would be less than significant.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
----------------------------	----------------------------------------------------------------	-------------------------------------	--------------

**IV. BIOLOGICAL RESOURCES.** Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Discussion:**

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?*

**Less-than-Significant Impact.** A literature and database review was conducted by Jones & Stokes biologists to identify special-status species and natural communities known to occur in the vicinity of the project area. The California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2007), CDFG California Natural Diversity Database (CNDDDB) (CDFG 2007a), and the current List of Special-Status Animals (CDFG 2007b) were reviewed. In addition, a general site assessment of the proposed project area was conducted on February 15, 2007, and a rare plant survey was performed during spring and summer 2007. Focused surveys for least Bell's vireo and southwestern willow flycatcher were conducted during spring 2007. A one-day reconnaissance survey to assess the project area for Stephens' kangaroo rat was conducted on June 12, 2007. The results of the literature and database review and field surveys are summarized below. See the Biological Resources Evaluation in Appendix B for details on the resources and conditions of the 13.5-acre study area (which includes the proposed project site and surrounding buffer area); that report and the references therein provide the bases for conclusions provided here.

The proposed project site has been previously cleared and graded for use as a construction staging area for the ORP project. The majority of the proposed project site is very disturbed with no natural community present. The disturbed area is almost completely devoid of vegetation and the soils are highly compacted from existing construction related activities.

A broad open swale is located at the northern limits of the proposed project footprint. The incised Tualota Creek drainage borders the site to the south. Tualota Creek usually has some minor year-round flow, which is fed by a small amount of water released from Skinner Dam. Vegetation along the narrow linear drainage mainly consists of dense stands of mule fat (*Baccharis salicifolia*), Mexican elderberry (*Sambucus mexicana*), Mediterranean tamarisk (*Tamarix ramosissima*), and black willow (*Salix gooddingii*). Vegetation within the immediate vicinity of the existing road crossing at Tualota Creek consists primarily of mule fat, Mexican elderberry, Mediterranean tamarisk, and summer mustard (*Hirschfeldia incana*). On either side of the incised Tualota Creek drainage is nonnative annual grassland. Grasses are primarily ripgut brome (*Bromus diandrus*), foxtail chess (*Brome madritensis* ssp. *rubens*), slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), and foxtail fescue (*Vulpia myuros*). Dominant forbs in the nonnative annual grassland community consist of summer mustard, Russian thistle (*Salsola tragus*), annual sunflower (*Helianthus annuus*), common fiddleneck (*Amsinckia menziesii*), red-stemmed filaree (*Erodium cicutarium*), tocalote (*Centaurea melitensis*), common sow thistle (*Sonchus oleraceus*), telegraph weed (*Heterotheca grandiflora*), and western ragweed (*Ambrosia psilostachya*). A few sub-shrubs are in the nonnative annual grassland but provide less than 10 percent cover; these are primarily California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*) and Palmer's goldenbush (*Ericameria palmeri*).

### **Special-Status Plant Species**

Ten special-status plant species were identified through the literature and database review as potentially occurring on or near the proposed project site. Based on flora, habitat resources, and conditions, there is no reasonable potential for seven of the 10 identified plant species of interest (see Table 2 in the Biological Resources Evaluation report in Appendix B). A rare plant survey was performed during spring and summer 2007 to assess the presence of the three identified plant species of interest (Smooth Tarplant, Paniculate Tarplant, and Robinson's Peppergrass). The results of the survey are provided below.

#### *Smooth Tarplant, Paniculate Tarplant, and Robinson's Peppergrass*

During surveys conducted in 2003, a single smooth tarplant (CNPS List 1B) and a paniculate tarplant (CNPS List 4) were observed within the vicinity of the project. Surveys conducted on August 3, 2007, did not record smooth tarplant but did record three individual paniculate tarplants located toward the southwest corner of the existing crossing over Tualota Creek (see Appendix B, Figure 5). Given those findings, along with the limited area and conditions of the site, there is no reasonable potential for substantial populations of either tarplant within or closely adjacent to the project footprint. Both smooth tarplant and paniculate tarplant are relatively common species within portions of western Riverside County and are tolerant of temporary disturbances. Robinson's peppergrass has potential to occur at the margins of Tualota Creek, but there is no reasonable potential for more than a few individuals given the extremely small extent of potential habitat, the marginally suitable conditions present, and the fact that no peppergrasses of any species were detected during any fieldwork.



### Special-status Wildlife Species

Twenty-four special-status wildlife species were identified through the literature review as potentially occurring on or near the proposed project site (see Table 3 in Appendix B). Based on an assessment of habitat, two species protected under state and/or federal endangered species acts (Stephens' kangaroo rat and least Bell's vireo) have the potential to occur in the proposed project area. A third such species, southwestern willow flycatcher, was also surveyed for out of caution as some regulatory agencies also request surveys for that species wherever least Bell's vireos have potential to occur. Surveys were conducted for the two bird species and a habitat evaluation for the Stephens' kangaroo rat; results are provided below.

Among the 24 special-status wildlife species mentioned above, the only other species with reasonable potential to occur are all non-listed, state Species of Special Concern birds: California Horned Lark (*Eremophila alpestris actia*), Yellow-breasted Chat (*Icteria virens*), and Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*). All were recorded in the study area, but none are expected to nest in the study area, and none are expected to make more than rare use of the study area in very small numbers.

#### *Stephens' kangaroo rat*

On June 4, 2007 the site was evaluated for Stephens' kangaroo rat sign (scat, trails, tracks, burrows) by walking transects spaced ten meters apart over 100 percent of the site. The survey revealed that the project site (including the access road and area near the switchyard facility) is highly disturbed with compacted or graveled soils and ongoing ground-disturbance causing activities. The areas immediately surrounding the site are also not occupied by Stephens' kangaroo rat due to dense vegetation and/or compacted soils. No signs of this species were observed on and near the site. The species is absent at this time.

#### *Least Bell's Vireo, and Southwestern Willow Flycatcher*

Focused surveys for least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) were conducted during spring 2007. Surveys were negative and both species are absent at this time.

### Construction Impacts

Construction activities could disturb or result in the removal of three paniculate tarplants. However, project impacts to paniculate tarplant would be less than significant given its CNPS List 4 status and the small number of individuals potentially affected. No smooth tarplants were identified during the 2007 surveys. Smooth tarplant has a low but reasonable potential to occur, but only in very small numbers (one to a few individuals). Additionally, this species is known to tolerate construction impacts relatively well. There is a low but reasonable potential for a limited amount of Robinson's peppergrass (CNPS List 1B) to be present at the site, though it was not found during the 2003 and 2007 surveys. However, if discovered on-site prior to construction-related activities, impacts to this species would be considered less than significant under CEQA due to the relatively small number of individuals that could occur within the project footprint and given the fact that Robinson's peppergrass populations are presumed stable and likely under-censused in southern California (Reiser 2001).

Since Stephens' kangaroo rat, least Bell's vireo and southwestern willow flycatcher are not present on the site, no impacts to these species would occur. It is expected that construction of the proposed solar power generation facility would start immediately after completion of ORP-related construction staging activities, therefore, the project site would remain disturbed and the potential for suitable habitat for these species would remain low.

See checklist response IVc below for a discussion of impacts to riparian habitat within Tualota Creek.

### Operational Impacts

The solar power generation facility would require very little maintenance once the system is installed. No staff personnel would be required to be present at the facility, therefore, traffic to the site would be limited and would be for routine maintenance activities only. The solar panels have inbuilt heat sinks to keep the panels from getting too hot in the day or too cold at night. Therefore, there is no danger that surface temperatures on the solar panels would pose a hazard to birds or other wildlife. Additionally, the tracking system follows the sun's path throughout the day and, consequently, the solar panel movements are gradual; therefore, there is no danger of bird fatalities as a result of fast moving mechanized parts. Also, the panels would not support any substantial windows or other clear obstructions that would pose a strike hazard for flying birds.

The solar panels would not result in substantial shade such that it would affect any natural resources present near the creek. The solar panels would be set back at least 40 feet from the edge of the Tualota Creek at its closest point (to the east) and at least 100 feet at the farthest point (near the road crossing of the creek). The standard-module solar panel array would be no more than 15 feet from the ground during its tracking operation, whereas the mega-module solar panel array would be as high as 40 feet during its tracking operation. Given the distance from the creek and height of the solar panels, the potential for substantial shade impacts on the habitat in the creek is low. Additionally, since the solar panels would tilt to track the sun's path throughout the day, the shade patterns would change according to the angle of the sun and solar panels, and no off-site areas would receive substantial shade for long periods of time. No nighttime lighting is proposed at the facility and operation of the solar panels would not generate substantial noise, therefore, potential disturbances to wildlife from artificial light and noise would be absent. Therefore, no operational impacts to natural resources would occur.

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U. S. Fish and Wildlife Service?*

**Less-than-Significant Impact.** A total of 0.07 acre of state-designated streambeds subject to Section 1602 of the Fish and Game Code, as administered by CDFG, would be affected as a result of widening and paving the road across Tualota Creek. Of this total, 0.03 acre would be permanently lost, while 0.04 acre would be temporarily removed. The total includes bed-and-bank portions of Tualota Creek and any adjacent riparian vegetation. Impacts were calculated through mapping and recording (using submeter-accurate Global Positioning System) of vegetation and jurisdictional boundaries, incorporation of that data and the project footprint into Geographic Information System software, and calculation of resulting impacts. Widening of the road would require the removal of all the vegetation within the construction zone, including within the bed and bank of the creek, as well as alteration of the bed and bank. Given the limited extent and somewhat disturbed condition of the state streambeds present, as well as the absence of least Bell's vireo, southwestern willow flycatcher, and all other special-status plants and wildlife (apart from a few individuals of paniculate tarplant), the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, and a less-than-significant impact would occur.

The proposed project would require a Streambed Alteration Agreement from CDFG. Metropolitan would comply with the permitting requirements of CDFG, which has a "no net loss" wetland policy. Metropolitan would coordinate with CDFG during the permitting process to ensure that no net loss of functions and values would be achieved for the 0.07 acre of affected habitat through replacement, restoration, enhancement, or other measures as applicable.

The 2003 MND for the Additional Construction-Use Area and Creek Crossing Project determined that 0.07 acre of riparian habitat would be temporarily affected as a result of the construction of a temporary access road across Tualota Creek. The 2003 MND also noted that once construction of the ORP facilities is completed, the access road improvements would be removed, and the access road area would be returned to "existing" (2003) conditions. As part of the permitting process for that project, Metropolitan consulted with the U.S. Army Corps of Engineers and CDFG to identify measures to ensure no net loss of functions and values would occur due to the impacts to 0.07 acre of affected habitat. Proposed measures to mitigate project impacts included creation of 0.26 acre of wetland habitat, restoration of 0.18 acre of temporarily affected areas, and enhancement of 2.77 acres of Tualota Creek by removing exotic vegetation. However, as discussed above and elsewhere in this document, permanent improvements to the access road are now proposed in order to provide access to the proposed solar power generation facility. The wetland mitigations associated with the permits for the prior approved project (2003 MND) and discussed above would be readdressed as part of the permit consultations for the present project to ensure that no net loss of functions and values would be achieved for the prior impacts to 0.07 acre of riparian habitat subject to CDFG jurisdiction as applicable.

Potential project impacts discussed above would occur during the construction phase of the project, with the operational phase not resulting in any additional impacts to sensitive natural communities.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

**Less-than-Significant Impact.** Widening and paving the creek crossing would affect areas identified as federally protected wetlands under Section 404 of the Clean Water Act. Project construction would result in fill over approximately 0.04 acre (0.02 acre and 40 linear feet permanent; 0.02 acre and 60 linear feet temporary) of jurisdictional wetlands subject to Section 404 of the Clean Water Act, as administered by the U.S. Army Corps of Engineers, and Section 401 of the Clean Water Act, as

administered by the San Diego Regional Water Quality Control Board (RWQCB). Impacts were calculated through mapping and recording (using sub-meter accurate Global Positioning System) of jurisdictional boundaries, incorporation of that data and the project footprint into Geographic Information System software, and calculation of resulting impacts. Tualota Creek has a "significant nexus" connection to navigable waters of the United States. Tualota Creek empties to Santa Gertrudis Creek, which in turn flows to Murrieta Creek and then the Santa Margarita River, and finally the Pacific Ocean. Areas outside of the bed and bank of Tualota Creek do not hold any wetlands. Therefore, the proposed project would not affect wetland habitat outside of the creek crossing. The proposed project would require a Section 404 permit from the U.S. Army Corps of Engineers and a Section 401 certification from RWQCB. Metropolitan would comply with the permitting requirements of the U.S. Army Corps of Engineers and the RWQCB, which have a "no net loss" wetland policy. Metropolitan would coordinate with these agencies during the permitting process to ensure that no net loss of functions and values would be achieved for the 0.04 acre of affected habitat subject to these agencies' jurisdictions as applicable. In addition, the wetland mitigations associated with the permits for the prior approved project (2003 MND) and discussed in *b* above would be readdressed as part of the permit consultations for the present project to ensure that no net loss of functions and values would be achieved for the prior impacts to 0.04 acre subject to U.S. Army Corps of Engineers jurisdiction (of the total 0.07 acre affected) as applicable. For the same reasons as stated above regarding impacts to state streambeds, that is, limited extent and limited functions and values, a less-than-significant impact to federally jurisdictional wetlands would occur. Therefore, the loss of 0.07 acre subject to CDFG jurisdiction, 0.04 of which is subject to U.S. Army Corps of Engineers jurisdiction, would be less than significant.

See the discussion in IVb, above, regarding the prior project's impacts to Tualota Creek. Potential project impacts discussed above would occur during the construction phase of the project, with the operational phase not resulting in any additional impacts to sensitive natural communities.

- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Less-than-Significant Impact.** Both at construction and operational phases, the proposed project would not substantially interfere with the movement of any resident or migratory fish or wildlife species or established resident or migratory wildlife corridors. The project would not impede the use of riparian vegetation within Tualota Creek for wildlife. The proposed project site is located west (outside) of the existing Southwestern Riverside County Multi-Species Reserve and north of the W. Ruel Johnson Ecological Reserve. As noted in the 2003 MND and confirmed by 2007 surveys, this area does not serve as a connection between the reserves and does not function as a substantial or focused, terrestrial wildlife movement corridor. The proposed improvements to the crossing would include construction of a large concrete pipe culvert under the road at the creek crossing as part of the widening to maintain water flow along the creek bottom. Terrestrial wildlife moving through the area would be able to traverse the crossing since the sides of the crossing are sloped.

Birds covered under the federal Migratory Bird Treaty Act and similar provisions of the California Fish and Game Code could utilize areas of Tualota Creek within the project site for nesting purposes. Consistent with the prescriptions against take under the Migratory Bird Treaty Act, if any construction work is to be initiated within the nesting period for migratory birds, at this site anticipated to be February 1 through August 31, a pre-construction survey of active nests for migratory birds would be conducted. Therefore, a less-than-significant impact would occur. No potential impacts to nesting birds are anticipated during the operational phase of the project.

- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**No Impact.** Applicable County of Riverside ordinances afford protection to native oak trees larger than 4 inches diameter at a height of 4.5 feet. However, no oak trees are present in the survey area and construction of the proposed project would not require the removal of any mature trees. Impacts to other biological resources would be limited and less than significant as discussed above. Additionally, use of the site as a solar power generation facility, and the proposed access road improvements, are consistent with the general plan land use and zoning designations for the County of Riverside. Therefore, no conflict with local ordinances or policies would occur, and there would be no impact. No potential impacts relevant to local policies or ordinances are anticipated for either the construction or operational phases of the project.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state habitat conservation plan?*

**No Impact.** The proposed project would not conflict with approved habitat conservation plans or natural community conservation plans for the area. The proposed project site is not within, and would not adversely affect habitat or species within the reserves established under the Southwestern Riverside County Multi-Species Habitat Conservation Plan (SWRC MSHCP), Stephens' Kangaroo Rat Habitat Conservation Plan for Western Riverside County (SKR HCP), or Western Riverside County Multiple Species Habitat Conservation Plan (WRC MSHCP). The proposed project also would not interfere with or be inconsistent with implementation of the SWRC MSHCP, SKR HCP, or WRC MSHCP. No potential conflicts are anticipated for either the construction or operational phases of the project, therefore, no impacts would occur.

	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less-than- Significant Impact</b>	<b>No Impact</b>
--	------------------------------------	---------------------------------------------------------------------------	----------------------------------------------	----------------------

**V. CULTURAL RESOURCES.** Would the project:

- |                                                                                                                      |                          |                          |                                     |                                     |
|----------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?              | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

***Discussion:***

a) *Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?*

**No Impact.** The proposed project would not require the removal or modification of any existing structures. Metropolitan brought the Skinner Plant into service in 1976. None of the buildings or structures on the Skinner Plant site would be considered historic, and no indirect impact to a historic resource would occur. Therefore, no impacts would occur.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

**Less-than-Significant Impact.** The proposed project area was surveyed in 2001, and no cultural resources were found. Archaeological monitoring was conducted in accordance with the mitigation measures in the 2003 MND during grading and establishment of the 10.3-acre additional construction-use area for the ORP. Again, no cultural resources were found. Given that grading has already occurred in the proposed project area, the potential for discovery of cultural resources during construction of the proposed project is low. Nonetheless, a qualified archaeologist would be present during any trenching in the proposed project area. If cultural materials, whether historic and prehistoric, are encountered during construction, a qualified archaeologist would examine the materials and determine appropriate treatment, if any. Therefore, a less-than-significant impact would occur.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

**Less-than-Significant Impact.** The proposed project area has been disturbed by grading in the past. Paleontologic monitoring was conducted in accordance with the mitigation measures in the 2003 MND during grading and establishment of the 10.3-acre additional construction-use area for the ORP. No paleontologic resources were found. Given that grading has

already occurred in the proposed project area, the potential for discovery of paleontological resources during construction of the proposed project is low. Paleontologic resources are not known to occur on the proposed site. Therefore, a less-than-significant impact would occur.

d) *Disturb any human remains, including those interred outside of formal cemeteries?*

**Less-than-Significant Impact.** The proposed project area was subject to an archeological survey in 2001, and no human remains were found. If human remains are discovered during construction, the coroner and designated Native American representatives would be notified in accordance with Public Resources Code Section 5097.98, Health and Safety Code Section 7050.5, and *State CEQA Guidelines*. Therefore, less-than-significant impact would occur.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
----------------------------	----------------------------------------------------------------	-------------------------------------	--------------

**VI. GEOLOGY AND SOILS.** Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

ii) Strong seismic ground shaking?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

iii) Seismic-related ground failure, including liquefaction?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

iv) Landslides?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

b) Result in substantial soil erosion or the loss of topsoil?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

**Discussion:**

- a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
- i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

**No Impact.** The proposed solar power generation facility site is not located within an Alquist-Priolo Earthquake Fault Zone, and there are no known or mapped active faults that pass through the proposed project site, as mapped by the California Geological Survey (California Department of Conservation, California Geologic Survey, Division of Mines and Geology, 1999). The closest faults are the San Jacinto and Elsinore faults, located approximately 12 miles and 8 miles, respectively, from the Skinner Plant (FPEIR 2003). The proposed project structures would be constructed in accordance with all updated California Building Codes and Code for Seismic Zone 4 codes and requirements; this includes the creek crossing, which would be constructed level with the ground surface at the northern and southern ends of the crossing, as explained in the project description. Furthermore, the proposed project includes the installation of solar panels and a creek crossing, which are not intended for habitation or office use and, therefore, would not expose people to substantial risk of loss, injury, or death. Therefore, no impact would occur.

- ii) *Strong seismic ground shaking?*

**No Impact.** As with most construction projects occurring within Southern California, the proposed project falls within a seismically active region and may be subject to ground shaking and other geologic hazards while in operation. The proposed solar power generation facility site includes the construction of solar panels but does not involve any substantive structures for human habitation. In addition, the solar panels would be constructed in compliance with applicable building codes, which would reduce the risk of structural damage due to strong ground shaking during a major seismic event. Therefore, no impacts would occur.

- iii) *Seismic-related ground failure, including liquefaction?*

**No Impact.** Seismic-induced liquefaction occurs when saturated granular soil deposits of low relative density are subjected to extreme shaking. The deposits lose strength or stiffness because of increased pore water pressure. The potential for liquefaction depends on the levels of shaking, groundwater conditions, the relative density of the soils, and the age and extent of the geologic units. As per the analysis conducted for the Skinner Plant in the FPEIR and the 2003 MND, the proposed solar power generation facility site is not prone to liquefaction due to the fact that the proposed facility would be located on bedrock or dense fill over the bedrock. Therefore, no impacts would occur.

- iv) *Landslides?*

**No Impact.** The site for the proposed solar power generation facility is relatively flat and does not have the potential for landslides. According to the FPEIR, no landslides have been mapped within the Skinner Plant. The existing creek crossing and temporary road would be paved and widened within an existing indentation through Tualota Creek. The creek crossing would be built level with the ground surface at the north and south ends. Therefore, no impact from landslides would occur.

- b) *Result in substantial soil erosion or the loss of topsoil?*

**Less-than-Significant Impact.** The proposed solar power generation facility site currently drains to the north, away from Tualota Creek. The proposed project would be subject to the General Construction Activity NPDES permit requirements obtained for the Skinner Plant (see FPEIR). The General Construction Activity NPDES permit requires that BMPs be implemented during establishment and use of the area for construction activities. BMPs include, but are not limited to, mulch, plastic sheeting, erosion control blankets, sandbags to control erosion caused by rainfall, check berms, and desilting basins. Furthermore, the proposed solar power generation facility site would be located on a previously graded pad, and compacted crushed rock aggregate would be placed throughout the proposed 6-acre construction area. Therefore, impacts related to soil erosion and loss of topsoil would not be significant during operation of the facility. Minimal grading would be required to construct the proposed facility. Implementation of the BMPs established in the General Construction Activity NPDES permit for the proposed project would reduce any erosion impacts at the proposed project site to a less-than-significant level.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**No Impact.** According to the previous geotechnical studies conducted by Geomatrix Consultants (1996 and 2003), no unstable geologic features have been identified at the proposed project site (see FPEIR). Additionally, construction activities for the proposed solar power generation facility and associated road improvements would not require a substantial amount of earth to be moved or any deep excavations; therefore, unstable soils resulting in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse are not anticipated, and no impacts would occur.

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

**No Impact.** Geotechnical studies indicate that the expansion potential of native soils is very low to low (FPEIR 2003). Therefore, soil expansion would not represent a hazard at the proposed solar power generation facility, and no impact would occur.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**No Impact.** The proposed solar power generation facility would not include construction of septic tanks or a wastewater disposal system. Therefore, no impact would occur.

	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less-than- Significant Impact</b>	<b>No Impact</b>
--	------------------------------------	---------------------------------------------------------------------------	----------------------------------------------	----------------------

**VII. HAZARDS AND HAZARDOUS MATERIALS.**

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**No Impact.** Operation of the proposed solar power generation facility would not result in any increase in the routine use, storage, or transportation of hazardous materials. Some hazardous materials typically used during construction activities, such as gasoline for construction equipment, would be used during construction of the proposed project. However, these materials would be stored, used, and disposed of appropriately by the contractor in accordance with Metropolitan’s specifications, such as placing hazardous materials in covered, leak-proof containers away from storm drains and heavy traffic areas. Therefore, no impacts would occur.

- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**No Impact.** See response to item VIIa. No hazardous materials would be required during operation of the proposed project. In addition, operation of the proposed solar power generation facility would comply with the existing management protocols in place at the Skinner Plant, such as the Hazardous Materials Business Emergency Management Plan and the Hazardous Materials and Waste Emergency Contingency Plans. Therefore, construction and operation of the proposed solar power generation facility would not create a significant hazard to the public or the environment, and therefore, no impact would occur.

- c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**No Impact.** See response to items VIIa and VIIb. No schools are located within 0.25 mile of the proposed solar power generation facility site (Temecula Valley Unified School District, 2007). The closest school (French Valley Elementary School) is over 0.75 miles to the west of the proposed project site. As of 2007, new schools proposed by Temecula Valley Unified School District would be more than 0.25 mile from the proposed project site. Therefore, no impact would occur.

- d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**No Impact.** The proposed solar power generation facility would be constructed within the boundaries of the existing Skinner Plant, which has not been previously identified on any lists compiled pursuant to Government Code Section 65962.5. The proposed solar power generation facility would not provide for additional handling or storage of hazardous materials. No hazardous materials would be used during operation of the proposed solar power generation facility; therefore, it would not create a substantial hazard to the public or the environment, and no impact would occur.



e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

**No Impact.** The proposed site for the solar power generation facility is not located within 2 miles of a public airport or within the vicinity of a private airstrip (Riverside County Airport Land Use Commission, 2007). The closest airport, French Valley Airport, is located approximately 5 miles west-southwest of the Skinner Plant. Therefore, no impact would occur.

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

**No Impact.** No private airstrips are located within the vicinity of the proposed solar power generation facility or the Skinner Plant. Therefore, no impact would occur.

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**No Impact.** Construction and operation of the proposed solar power generation facility would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The widening and paving of an existing temporary road would not interfere with any access routes to the Skinner Plant or to adjacent parcels. No local roads would be altered, and no access routes would be blocked so as to interfere with emergency response vehicles. Therefore, no impact would occur.

h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

**No Impact.** The proposed project involves construction of a 1 MW solar power generation facility on a graded pad, which is currently occupied by a construction staging area for the ORP facilities. The construction staging area has been previously cleared and grubbed in a manner that removed all of the vegetation within the work/lay-down area, including a 20-foot perimeter buffer. Since the site is graded and the potential for wildland fires is low, no impact would occur.

	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less-than- Significant Impact</b>	<b>No Impact</b>
--	------------------------------------	---------------------------------------------------------------------------	----------------------------------------------	----------------------

**VIII. HYDROLOGY AND WATER QUALITY.** Would the project:

a) Violate any water quality standards or waste discharge requirements?

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

- a) *Violate any water quality standards or waste discharge requirements?*

**Less-than-Significant Impact.** Operation of the proposed solar power generation facility would not generate any wastewater. Operation of the proposed project involves minimal maintenance, and waste discharges would not occur. The crushed rock aggregate would reduce the potential for wind or water erosion of on-site soils. However, activities associated with the construction of the proposed solar power generation facility and associated access road improvements have the potential to result in runoff that could carry erosion material downstream, thereby affecting water quality. The proposed project would be subject to the requirements of the General Construction Activity NPDES permit obtained for the Skinner Plant. The NPDES permit requires BMPs to be implemented during establishment and use of the area for construction activities. Typical BMP erosion control measures would include, but would not be limited to, the use of mulch, plastic sheeting, erosion control blankets, or sandbags to control erosion caused by rainfall. Check berms and desilting basins may be developed during construction to prevent off-site sediment transport. A typical BMP stormwater pollution interception system may include a temporary detention/sedimentation basin and a filter or clarifier device that would remove pollutants from the runoff before release from the property. The implementation of the BMPs established in the NPDES permit for the proposed project would reduce the potential for the proposed project to violate any water quality standards to a less-than-significant level.

- b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

**No Impact.** The proposed project would not be located within a groundwater storage or recharge area. The proposed facility would not consume groundwater; any water that is required for the proposed construction and operation of the facility would come from the Skinner Plant’s domestic water system. The proposed solar power generation facility would be constructed on a permeable crushed rock aggregate surface that would allow potential runoff to percolate through the surface and recharge the local groundwater table. No cleaning agents would be used for routine washing of solar panels. Therefore, no impact would occur.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?*

**Less-than-Significant Impact.** Construction of the proposed solar power generation facility would be on a graded lot that drains naturally to the north, away from Tualota Creek. No substantial additional grading would be required once the ORP project is completed. Therefore, construction of the proposed solar power generation facility would not affect the existing drainage pattern of the site. Currently, the creek crossing consists of a temporary road with five 30-inch corrugated metal pipes placed within the area of the streambed beneath the temporary road. The widening and paving of the temporary road would include a permanent creek crossing, which would have the potential to impede flows within the creek. However, design of the permanent creek crossing would include installation of large concrete pipe culverts that would enable a 25-year storm to flow unencumbered beneath the road. In addition, the side slopes of the road crossing (upstream and downstream) would have grouted riprap at the entrance and exit of the culverts to assist in channeling flow beneath the road. As the proposed solar power generation facility is a non-essential, un-manned facility, drainage design to accommodate a 100-year storm is not practical. Nonetheless, the creek crossing would have the ability to allow a 25-year storm and would be designed as a semi-dip crossing at the creek to allow flows greater than a 25-year storm to pass over the road. The grouted riprap and paved road section would act together as an armoring system so the road is not washed away or damaged. Therefore, a less-than-significant impact would occur.

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?*

**Less-than-Significant Impact.** The proposed solar power generation facility would be constructed on a graded lot that drains naturally to the north, away from Tualota Creek. The proposed project would not involve changes to the natural topography or existing site contours and, therefore, would not substantially alter the existing drainage pattern of the site. Widening of the creek crossing could potentially alter the existing drainage pattern of the creek during construction. However, design of the creek crossing would include features that would allow flows to continue downstream. Additionally, the proposed solar power generation facility would be constructed on a permeable crushed rock aggregate surface that would allow potential runoff to percolate. The paving and widening of the road would not increase runoff by a substantial amount. Therefore, the potential for any on-site or off-site flooding would be low, and potential impacts would be less than significant.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

**Less-than-Significant Impact.** The proposed solar power generation facility would be constructed on a permeable crushed rock aggregate surface that would allow potential runoff to percolate. The paving and widening of the temporary access road would increase the impermeable surfaces on the site, resulting in increased runoff. However, the surface area of the paved and widened road would be approximately 32,000 square feet, or 0.74 acre, which is not a substantial increase in terms of percent increase over existing impermeable surface at the Skinner Plant. Also, 0.74 acre represents less than 7 percent of the area of the proposed project site. Construction activities for the proposed project would be subject to the requirements of the General Construction Activity NPDES permit obtained for the Skinner Plant. Operation of the solar power generation facility and associated road would not release any pollutants into stormwater runoff. Therefore, a less-than-significant impact would occur.

- f) *Otherwise substantially degrade water quality?*

**No Impact.** Operation of the proposed solar power generation facility would not release any pollutants or wastes that would affect water quality. Construction activities for the proposed project would comply with the requirements of the NPDES permit and implement BMPs to remove pollutants from runoff from the site. A typical BMP stormwater pollution interception system may include a temporary detention/sedimentation basin and a filter or clarifier device that would remove pollutants from the runoff before release from the property. With the implementation of the BMPs established in the NPDES permit for the proposed project, there would be no impacts to water quality.

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

**No Impact.** No housing is proposed as part of the proposed solar power generation facility. Therefore, no impact would occur.

h) *Place within a 100-year flood hazard area structures that would impede or redirect flood flows?*

**Less-than-Significant Impact.** The proposed site is within the boundaries of the 100-year floodplain, as identified by the Riverside County Flood Control District. The 100-year flood depth, as it relates to the existing ground surface within the limits of the solar power generation facility, is less than 2 feet. The solar power generation facility would be unmanned and built so that the solar array would be above the 100-year flood depth. In addition, any and all appurtenant structures related to the facility (e.g., inverters, electrical boxes, monitoring devices, etc.) would be constructed above the 100-year flood depth as well.

Furthermore, the 100-year floodplain map assumes that Lake Skinner would be operating under a full condition, with the 100-year storm inflow routed over the emergency spillway (elevation 1,479 feet) (National Geodetic Vertical Datum [NGVD]). Historically, Metropolitan operates the lake at an average elevation of 1,472.5 feet, which provides for an average freeboard of 6.5 feet. In addition, if the lake elevation were to approach a full condition during the winter months, Metropolitan would have several operational options available. Metropolitan would release water so that overflow at the emergency spillway would not occur, and the area downstream would not be flooded.

Over the last 10 years, there have been only 4 days during the winter months when the lake's elevation has been within 1 foot of the emergency spillway. On those 4 days, if a 100-year storm event were to have occurred and the aforementioned operational options to release water were unavailable, the downstream area encompassing the proposed project limits could, potentially, have been inundated.

The construction and operation of the proposed project would not impede or otherwise redirect flood flows in the area. The facility would be designed so that only the columns of the solar panels would be subject to flooding. In addition, Metropolitan's operational standards at the lake are designed to prevent overtopping of the emergency spillway. Finally, the historical freeboard at the lake would provide several feet of storage during a 100-year event. Given these project design considerations, the impact would be less than significant.

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

**No Impact.** The proposed solar power generation facility site and creek crossing is located west of Lake Skinner Dam. If the dam were to breach, the proposed facility would be flooded since the proposed area falls within the 100-year floodplain. However, no structures are proposed as part of the proposed project that would be used for human habitation; therefore, the proposed project would not expose people to risk of death due to flooding. Additionally, as discussed above, the solar panels and all appurtenant structures would be constructed above the 100-year flood depth. Therefore, no impact would occur.

j) *Inundation by seiche, tsunami, or mudflow?*

**No Impact.** The proposed solar power generation facility is not located within a coastal zone that would be subject to tsunami, nor is it located near a hillside that would be subject to mudflows (FPEIR, 2003). Part of the proposed project requires paving and widening a road that crosses over Tualota Creek. Tualota Creek could be subject to seiche wave inundation during a seismic event. However, the potential for this to occur would be low because Lake Skinner Dam would have substantial freeboard even when the lake is full. Therefore, no impact would occur.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
-------------------------	----------------------------------------------------	------------------------------	-----------

**IX. LAND USE AND PLANNING.** Would the project:

- a) Physically divide an established community?
- b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

**Discussion:**

a) *Physically divide an established community?*

**No Impact.** The proposed solar power generation facility would be located within the boundaries of the Skinner Plant, and construction would occur on an existing graded construction staging area. The construction and operation of the proposed project would not physically divide or otherwise alter the character of an established community. Therefore, no impact would occur.

b) *Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

**No Impact.** The Skinner Plant has a general plan designation of Public Facilities and a zoning designation of Rural Residential. Proposed construction and operation of the solar power generation facility would be consistent with the general plan designation of Public Facilities. Therefore, no impact would occur.

c) *Conflict with any applicable habitat conservation plan or natural communities conservation plan?*

**No Impact.** The proposed project would not conflict with approved habitat conservation plans or natural community conservation plans for the area. The proposed project site is not within and would not adversely affect habitat or species within, the reserves established under the Southwestern Riverside County Multi-Species Habitat Conservation Plan (SWRC MSHCP), Stephens' Kangaroo Rat Habitat Conservation Plan for Western Riverside County (SKR HCP), or Western Riverside County Multiple Species Habitat Conservation Plan (WRC MSHCP). The construction and operation of the proposed project also would not interfere with or be inconsistent with implementation of the SWRC MSHCP, SKR HCP, or WRC MSHCP. Therefore, no impact would occur.

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	-------------------------	----------------------------------------------------	------------------------------	-----------

**X. MINERAL RESOURCES.** Would the project:

- |                                                                                                                                                                       |                          |                          |                          |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Discussion:**

- a) *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

**No Impact.** According to the Riverside County General Plan, the proposed project site is classified as MRZ-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data). No mines are located within the general vicinity of the proposed project site. Therefore, no impacts to mineral resources would occur.

- b) *Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

**No Impact.** Please see response Xa.

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
--	-------------------------	----------------------------------------------------	------------------------------	-----------

**XI. NOISE.** Would the project result in:

- |                                                                                                                                                                                                                                                                   |                          |                          |                                     |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?                                                                                                                                                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?                                                                                                                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?                                                                                                                        | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?                                                                                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Discussion:**

- a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Less-than-Significant Impact.** The Riverside County General Plan Noise Element sets a 65-decibel, adjusted (dBA),  $L_{eq}$  (10-minute) limit on exterior noise levels for stationary sources (i.e., non-transportation) at sensitive receptors. Noise-sensitive receptors are generally considered to be human activities or land uses that may be subject to the stress of substantial interference from noise. Land uses associated with sensitive receptors include residential dwellings, hotels, motels, hospitals, nursing homes, education facilities, and libraries. Riverside County Code (Ordinance 457) regulates construction noise by limiting the hours of operation. If a project is located within 0.25 mile of residential or other noise-sensitive land uses, construction hours are limited to the hours between 6:00 a.m. and 6:00 p.m. June through September and 7:00 a.m. and 6:00 p.m. October through May, although waivers to these hours may be requested. The nearest residences to the proposed solar power generation facility site are approximately 0.25 mile to the northwest. An evaluation of ambient noise levels at the proposed solar power generation facility was prepared to determine whether the proposed project, either by itself or cumulatively, would result in any significant impacts related to noise levels.

**Short-Term Impacts**

Construction activities associated with paving and widening the road and laying crushed rock aggregate on the graded site have the highest potential for creating noise. Construction noise levels would fluctuate depending on construction activity, equipment type, duration of use, and distance between noise source and receiver. Average (equivalent) construction noise levels projected for the residence nearest the proposed project site are presented in Table 3-3 (Project Construction Noise Levels at Nearest Receiver). This table lists the loudest anticipated construction phases and the typical noise levels generated by the construction activities at a distance of 50 feet from the nearest receiver.

**Table 3-3.** Project Construction Noise Levels at Nearest Receiver (dBA)

Location	Loudest Phases of Construction	Noise Level @50 feet <sup>1</sup>	Noise Level at Receiver <sup>2</sup>
Receiver at 1,000 feet	Road construction and finishing	89 dBA	62 dBA
Receiver at 1,500 feet	Road construction and finishing	89 dBA	57 dBA

Notes:

<sup>1</sup> U.S. Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, NTID300.1, December 31, 1971.

<sup>2</sup> Assumes a drop-off rate with distance of 6 dBA per doubling of distance and additional attenuation from the effects of molecular air absorption and anomalous excess attenuation at the rates of 0.7 dBA and 1.0 dBA per 1,000 feet, respectively.

Source: Jones & Stokes, 2007.

As shown in Table 3-3, the proposed project is expected to result in construction noise levels at the closest residence of approximately 62 dBA  $L_{eq}$  during construction operations. While levels of this magnitude would likely be audible, they would not cause interference with conversations or other normal daytime activities. At the next-closest residences, located approximately 1,500 feet away, the noise level from construction would be approximately 57 dBA  $L_{eq}$ . The construction of the proposed solar power generation facility would comply with the hours specified in Ordinance 457. Therefore, a less-than-significant impact would occur. Approximately 100 truck trips would be required over the 9-month construction period, which is an average of less than one truck trip per day. During construction, the actual number of daily truck trips would vary widely, depending upon the project phase. However, the relatively small volume of trucks indicates that while truck trips may result in elevated noise levels periodically, such occurrences would be relatively brief and infrequent and would not result in sustained increases in local traffic noise. Therefore, less-than-significant impact would occur.

**Long-Term Impacts**

There would be no long-term operational noise impacts from the proposed project. The proposed project would generate power using passive, non-mechanical solar arrays. Thus, there would be little if any noise produced. Periodic maintenance would consist primarily of cleaning the panels, as needed. Resultant noise levels would be low and below a level of significance.

b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

**No Impact.** Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of building interior surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB). Typical outdoor sources of perceptible groundborne vibration are construction equipment and traffic on rough roads. Construction and operation of the proposed solar power generation facility and associated roadway improvements would not produce excessive groundborne vibration or groundborne noise. The nearest residences (sensitive receptors) would be more than 1,000 feet away from the proposed project site. According to the estimations provided in Table 3-4 (Vibration Source Levels for Construction Equipment), vibration levels would be less than 33 VdB at the nearest residential units. This would be well below the significance threshold of 80 VdB used by the federal government and would occur only for short periods during construction. No vibration would be generated by the proposed project after completion. Therefore, no impact would occur as a result of proposed project implementation.

**Table 3-4.** Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB <sup>1</sup>		
	25 Feet	1,000 Feet	1,500 Feet
Loaded Truck	86	38	33
Roller	94	46	41
Small Bulldozer	58	10	5

Note:

<sup>1</sup> Federal Transit Administration, Office of Planning and Environment. Transit Noise and Vibration Impact Assessment. FTA-VA-90-1003-06. May 2006.

Source: Jones & Stokes, 2007.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

**No Impact.** Operation of the solar power generation facility would not produce noise. The solar power generation facility would not require staff personnel to be present at all times. Any traffic generated on the access road for the solar power generation facility would be there for routine maintenance activities, which would occur on an as-needed basis. Therefore, the proposed project would not result in a permanent increase in ambient noise levels in the proposed project vicinity. No impact would occur.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

**Less-than-Significant Impact.** As discussed in response XIa, the proposed project could potentially generate high noise levels during short-term construction activities as a result of heavy machinery and equipment use. However, construction noise impacts associated with the proposed project would be temporary and intermittent in nature, and because of the distance to the nearest residential receptor, they would not disrupt conversations or other daytime activities. The proposed project would comply with Riverside County Code (Ordinance 457), which limits the number of hours for construction activities. Therefore, a less-than-significant impact would occur.



e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

**No Impact.** The proposed project site is located just over 2 miles northeast of French Valley Airport. Construction workers would not be exposed to excessive aircraft noise given the distance of the site from French Valley Airport. Also, once completed, the proposed facility would not require any permanent on-site personnel to operate and maintain the facility. Therefore, operation of the facility would not expose persons to excessive aircraft noise. See also responses XIa and XIc regarding projected noise levels as a result of the proposed project.

f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

**No Impact.** The proposed project site would not be in the vicinity of a private airstrip (Riverside County Airport Land Use Commission, 2007). Therefore, no impact would occur.

	<b>Potentially Significant</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less-than- Significant Impact</b>	<b>No Impact</b>
--	------------------------------------	---------------------------------------------------------------------------	----------------------------------------------	----------------------

**XII. POPULATION AND HOUSING.** Would the project:

- |                                                                                                                                                                                                           |                          |                          |                          |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?                                                                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

***Discussion:***

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**No Impact.** Due to the limited duration of construction and small number of construction workers, construction of the proposed project elements (installation of solar panels or paving and widening of existing temporary road) does not have the potential to induce population growth either directly or indirectly. Operation of the proposed solar power generation facility would not require additional employees. Therefore, no impact would occur.

b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

**No Impact.** The proposed site for the solar power generation facility is currently used as a construction staging area. No housing is proposed by the project, nor would any housing be displaced as a result of the proposed project. Therefore, no impact would occur.

c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

**No Impact.** As stated in response XIIb, the proposed solar power generation facility would not displace any housing. Therefore, no impact would occur.

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>XIII. PUBLIC SERVICES.</b> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a) *Fire protection?*

**No Impact.** In the event of a fire or hazardous material release at the Skinner Plant, the fire station closest to the plant (French Valley Fire Station, 37500 Sky Canyon Drive, Murrieta, CA 92563—which is equipped to handle such calls) would initially respond. The construction and operation of the proposed project would not include any characteristics or create fire hazards that would increase the need for fire protection. Therefore, no impacts would occur.

b) *Police protection?*

**No Impact.** Construction and operation of the proposed solar power generation facility would not increase the need for police services. The solar power generation facility would be located within the Skinner Plant, which is a secure facility. In addition, a 6-foot-high chain link fence would surround the proposed solar panel facility. There are no residential, commercial, industrial, or recreational land uses proposed as part of the project. Therefore, no impacts would occur.

c) *Schools?*

**No Impact.** The proposed solar power generation facility does not include a housing component and it would not increase employment. Therefore, it would not directly or indirectly increase student enrollment levels. Therefore, no impacts would occur.

d) *Parks?*

**No Impact.** The proposed solar power generation facility would not include housing or increase employment opportunities within the community. Therefore, additional demands on existing public parks would not occur as a result of construction or operation of the proposed solar power generation facility. No impact would occur.

e) *Other public facilities?*

**No Impact.** Construction and operation of the proposed solar power generation facility would not result in any impacts on public facilities.

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b><u>XIV. RECREATION.</u></b>				
a) Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a) *Would the project increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**No Impact.** The proposed project would not include housing or increase employment opportunities within the community; therefore, the proposed project would not increase the use of existing neighborhood or regional parks or other recreational facilities.

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

**No Impact.** The proposed solar power generation facility would not affect existing recreational resources or create a need for new or expanded recreational facilities. Therefore, no impacts would occur.

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b><u>XV. TRANSPORTATION/TRAFFIC.</u></b> Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a) *Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?*

**No Impact.** During the construction phase, the proposed project would add approximately 100 truck trips to local roads during the 9-month construction period; however, this would be a temporary traffic impact and would not substantially affect traffic load or capacity of the street system in the proposed project vicinity. No more than six construction workers would be present on the site on any given day during the 9-month construction period. No long-term impact on the capacity of the street system would occur since the minor increase in construction traffic on the surrounding street system would be temporary. Operation of the solar power generation facility would not add any daily vehicular trips on the surrounding street system since no additional staff would be required to operate or maintain the facility. Therefore, no impact would occur.

b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?*

**No Impact.** Operation of the solar power generation facility would not add any vehicular trips on the surrounding street system; therefore, no impacts would result.

c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

**No Impact.** The proposed project would not have any features that could cause any changes to air traffic patterns. Therefore, no impact would occur.

d) *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e. g. farm equipment)?*

**No Impact.** The proposed project would not require changes to local public roads or introduce incompatible uses on local streets. The paving and widening of the temporary road would not be designed to result in any hazardous features. Therefore, no impact would occur.

e) *Result in inadequate emergency access?*

**No Impact.** See response to item VIIg.

f) *Result in inadequate parking capacity?*

**No Impact.** Adequate parking would be provided on the proposed project site for construction workers. Also, operation of the proposed facility would not require additional staff. Consequently, no aspect of the proposed project would increase demand for parking. Therefore, no impact would occur.

g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

**No Impact.** The proposed project would be located entirely within the boundaries of the Skinner Plant property and would not affect the alternative transportation facilities. The proposed project would not conflict with any adopted policies, plans, or programs. Therefore, no impact would occur.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
-------------------------	----------------------------------------------------	------------------------------	-----------

**XVI. UTILITIES AND SERVICE SYSTEMS.** Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

**No Impact.** Minimal amounts of wastewater would be generated by construction workers on the site during the construction period. The wastewater would percolate into the ground. The proposed project would generate minimal amounts of wash water during operation. Wash water would percolate into the ground. Therefore, there would be no impact on wastewater treatment requirements as a result of construction or use of the proposed project.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

**No Impact.** The proposed solar power generation facility project involves the installation of solar panels to produce 1 MW of power. The solar panels would be washed once every 3 months and therefore would not require substantial amounts of water.

A 3-inch water pipe would be extended to the site and would provide water for washing. The proposed project would not require the construction of new water or wastewater treatment facilities. Therefore, no impacts would occur.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

**Less-than-Significant Impact.** Operation of the proposed facility would not result in substantial amounts of runoff that would require construction of new, or expansion of existing, stormwater drainage facilities. The increase in impermeable surface, approximately 0.74 acre, due to paving and widening of the road would not be substantial. The runoff from washing the solar panels once every 3 months would percolate into the permeable crushed rock aggregate. Therefore, a less-than-significant impact would occur.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

**No Impact.** Construction and operation of the proposed solar power generation facility would not require new or expanded entitlements. The minor amounts of water that would be required for construction and operation of the proposed project would come from the plant's domestic water system. Therefore, no impacts would occur.

- e) *Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**No Impact.** Construction and operation of the proposed solar power generation facility would not increase the demand for wastewater treatment facilities in the area (see responses to items XVIa and XVIb). Therefore, no impact would occur.

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

**No Impact.** Operation of the proposed solar power generation facility would not generate any solid waste. If any waste were generated during construction, disposal of construction materials would occur in accordance with federal, state, and local regulations. Disposal would occur at permitted landfills, and construction contractors would be encouraged to recycle construction materials. In addition, the solar panels are prefabricated; therefore, there would be minimum waste associated with their installation, and no impact would occur.

- g) *Comply with federal, state, and local statutes and regulations related to solid waste?*

**No Impact.** The construction and operation of the proposed project would comply with federal, state, and local statutes for solid waste. Therefore, no impact would occur.

Potentially Significant	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
----------------------------	----------------------------------------------------------------	-------------------------------------	--------------

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE.**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                          |                          |                                     |                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| <p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>                                                                                                           | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p>c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</p>                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

***Discussion:***

- a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

**Less-than-Significant Impact.** Construction activities could disturb or result in the removal of three paniculate tarplants. However, project impacts to paniculate tarplant would be less than significant given its CNPS List 4 status and the small number of individuals potentially affected. No smooth tarplants were identified during the 2007 surveys. Smooth tarplant has a low but reasonable potential to occur, but only in very small numbers (one to a few individuals). Additionally, this species is known to tolerate temporary construction impacts relatively well. There is a low but reasonable potential for a limited amount of Robinson’s peppergrass (CNPS List 1B) to be present at the site, though it was not found during the 2003 and 2007 surveys. However, if discovered on-site prior to construction-related activities, impacts to this species would be considered less than significant under CEQA due to the relatively small number of individuals that could occur within the project footprint and given the fact that Robinson’s peppergrass populations are presumed stable.

Based on an assessment of habitat, two species protected under state and/or federal endangered species acts (Stephens’ kangaroo rat and least Bell’s vireo) have the potential to occur in the proposed project area. A third such species, southwestern willow flycatcher, was also surveyed for out of caution as some regulatory agencies also request surveys for that species wherever least Bell’s vireos have potential to occur. Stephens’ kangaroo rat, least Bell’s vireo and southwestern willow flycatcher are not present on the site, therefore, no impacts to these species would occur. The only other species with reasonable potential to occur are all non-listed, state Species of Special Concern birds: California Horned Lark (*Eremophila alpestris actia*), Yellow-breasted Chat (*Icteria virens*), and Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*). All were recorded in the study area, but none are expected to nest in the study area, and none are expected to make more than rare use of the study area in very small numbers. Therefore, no impacts to these species would occur.

A total of 0.07 acre of state-designated streambeds subject to Section 1602 of the Fish and Game Code, as administered by CDFG, would be affected as a result of widening and paving the access road across Tualota Creek. Of this total, 0.03 acre would be permanently lost, while 0.04 acre would be temporarily removed. Given the limited extent and somewhat disturbed condition of the state streambeds present, as well as the absence of least Bell’s vireo, southwestern willow flycatcher, and all

other special-status plants and wildlife (apart from a few individuals of paniculate tarplant), the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community, and a less-than-significant impact would occur.

Construction activities would result in fill over approximately 0.04 acre (0.02 acre and 40 linear feet permanent; 0.02 acre and 60 linear feet temporary) of jurisdictional wetlands subject to Section 404 of the Clean Water Act, as administered by the U.S. Army Corps of Engineers, and Section 401 of the Clean Water Act, as administered by the San Diego Regional Water Quality Control Board (RWQCB). For the same reasons as stated above regarding impacts to state streambeds, that is, limited extent and limited functions and values, a less-than-significant impact to federally jurisdictional wetlands would occur. Therefore, the loss of 0.07 acre subject to CDFG jurisdiction, 0.04 of which are subject to U.S. Army Corps of Engineers jurisdiction, would be less than significant.

The proposed project would require a Streambed Alteration Agreement from CDFG, a Section 404 permit from U.S. Army Corps of Engineers, and a Section 401 certification from the RWQCB. Metropolitan would comply with the permitting requirements of CDFG, the U.S. Army Corps of Engineers, and the RWQCB. Metropolitan would coordinate with these agencies during the permitting process prior to project construction to ensure that no net loss of functions and values would be achieved for the 0.07 acre of affected riparian habitat through replacement, restoration, enhancement, or other measures as applicable. In addition, the wetland mitigations associated with the permits for the prior approved project (2003 MND) and discussed in IVb would be readdressed as part of the permit consultations for the present project to ensure that no net loss of functions and values would be achieved for the prior impacts to 0.07 acre of riparian habitat subject to CDFG, U.S. Army Corps of Engineers, and RWQCB jurisdiction as applicable.

No known cultural, historical, or paleontologic resources would be affected by the proposed project.

- b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

**Less-than-Significant Impact.** As provided in more detail in the individual impact discussions of this proposed ND, the proposed project would not result in any significant or potentially significant impacts. Construction of the proposed solar power generation facility would not result in any significant air quality impacts (see checklist item III), the operation of the proposed project would have a beneficial impact on air quality by reducing carbon emissions. The emissions associated with the proposed project would not be cumulatively considerable because the emissions would fall below SCAQMD daily significance thresholds. Operation of the proposed facility would not require any additional employees, nor would it generate waste or air pollutants. It would also require very little maintenance except for periodic washing of the panels once every 3 months. For these reasons, the proposed project's impacts would not be cumulatively considerable. Therefore, a less-than-significant impact would occur.

- c) *Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?*

**No Impact.** Construction of the proposed project would result in temporary minor increases in noise and air pollution. These impacts would not be significant. The effects would not be substantially adverse to human beings either directly or indirectly. The proposed solar power generation facility would provide an alternate source of power for the Skinner Plant while providing renewable green energy that would help reduce Metropolitan's overall carbon emissions. With implementation of the proposed facility, Metropolitan would indirectly reduce carbon emissions by nearly 2.5 million pounds annually. The proposed project is an environmentally friendly project that would harness a renewable source of energy and have a beneficial impact on the environment.





## SECTION 4 REFERENCES

California Department of Conservation. 1999. Maps of earthquake fault zone affecting cities. California Geologic Survey, Division of Mines and Geology. Available: <[http://www.consrv.ca.gov/cgs/rghm/ap/Map\\_index/city.htm#H-L](http://www.consrv.ca.gov/cgs/rghm/ap/Map_index/city.htm#H-L)>. Accessed: July 16, 2007.

———. 2004a. Important Farmland in California map. Available: <[http://www.consrv.ca.gov/DLRP/fmmp/images/fmmp2004\\_11\\_17.pdf](http://www.consrv.ca.gov/DLRP/fmmp/images/fmmp2004_11_17.pdf)>. Accessed: July 13, 2007.

———. 2004b. Williamson Act Program. Division of Land Resource Protection. Available: <<http://gis.ca.gov/catalog/BrowseCatalog.epl?id=1077#>>. Accessed: July 13, 2007.

California Department of Transportation. n.d. California Scenic Highway Mapping System. Available: <[http://www.dot.ca.gov/hq/LandArch/scenic\\_highways/](http://www.dot.ca.gov/hq/LandArch/scenic_highways/)>. Accessed: July 13, 2007.

Geomatrix Consultants. 1996. The Metropolitan Water District of Southern California Engineering Report Number 1118, Geologic and Geotechnical Investigation Report, Modification of Robert A. Skinner Filtration Facility for the Oxidation Retrofit Program. Unpublished report for the Metropolitan Water District of Southern California. August 14.

The Metropolitan Water District of Southern California. 2003. Robert A. Skinner Filtration Plant Reliability and Quality Program, Draft Program Environmental Impact Report. May.

———. 2003. Robert A. Skinner Filtration Plant Reliability and Quality Program, Final Program Environmental Impact Report. July.

———. 2003. Robert A. Skinner Filtration Plant Reliability and Quality Program, Additional Construction-Use Area and Creek Crossing, Mitigated Negative Declaration. December.

———. 2004. Robert A. Skinner Filtration Plant Reliability and Quality Program, Refinements to the Program, Negative Declaration. August.

———. 2006. Addendum No. 1 to the Robert A. Skinner Filtration Plant Reliability and Quality Program, Additional Use Area and Creek Crossing, Mitigated Negative Declaration. May.

Reiser, C. H. 2001. Rare Plants of San Diego County. Accessed at <http://sandiego.sierraclub.org/rareplants/> with last update stated as 10/6/01.

Riverside County Airport Land Use Commission. 2007. Available:

<[http://www.rcaluc.org/links\\_airports.asp](http://www.rcaluc.org/links_airports.asp)>. Accessed: July 13, 2007.

Riverside County Habitat Conservation Agency. 1995. *Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County California*. February.

Riverside County Habitat Conservation Agency and the Metropolitan Water District of Southern California. 1992. *Multi-Species Habitat Conservation Plan for Southwestern Riverside County, California*. October.

Riverside County Transportation and Land Management Agency. 2007. Zoning information. Geographic Information Services. Available: <<http://www3.tlma.co.riverside.ca.us/pa/rclis/index.html>>. Accessed: July 13, 2007.

Temecula Valley Unified School District. 2007. Boundary Maps. Available:

<<http://www.tvusd.k12.ca.us/>>. Accessed July 16, 2007.

U.S. Department of Transportation. 1998. *Vibration Source Levels*. Federal Railroad Administration.

## **SECTION 5 LIST OF PREPARERS**

### **The Metropolitan Water District of Southern California**

Delaine Shaine, Interim Team Manager, Environmental Planning Team

Debbie Drezner, Environmental Specialist

John Vrsalovich, Senior Engineer

### **MWH Americas**

Steve Hirai, Principal

### **Vector Delta**

Dr. Peter Gevorkian, Scientist

### **Jones & Stokes**

Lee Lisecki, Project Director

Shilpa Trisal, Project Manager

Steven Esselman, Deputy Project Manager

Keith Cooper, Senior Air Quality Specialist

Mike Greene, Noise Specialist

Kim Svitenko, Project Biologist

Kurt Campbell, Senior Biologist

Patricia Campbell, Senior Biologist

Peter Langenfeld, Visual Simulations Specialist

Mark Robinson, Senior Archaeologist

Bert Dudley, Environmental Planner

Victor Ortiz, Air Quality Specialist

John Mathias, Technical Editor

Coral Manning, GIS/Graphics

Hina Gupta, Intern

### **Envira**

Philippe Vergne, Biologist



**Appendix A**  
**AIR QUALITY DATA SHEETS**



**CONSERVATIVE ESTIMATE OF CONSTRUCTION EMISSIONS (pounds per day)**

	ROC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub> <sup>a</sup>	PM <sub>2.5</sub> <sup>a</sup>
<b>Site Grading</b>						
<b>1 Month</b>						
On-site Total	14.60	98.06	118.02	-	10.55	4.95
Fugitive Dust	-	-	-	-	6.53	1.37
Off-Road Diesel	14.60	98.06	118.02	-	4.02	3.58
Off-site Total	0.05	0.08	1.59	-	0.01	0.01
On-Road Diesel	-	-	-	-	-	-
Worker Trips	0.05	0.08	1.59	-	0.01	0.01
<b>Grand Total</b>	<b>14.65</b>	<b>98.14</b>	<b>119.61</b>	<b>-</b>	<b>10.56</b>	<b>4.96</b>
<b>Roadway Improvement</b>						
<b>3 Months</b>						
On-site Total	4.62	28.34	38.45	-	0.90	0.80
Fugitive Dust	-	-	-	-	-	-
Off-Road Diesel	4.62	28.34	38.45	-	0.90	0.80
Off-site Total	0.05	0.39	0.40	-	0.02	0.01
On-Road Diesel	0.02	0.37	0.07	-	0.01	0.00
Worker Trip	0.03	0.02	0.33	-	0.01	0.01
<b>Grand Total</b>	<b>4.67</b>	<b>28.73</b>	<b>38.85</b>	<b>-</b>	<b>0.92</b>	<b>0.81</b>
<b>Solar Array Installation</b>						
<b>5 Months</b>						
On-site Total	5.10	30.28	43.00	-	0.90	0.80
Fugitive Dust	-	-	-	-	-	-
Off-Road Diesel	5.10	30.28	43.00	-	0.90	0.80
Off-site Total	1.14	15.45	4.27	0.02	0.72	0.62
On-Road Diesel	1.14	15.45	4.27	0.02	0.72	0.62
Worker Trip	-	-	-	-	-	-
<b>Grand Total</b>	<b>6.24</b>	<b>45.73</b>	<b>47.27</b>	<b>0.02</b>	<b>1.62</b>	<b>1.42</b>
<b>On-site Emissions Totals</b>						
Site Grading	14.6	98.1	118.0	-	10.5	4.9
Roadway Improvement	4.6	28.3	38.5	-	0.9	0.8
Solar Array Installation	5.1	30.3	43.0	-	0.9	0.8
<b>Maximum On-site Emissions</b>	<b>15</b>	<b>98</b>	<b>118</b>	<b>-</b>	<b>11</b>	<b>5</b>
Localized Significance Threshold <sup>b</sup>	--	1,657	27,729	--	207	105
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Regional Emissions Totals</b>						
Site Grading	14.7	98.1	119.6	-	10.6	5.0
Roadway Improvement	4.7	28.7	38.9	-	0.9	0.8
Solar Array Installation	6.2	45.7	47.3	0.0	1.6	1.4
<b>Maximum Regional Emissions</b>	<b>15</b>	<b>98</b>	<b>120</b>	<b>0</b>	<b>11</b>	<b>5</b>
Regional Significance Threshold	75	100	550	150	150	55
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

## Notes:

URBEMIS print-out sheets and fugitive PM calculation worksheet are included in Appendix A.

<sup>a</sup> Fugitive PM<sub>10</sub> and PM<sub>2.5</sub> emissions estimates take into account compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the site boundaries.

<sup>b</sup> The project site is located in SCAQMD SRA No. 26. These LSTs are based on the site location SRA, distance to nearest sensitive receptor location from the project site (500 meters), and project area that could be under construction on any given day (five acres).



<p><b>Summary of On-Site Fugitive PM<sub>10</sub> Emissions</b></p> <p>3.8 Dirt pushing emissions</p> <p>- Dirt/materials handling emissions</p> <p>2.8 Unpaved surface travel emissions</p> <p><b>6.5 On-site Emissions Total</b></p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>Estimating Emissions from Dirt Pushing or Bulldozing Operations <sup>a</sup></b></p> <p><math>E = ([0.45 \times (([G]^{1.5})/([H]^{1.4}))]) \times I) \times J</math></p> <p>Where,</p> <p>E = PM<sub>10</sub> emissions from dirt pushing</p> <p>G = Silt content of aggregate in percent</p> <p>H = Moisture content of the surface material</p> <p>I = 2.2046; a conversion factor to convert kilograms per hour to pounds per hour</p> <p>J = Hours of dirt pushing</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>G =</td> <td>7.5</td> <td>I =</td> <td>2.2046</td> </tr> <tr> <td>H =</td> <td>12.0</td> <td>J =</td> <td>6.0</td> </tr> <tr> <td><b>E =</b></td> <td><b>3.77</b></td> <td></td> <td></td> </tr> </table> <p><sup>a</sup> SCAQMD 1993; CEQA Air Quality Handbook, Table A9-9-F</p>	G =	7.5	I =	2.2046	H =	12.0	J =	6.0	<b>E =</b>	<b>3.77</b>		
G =	7.5	I =	2.2046									
H =	12.0	J =	6.0									
<b>E =</b>	<b>3.77</b>											

<p><b>Estimating Emissions from Dirt Piling or Material Handling <sup>b</sup></b></p> <p><math>E = [0.00112 \times (([G/5]^{1.3})/([H/2]^{1.4}))] \times [I/J]</math></p> <p>Where,</p> <p>E = PM<sub>10</sub> emissions from dirt piling or materials handling</p> <p>G = Mean wind speed in miles per hour</p> <p>H = Moisture content of the surface material</p> <p>I = Pounds of dirt handled per day</p> <p>J = 2,000; a conversion factor to convert pounds to tons</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>G =</td> <td>3.4</td> <td>I =</td> <td>-</td> </tr> <tr> <td>H =</td> <td>12%</td> <td>J =</td> <td>2,000</td> </tr> <tr> <td><b>E =</b></td> <td><b>-</b></td> <td></td> <td></td> </tr> </table> <p><sup>b</sup> SCAQMD 1993; CEQA Air Quality Handbook, Table A9-9-G</p>	G =	3.4	I =	-	H =	12%	J =	2,000	<b>E =</b>	<b>-</b>		
G =	3.4	I =	-									
H =	12%	J =	2,000									
<b>E =</b>	<b>-</b>											

<p><b>Estimating Emissions from Vehicle Travel on Unpaved Roads <sup>c</sup></b></p> <p><math>E = V \times F</math></p> <p>Where,</p> <p>E = Emissions for vehicles on unpaved roads</p> <p>V = Vehicle miles traveled</p> <p>F = Emissions factor for vehicle travel on unpaved roads.</p> <p><math>2.1 \times [G/12] \times H/30 \times \{[J/3]0.7\} \times \{[I/4]0.5\} \times \{[365 - K]/365\}</math> in pounds per miles traveled</p> <p>Where,</p> <p>G = Surface silt loading in percent</p> <p>H = Mean vehicle speed in miles per hour</p> <p>I = Mean number of wheels on vehicles</p> <p>J = Mean vehicle weight in tons</p> <p>K = Mean number of days per year with at least 0.01 inch of precipitation</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>G =</td> <td>7.5</td> <td>J =</td> <td>15</td> </tr> <tr> <td>H =</td> <td>5.0</td> <td>K =</td> <td>34</td> </tr> <tr> <td>I =</td> <td>6</td> <td></td> <td></td> </tr> <tr> <td>F =</td> <td>0.75</td> <td colspan="2">Uncontrolled emissions factor</td> </tr> <tr> <td></td> <td>(0.51)</td> <td colspan="2">Rule 403 control efficiency (68 percent)</td> </tr> <tr> <td></td> <td>0.24</td> <td colspan="2">Controlled emissions factor</td> </tr> <tr> <td></td> <td>11.49</td> <td colspan="2">On-site VMT</td> </tr> <tr> <td><b>E =</b></td> <td><b>2.76</b></td> <td></td> <td></td> </tr> </table> <p><sup>c</sup> SCAQMD 1993; CEQA Air Quality Handbook, Table A9-9-D</p>	G =	7.5	J =	15	H =	5.0	K =	34	I =	6			F =	0.75	Uncontrolled emissions factor			(0.51)	Rule 403 control efficiency (68 percent)			0.24	Controlled emissions factor			11.49	On-site VMT		<b>E =</b>	<b>2.76</b>		
G =	7.5	J =	15																													
H =	5.0	K =	34																													
I =	6																															
F =	0.75	Uncontrolled emissions factor																														
	(0.51)	Rule 403 control efficiency (68 percent)																														
	0.24	Controlled emissions factor																														
	11.49	On-site VMT																														
<b>E =</b>	<b>2.76</b>																															

### Emfac2007 Emission Factors

Title : RiversideCountyEmissions2007

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2007/06/11 11:50:41

Scen Year: 2009 -- All model years in the range 1967 to 2009 selected

Season : Annual

Area : Riverside County Average

I/M Stat : Enhanced Interim (2005) -- Using I/M schedule for area 61 Riverside (SC)

Emissions: Tons Per Day

\*\*\*\*\*

		lbs/day	grams/day	grams/mile	grams/trip
HHDT-DSL					
Vehicles	21,298				
VMT/1000	3,441				
Trips	129,467				

Reactive Organic Gas Emissions

Run Exh	4.24	8,480	3,846,464	1.11783	
Idle Exh	0.51	1,020	462,664		3.57361
Start Ex	0				
-----					
Total Ex	4.74				

Carbon Monoxide Emissions

Run Exh	15.83	31,660	14,360,739	4.17342	
Idle Exh	1.9	3,800	1,723,652		13.31344
Start Ex	0				
-----					
Total Ex	17.72	35,440	16,075,318		

Oxides of Nitrogen Emissions

Run Exh	60.88	121,760	55,229,423	16.05040	
Idle Exh	4.19	8,380	3,801,105		29.35964
Start Ex	0				
-----					
Total Ex	65.07	130,140	59,030,528		

PM10 Emissions

Run Exh	2.72	5,440	2,467,543	0.71710	
Idle Exh	0.08	160	72,575		0.56057
Start Ex	0				
-----					
Total Ex	2.8	5,600	2,540,118		

TireWear	0.14	280	127,006	0.03691	
BrakeWr	0.11	220	99,790	0.02900	
-----					

Total	3.04	6,080	2,757,842		
-------	------	-------	-----------	--	--

Lead 0

SOx 0.07 140 63,503 0.01845

## Delivery Truck Emissions Summary

Maximum Day Truck Trips: 20  
 Maximum Day Truck VMT: 400 (20-mile roundtrip length)

### Grams per Trip Emissions Factors

ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
3.5736	13.3134	29.3596	0.5606	0.5157	-

### Grams per Mile Emissions Factors

ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
1.1178	4.1734	16.0504	0.7830	0.6814	0.0185

### Trip Emissions (pounds per day)

ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
0.16	0.59	1.29	0.02	0.02	-

### VMT Emissions (pounds per day)

ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
0.99	3.68	14.15	0.69	0.60	0.02

### Total Haul Truck-related Emissions (pounds per day)

ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
1.14	4.27	15.45	0.72	0.62	0.02

### Excavation-period Emissions Summary

	ROG	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Haul-truck Emissions	1.14	4.27	15.45	0.72	0.62	0.02
On-site Equipment Emissions	5.10	43.00	30.30	0.90	0.80	-
Net Project Emissions	6.24	47.27	45.75	1.62	1.42	0.02
Daily Significance Threshold	75	550	100	150	55	150
Amount Over/(Under) Threshold	(68.76)	(502.73)	(54.25)	(148.38)	(53.58)	(149.98)
Significant Impact?	No	No	No	No	No	No

URBEMIS 2002 For Windows 8.7.0

File Name: G:\3\_Projects\\_Air Quality\Lake Skinner\Impact  
 Analysis\Urbemis\Phase 1 and 2.urb  
 Project Name: Lake Skinner  
 Project Location: South Coast Air Basin (Los Angeles area)  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	14.65	98.14	119.61	0.00	4.03	4.02	0.01

DETAIL REPORT  
 (Pounds/Day - Summer)

Construction Start Month and Year: September, 2008  
 Construction Duration: 4  
 Total Land Use Area to be Developed: 5 acres  
 Maximum Acreage Disturbed Per Day: 5 acres  
 Single Family Units: 0 Multi-Family Units: 0  
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	14.60	98.06	118.02	-	4.02	4.02	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.05	0.08	1.59	0.00	0.01	0.00	0.01
Maximum lbs/day	14.65	98.14	119.61	0.00	4.03	4.02	0.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.10	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.62	28.34	38.45	-	0.90	0.90	0.00
Asphalt On-Road Diesel	0.02	0.37	0.07	0.00	0.01	0.01	0.00
Asphalt Worker Trips	0.03	0.02	0.33	0.00	0.01	0.00	0.01
Maximum lbs/day	4.77	28.72	38.86	0.00	0.91	0.90	0.01
Max lbs/day all phases	14.65	98.14	119.61	0.00	4.03	4.02	0.01

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions

Start Month/Year for Phase 2: Sep '08  
 Phase 2 Duration: 1 months  
 On-Road Truck Travel (VMT): 0  
 Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Rubber Tired Dozers	352	0.590	8.0
2	Scrapers	313	0.660	8.0

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Oct '08  
 Phase 3 Duration: 3 months

SubPhase Building Turned OFF  
SubPhase Architectural Coatings Turned OFF  
Start Month/Year for SubPhase Asphalt: Oct '08  
SubPhase Asphalt Duration: 3 months  
Acres to be Paved: 2.5  
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Pavers	132	0.590	8.0
1	Paving Equipment	111	0.530	8.0
1	Rollers	114	0.430	8.0
1	Rubber Tired Loaders	165	0.465	8.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths  
Site Grading Fugitive Dust Emission Rate changed from 10 to 0  
Site Grading Truck Haul Capacity (yds3) changed from 20 to 14

URBEMIS 2002 For Windows 8.7.0

File Name: G:\3\_Projects\\_Air Quality\Lake Skinner\Impact  
 Analysis\Urbemis\Phase 3.urb  
 Project Name: Lake Skinner  
 Project Location: South Coast Air Basin (Los Angeles area)  
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT  
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2009 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.10	30.28	43.00	0.00	0.90	0.90	0.00

DETAIL REPORT  
 (Pounds/Day - Summer)

Construction Start Month and Year: January, 2009  
 Construction Duration: 5  
 Total Land Use Area to be Developed: 5 acres  
 Maximum Acreage Disturbed Per Day: 5 acres  
 Single Family Units: 0 Multi-Family Units: 0  
 Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2009***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	5.10	30.28	43.00	-	0.90	0.90	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	5.10	30.28	43.00	0.00	0.90	0.90	0.00
Max lbs/day all phases	5.10	30.28	43.00	0.00	0.90	0.90	0.00

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions

Start Month/Year for Phase 3: Jan '09

Phase 3 Duration: 5 months

Start Month/Year for SubPhase Building: Jan '09

SubPhase Building Duration: 5 months

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Cranes	190	0.430	8.0
2	Rough Terrain Forklifts	94	0.475	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

SubPhase Architectural Coatings Turned OFF

SubPhase Asphalt Turned OFF

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction



**Appendix B**  
**BIOLOGICAL RESOURCES EVALUATION**





**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
SOLAR POWER GENERATION FACILITY  
at  
ROBERT A. SKINNER WATER TREATMENT PLANT  
BIOLOGICAL RESOURCES EVALUATION**

***Prepared for:***

The Metropolitan Water District of Southern California  
700 North Alameda Street  
Los Angeles, California 90012  
Contact: Dr. Debbie Drezner

***Prepared by:***

Jones & Stokes  
42145 Lyndie Lane  
Temecula, California 92591

August 2007



### TABLE OF CONTENTS

**SUMMARY ..... 1**

**1.0 INTRODUCTION..... 2**

**2.0 LITERATURE REVIEW ..... 2**

**3.0 TOPOGRAPHY..... 2**

**4.0 HYDROLOGY ..... 3**

**5.0 SOILS ..... 3**

**6.0 SURVEY METHODS..... 3**

**7.0 VEGETATION AND COVER TYPES..... 4**

**8.0 WILDLIFE ..... 5**

**9.0 SPECIAL-STATUS PLANTS AND WILDLIFE ..... 5**

    9.1 Special-Status Plants..... 6

    9.2 Special-Status Wildlife ..... 8

**10.0 SURVEY RESULTS..... 13**

    10.1 Plants..... 13

    10.2 Wildlife..... 13

    10.3 Jurisdictional Delineation ..... 13

**11.0 REFERENCES..... 14**

**12.0 FIGURES ..... follow page 16**

#### EXHIBITS

EXHIBIT A: PHOTOGRAPHS OF THE PROJECT AREA

EXHIBIT B: VASCULAR PLANT SPECIES OBSERVED

EXHIBIT C: WILDLIFE SPECIES OBSERVED

**LIST OF TABLES**

TABLE 1 SURVEY DATES FOR LEAST BELL'S VIREO AND  
SOUTHEASTERN WILLOW FLYCATCHER .....4

TABLE 2 SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR IN THE REGION .....6

TABLE 3 SPECIAL STATUS WILDLIFE SPECIES KNOWN TO OCCUR IN THE REGION .....8

**LIST OF FIGURES**

FIGURE 1 REGIONAL MAP.....follows page 16

FIGURE 2 VICINITY MAP .....follows page 16

FIGURE 3 PROPOSED PROJECT BOUNDARY .....follows page 16

FIGURE 4 SOILS TYPES.....follows page 16

FIGURE 5 VEGETATION MAP .....follows page 16

## SUMMARY

The Skinner Plant is located immediately west of Lake Skinner, approximately 5 miles east of the City of Murrieta and 5 miles northeast of the City of Temecula (see Figure 1, Regional Location Map, and Figure 2, Vicinity Map). It is located entirely within the area of the U.S. Geological Survey (USGS) 7.5-minute Bachelor Mountain, California, quadrangle (USGS 1973) in Township 7 South, Range 2 West, Section 3. Lake Skinner Dam forms a portion of the eastern boundary of the Skinner Plant.

The proposed project would involve construction of a 1-megawatt (MW) solar power generation facility (i.e., photovoltaic power) at the Skinner Plant (Figure 3). Tualota Creek is located south of the proposed solar power generation facility. Currently, the temporary access road connecting the main plant road to the solar power generation facility crosses the creek. Flows within the creek have been maintained by culverts located under the access road. Tualota Creek supports a mixture of willow mule fat scrub and nonnative annual grassland. A total study area of 13.5 acres is addressed for this biological resources evaluation. The proposed project would have a footprint of 5 to 6 acres within this area; the additional area is addressed for context and to provide a basis for consideration of indirect impacts.

Impacts associated with development of the proposed solar power generation facility would consist of the removal of 0.06 acre of willow riparian scrub (0.01-acre permanent loss, 0.05-acre temporary disturbance), all within Tualota Creek, and 0.32 acre of nonnative annual grassland (0.05-acre permanent loss, 0.27-acre temporary disturbance), adjacent to Tualota Creek, to widen the existing creek crossing.

A rare plant survey was performed during spring and summer 2007. Based on flora, habitat resources, and conditions, there is no reasonable potential for 7 of the 10 identified plant species of interest. Three individuals of paniculate tarplant (*Deinandra paniculata*) were found at the existing creek crossing within the proposed project footprint. However, for this species as well as smooth tarplant (*Centromadia pungens laevis*) and Robinson's peppergrass (*Lepidium virginicum robinsonii*), there is no reasonable potential for more than a few individuals to be affected by the project.

Focused surveys were performed for least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) along Tualota Creek in 2007. Neither of these species was detected on or near the proposed project area. Both species are absent on the site at this time.

The proposed project site was assessed for the presence of Stephens' kangaroo rat (SKR) by Philippe Vergne of ENVIRA during spring 2007. Site conditions are not appropriate to support this species, and it is absent at this time.

Impacts on waters of the United States total 0.02 acre (40 linear feet) of permanent fill and 0.02 acre (60 linear feet) of temporary fill; the entire 0.04 acre area is wetland. Impacts on state streambeds total 0.07 acre (including adjacent riparian vegetation), of which 0.03 acre would be permanent and 0.04 acre temporary.

## 1.0 INTRODUCTION

This biological resources evaluation has been prepared by Jones & Stokes in response to MWD's request for biological studies of the proposed project area. The proposed project site is located immediately west of Lake Skinner and approximately 10 miles southwest of the City of Hemet, 5 miles east of the City of Murrieta, and 5 miles northeast of the City of Temecula (see Figure 1, Regional Location Map, and Figure 2, Vicinity Map). It is located entirely within the area of the USGS 7.5-minute Bachelor Mountain, California, quadrangle (USGS 1973) in Township 7 South, Range 2 West, Section 3. Locally, the Skinner Plant is east of Winchester Road at the eastern end of Auld Road. Lake Skinner Dam forms a portion of the eastern boundary of the Skinner Plant.

A total study area of 13.5 acres is addressed for this biological resources evaluation. The proposed project would have a footprint of 5 to 6 acres within this area; the additional area is addressed for context and to provide a basis for consideration of indirect impacts.

The studies conducted consist of a review of published and unpublished information for the vicinity, consultation with knowledgeable persons and relevant agencies, a reconnaissance site assessment of the project footprint addressing the area's potential for special-status species and other potentially sensitive resources, a focused plant survey, focused, protocol-level surveys for least Bell's vireo and southwestern willow flycatcher, a habitat evaluation for Stephens' Kangaroo Rat, and a jurisdictional delineation.

## 2.0 LITERATURE REVIEW

Prior to conducting biological surveys, Jones & Stokes biologists conducted a literature review to identify special-status plants, wildlife, and habitats known to occur in the vicinity of the survey area. The California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2007), CDFG California Natural Diversity Database (CNDDDB) (CDFG 2007a), and the current List of Special-Status Animals (CDFG 2007b) were reviewed. The survey area is within the USGS 7.5-minute Bachelor Mountain, California quadrangle. Adjacent quadrangles were also entered into the database search, including Pechanga, Temecula, Hemet, Sage, Vail Lake, Winchester, Romoland, and Murrieta.

Taxonomy and nomenclature for plants follow Hickman (1993). Taxonomy and nomenclature for wildlife follow Behler (1998) for amphibians and reptiles, American Ornithologist's Union (1998) and Sibley (2000) for birds, and Jones et. al (1992) for mammals. All wildlife species observed or detected by sign (tracks, scat, burrows, etc.) were recorded in field notes. Listings of plants and wildlife observed during the reconnaissance surveys are included in Exhibit A.

## 3.0 TOPOGRAPHY

The proposed project site is located on a small, dissected plateau above the Auld Valley-Tucalota Creek area. The plateau consists of small hills dissected by several slightly to moderately sloped drainages. The margin of the plateau for the Skinner Plant site consists of steeper dissected topography that goes down into the drainage area of Tucalota Creek. The Auld Valley-Tucalota Creek area generally consists of a broad flat valley that contains a series of terraces and small hills just north and outside the main drainage area. These terraces are dissected by several steeply sided ephemeral drainages and small knolls. Elevation of the proposed project site is approximately 1,495 feet above mean sea level.

#### 4.0 HYDROLOGY

Tucalota Creek is the only jurisdictional feature that would be disturbed by project implementation. The creek occurs just south of the solar power generation facility site. Currently, an access road crosses over the creek, and culverts have been installed under the road.

#### 5.0 SOILS

The soils within the proposed project site were mapped by the U.S. Department of Agriculture in 1973 (Knecht 1973); the text describing these soils follows the descriptions provided in the report and shown in Figure 4.

The Auld Valley area is dominated by Grangeville sandy loam alkali on 0%–5% slopes. Grangeville soils are moderately to poorly drained soils, derived from granitic alluvium found on alluvial fans and floodplains. These soils generally consist of a layer of grayish brown sandy loam up to 45 inches deep. The subsoil layers (below 17 inches) may contain areas of loamy fine sand or areas that contain layers of coarse gravelly fine sand. Alkalinity of these soils is slight to moderate, but subsoil layers may be strongly alkaline. These soils are often found in areas with a shallow water table; the runoff is slow, and the potential for erosion is slight.

Other soils within the proposed project boundary consist of Friant fine sandy loam and Arbuckle loam. The former is an upland soil with slopes of 5%–50% developed from a weathered mica-schist. The soil consists of a dark grayish brown fine sandy loam to a depth of approximately 13 inches. The parent material is weakly weathered mica-schist. This mapping unit contains about 2% outcrop. The runoff from this soil is medium, and the erosion hazard is moderate.

Arbuckle loam is an upland soil with 2%–8% slopes. Arbuckle soils occur on low terraces on alluvial fans. They have negligible to high runoff and moderately slow to slow permeability. Arbuckle soils are well drained.

#### 6.0 SURVEY METHODS

A general site assessment of the proposed project area was conducted by Jones & Stokes biologists on February 15 and March 5, 2007. Temperatures during the February site assessment ranged from 70°F–75°F and skies were clear. The purpose of the visit was to assess current conditions, identify plant and animal species present within the proposed project area, map vegetation communities, evaluate the potential of the survey area to support special-status species, and identify any potential areas of jurisdiction under the federal Clean Water Act or state Streambed Alteration Program.

Ten special-status plant species were identified through the literature review as potentially occurring on or near the proposed project site. The site was assessed for their potential occurrence. The 10 identified species are Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), Plummer's mariposa lily (*Calochortus plummerae*), smooth tarplant (*Centromadia pungens* sp. *laevis*), long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), paniculate tarplant (*Deinandra paniculatas*), round-leaved filaree (*Erodium macrophyllum*), Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*), spreading navarretia (*Navarretia fossalis*), and California orcutt grass (*Orcuttia californica*).

Focused plant survey work was performed on March 5, June 23, and August 3, 2007, to clarify further the potential for the aforementioned plant species to be present on the proposed project site. Focused surveys for least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher



(*Empidonax traillii extimus*) were conducted during spring and summer 2007. Survey methods followed USFWS protocol. Survey work for southwestern willow flycatcher was performed with authorization of the U.S. Fish and Wildlife Service under recovery permits held by Tricia A. Campbell and Kurt F. Campbell. The dates the surveys were performed are shown in Table 1.

**Table 1.** Survey Dates for Least Bell’s Vireo and Southwestern Willow Flycatcher

Date	Species Surveyed
April 11, 2007	LBV
April 23, 2007	LBV
May 3, 2007	LBV
May 14, 2007	LBV and WiFI
May 24, 2007	LBV and WiFI
June 5, 2007	LBV
June 15, 2007	WiFI
June 23, 2007	LBV and WiFI
July 4, 2007	LBV and WiFI
July 13, 2007	WiFI

Note:  
 LBV= least Bell’s vireo; WiFI = southwestern willow flycatcher.

A one-day reconnaissance survey was performed by Philippe Vergne of ENVIRA on June 12, 2007, to assess the project area for Stephens’ kangaroo rat (*Dipodomys stephensi*).

**7.0 VEGETATION AND COVER TYPES**

As described in more detail below, the proposed project site, totaling 5 to 6 acres, consists of 0.06 acre of willow riparian scrub, all within Tocalota Creek, and 0.32 acre of nonnative annual grassland adjacent to Tocalota Creek. The remainder of the site is heavily disturbed, supporting no natural community (Figure 5).

The incised Tocalota Creek drainage borders the site to the south. Tocalota Creek usually has some minor year-round flow, which is fed by water released from Skinner Dam. Vegetation along the narrow linear drainage in the vicinity of the site is dominated by mule fat (*Baccharis salicifolia*), Mexican elderberry (*Sambucus mexicana*), Mediterranean tamarisk (*Tamarix ramosissima*), and willows (primarily *Salix gooddingii* and *S. lasiolepis*).

North of the incised Tocalota Creek drainage is nonnative annual grassland. Grasses noted include ripgut brome (*Bromus diandrus*), foxtail chess (*Brome madritensis* ssp. *rubens*), slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*), and foxtail fescue (*Vulpia myuros*).

Forbs in the nonnative annual grassland community consist of summer mustard, Russian thistle (*Salsola tragus*), annual sunflower (*Helianthus annuus*), common fiddleneck (*Amsinckia menziesii*), red-stemmed filaree (*Erodium cicutarium*), tocalote (*Centaurea melitensis*), common sow thistle (*Sonchus oleraceus*), prickly lettuce (*Lactuca serriola*), telegraph weed (*Heterotheca grandiflora*), western ragweed (*Ambrosia psilostachya*), salt-heliotrope (*Heliotropium curassavicum*), rattlesnake spurge (*Chamaesyce albomarginata*), field bindweed (*Convolvulus arvensis*), and curly dock (*Rumex crispus*). A few shrubs are also found in the nonnative annual grassland, including California buckwheat (*Eriogonum fasciculatum* var. *foliolosum*) and Palmer’s goldenbush (*Ericameria palmeri*).

Vegetation and cover types for the proposed project area were classified as listed below.

**Willow riparian scrub.** Willow riparian scrub within the site is dominated by mule fat, arroyo willow (*Salix lasiolepis*), Emory's baccharis, tree tobacco, Mexican elderberry, and Mediterranean tamarisk. Western ragweed (*Ambrosia psilostachya*), rabbit's foot grass (*Polypogon monspeliensis*), summer mustard, prickly sow thistle (*Sonchus asper*), and cocklebur (*Xanthium strumarium*) dominate the herb layer at the existing culvert crossing at Tualota Creek (Exhibit A, Photographs 1–4).

**Nonnative annual grassland.** Nonnative annual grassland vegetation at the site is dominated by foxtail chess (*Bromus madritensis* ssp. *rubens*), filaree, red brome, pigweed, summer mustard, telegraph weed (*Heterotheca grandiflora*), Russian thistle (*Salsola tragus*), horehound, ripgut brome, and red-stemmed filaree.

**Disturbed.** Disturbed areas, not supporting any natural community, include staging and stockpiling areas and the existing culvert structure across Tualota Creek (Exhibit A, Photograph 1). These areas are unvegetated or hold only scattered, weedy upland species dominated by nonnative annuals, especially Russian thistle and nonnative annual grasses. Most of the soils in this area are highly compacted.

Representative site photographs are included in Exhibit A (Photos 1–4), and a complete compendia of plants observed during the site assessment is included in Exhibit B.

## 8.0 WILDLIFE

The list of wildlife species detected during the field surveys is dominated by common and widespread species expected to be found within the site. Because of the scope and timing of the work, including avian surveys across the spring migration season, the list includes a representative sampling of migrant bird species as well. Mammalian species observed during the field survey included Audubon's cottontail (*Sylvilagus audubonii*) and Beechey's ground squirrel (*Spermophilus beecheyi*). Animals detected by sign (e.g., track, scat) include Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), bobcat (*Lynx rufus*), and mule deer (*Odocoileus hemionus*). A complete list of butterflies and vertebrate wildlife species observed at the project site is included in Exhibit C.

The list of wildlife species detected reflects both the condition and resources of the site, largely very disturbed but with some intact natural communities, and its context. The site is surrounded by open space that is a mix of disturbed areas (e.g., construction zones) and natural communities, especially nonnative annual grassland. There was no clear indication that wildlife use Tualota Creek at the site as a corridor. Given the topography and accessibility of the site and its surroundings, there does not appear to be any basis to assume the creek, or other portions of the proposed project site, provides any substantial function in that role.

## 9.0 SPECIAL-STATUS PLANTS AND WILDLIFE

Special-status biological resources are those species or natural communities 1) listed under federal or state Endangered Species Acts (ESAs), 2) listed as Species of Special Concern by the state, 3) protected under official conservation programs (e.g., multi-species conservation programs), 4) considered sensitive under the California Environmental Quality Act (CEQA), or 5) designated by legislation as requiring protection.

Legal protection for special-status species varies widely, from the relatively comprehensive protection extended to listed threatened/endangered species to no legal status at present. The USFWS, CDFG, local agencies, and special interest groups such as CNPS publish watch lists of declining species. These lists often describe the general nature and perceived severity of the decline. In addition, recently published findings and preliminary results of ongoing research provide a basis for consideration of species that are candidates for state and/or federal listing. Finally, species that are clearly not rare or threatened statewide or regionally but whose local populations are sparse, rapidly dwindling, or otherwise unstable may be considered to be of "local interest."

The general site assessment and review of the CNDDDB and other sources identified the species listed in Tables 1 and 2 as those having the potential to occur in the proposed project vicinity based on geographic proximity. The probabilities of these species to occur within the survey area are ranked in Tables 1 and 2 as follows:

- **High:** species is historically or currently known to occur on-site, and suitable habitat is present;
- **Medium:** species is not known to occur on the site, but suitable habitat is present; or
- **Low:** species is not known to occur on the site, and suitable habitat is not present.

**9.1 Special-Status Plants**

Table 2 summarizes the special-status plant species known in the proposed project vicinity and provides the status, habitat, and potential for these species to occur in the proposed project area. Focused surveys for smooth tarplant, paniculate tarplant, and Robinson's peppergrass were performed during August 2007. Focused surveys for the other sensitive plant species were not performed. For this evaluation, a general reconnaissance site visit was performed during spring 2007, which resulted in the detection of suitable habitat for these species. A probability of occurrence is described in Table 2.

**Table 2. Special-Status Plant Species Known to Occur in the Region**

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
Munz's Onion ( <i>Allium munzii</i> )	FE, ST, List 1B	<i>Veg. Comm.:</i> Chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland/mesic, clay. <i>Blooming Window:</i> Mar.-May. <i>Elevation Window:</i> 300–1070 meters (m) (984–3,511 feet [ft]).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
San Diego Ambrosia ( <i>Ambrosia pumila</i> )	FE, List 1B	<i>Veg. Comm.:</i> Chaparral, coastal scrub, valley and foothill grassland, vernal pools; often in disturbed areas. <i>Blooming Window:</i> Apr.–Oct. <i>Elevation Window:</i> 20–415 m (66–1,362 ft).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
Plummer's Mariposa Lily ( <i>Calochortus plummerae</i> )	List 1B	<i>Veg. Comm.:</i> Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland/granitic, rocky areas. <i>Blooming Window:</i> May–Jul. <i>Elevation Window:</i> 100–1,700 m (328–5,578 ft).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Smooth Tarplant ( <i>Centromadia pungens</i> ssp. <i>laevis</i> )	List 1B	<i>Veg. Comm.:</i> Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland/alkaline areas. <i>Blooming Window:</i> Apr.–Sep. <i>Elevation Window:</i> 0–480 m (0–1,575 ft).	<b>Moderate.</b> This species was observed near the project site during 2002–2003. Not observed during 2007 surveys.
Long-spined Spineflower ( <i>Chorizanthe polygonoides</i> var. <i>longispina</i> )	List 1B	<i>Veg. Comm.:</i> Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland/often clay. <i>Blooming Window:</i> Apr.–Jul. <i>Elevation Window:</i> 30–145 m (98–4,757 ft).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Paniculate Tarplant ( <i>Deinandra paniculatas</i> )	List 4	<i>Veg. Comm.:</i> Coastal sage scrub valley and foothills, usually vernal mesic areas. <i>Blooming Window:</i> Apr.–Nov. <i>Elevation Window:</i> 25–940 m (80–3,000 ft).	<b>High.</b> This species was observed near the project site during 2002–2003. Three individual tarplants were observed during 2007 surveys.
Round-leaved Filaree ( <i>Erodium macrophyllum</i> )	List 2	<i>Veg. Comm.:</i> Cismontane woodland, valley and foothill grassland/clay soils. <i>Blooming Window:</i> Mar.–May <i>Elevation Window:</i> 15–1,200 m (49–3,937 ft).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Robinson's Pepper-Grass ( <i>Lepidium virginicum</i> var. <i>robinsonii</i> )	List 1B	<i>Veg. Comm.:</i> Chaparral, coastal scrub. <i>Blooming Window:</i> Jan.–Jul. <i>Elevation Window:</i> 1–885 m (3–2,904 ft).	<b>Low.</b> Potential based on the species' habitat preferences and known geographic distribution. Not observed during 2007 surveys.
Spreading Navarretia ( <i>Navarretia fossalis</i> )	FT, List 1B	<i>Veg. Comm.:</i> Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools. <i>Blooming Window:</i> Apr.–Jun. <i>Elevation Window:</i> 30–1,300 m (98–4,265 ft).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
California Orcutt Grass ( <i>Orcuttia californica</i> )	FE, SE, List 1B	Vernal pools, drying mud flats, vernal mesic grasslands. Ventura County to northern Baja California, including western Riverside County.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.

**STATUS DEFINITIONS**

**USFWS**

- FE: Species designated as endangered under the federal ESA. Endangered = any species in danger of extinction throughout all or a significant portion of its range.  
 FT: Species designated as threatened under the federal ESA. Threatened = species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

**CDFG**

- ST: Threatened = (a species that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by the California ESA).  
 SE: Endangered (a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes).

**CNPS**

- 1B Plants that are rare, threatened, or endangered in California and elsewhere.  
 2 Plants that are rare, threatened, or endangered in California but more common elsewhere.  
 3 Plants about which we need more information—a review list.

**9.2 Special-Status Wildlife**

Table 3 summarizes the special-status wildlife species known in the proposed project vicinity and provides status, habitat, and potential for these species to occur in the proposed project area. Focused surveys for least Bell's vireo and southwestern willow flycatcher were performed during spring and summer 2007. Probability of occurrence is described in the table below.

**Table 3. Special-Status Wildlife Species Known to Occur in the Region**

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
Vernal Pool Fairy Shrimp ( <i>Branchinecta lynchi</i> )	FT	Grasslands and ponded areas such as vernal pools, cattle watering holes, basins, etc. In Southern California, species found primarily in the interior of western Riverside County, central Santa Barbara County, and eastern Orange County. Also, more recently discovered in Los Angeles County.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Riverside Fairy Shrimp ( <i>Streptocephalus woottoni</i> )	FE	Known only from ephemeral pools in southern Orange and western Riverside and San Diego Counties.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
Quino Checkerspot Butterfly ( <i>Euphydryas editha quino</i> )	FE	Meadows or openings within coastal sage scrub or chaparral where food plants ( <i>Plantago erecta</i> and/or <i>Orthocarpus purpurascens</i> ) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently, known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Western Spadefoot ( <i>Scaphiopus hammondi</i> )	SSC	Grasslands and occasionally hardwood woodlands. Largely terrestrial but, for breeding, requires rain pools or other ponded water for 3 or more weeks. Burrows in loose soils during dry season; found in Central Valley and foothills, coast ranges, inland valleys, to Baja California.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Southwestern Pond Turtle ( <i>Clemmys marmorata pallida</i> )	SSC	Permanent or nearly permanent water in a wide variety of habitats; requires basking sites such as partially submerged logs, rocks, or open mud banks. Central California to northwestern Baja California.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
San Diego Coast Horned Lizard ( <i>Phrynosoma coronatum blainvillei</i> )	SSC	Variety of vegetation communities, from grasslands and shrublands to woodlands. Critical factors are the presence of loose soils with a high sand fraction; an abundance of native ants or other insects, especially harvester ants ( <i>Pogonomyrmex</i> spp.); and the availability of both sunny basking spots and dense cover for refuge.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat. Water release regime within Tocalota Creek limits the potential for this species to occur.
Orange-throated Whiptail ( <i>Aspidoscelis hyperythrus</i> )	SSC	Occurs in western Riverside (inland to northeast of Aguanga) and San Diego Counties. Found on or adjacent to floodplains or the terraces of streams, in or by open sage scrub and chaparral communities. Maximum known elevation in California is approximately 1,035 m (3,400 ft), though few occur above 853 m (2,800 ft).	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat. Water release regime within Tocalota Creek limits the potential for this species to occur.

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
White-tailed Kite ( <i>Elanus leucurus</i> )	CFP	Lowland species, apparently rare anywhere in California above 610 m (2,000 ft). Nests are located low in trees and large shrubs near foraging areas in savannahs and at edges between open habitat and woodland or forest areas; resident and migrant.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	FT, SE, CFP	Breeds in forested areas adjacent to large bodies of water (coastal areas, rivers, lakes, and reservoirs). Winters primarily in temperate zone below 500 m (1,640 ft) in elevation. Forages at or near the surface of any body of water, more often close (< 500 m [ $< 1,640$ ft]) to shoreline perch. Roost trees in the western United States are mostly conifers.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Northern Harrier ( <i>Circus cyaneus</i> )	SSC	Formerly a fairly common breeder in much of coastal Southern California, but now nearly extirpated in this role due to loss of native open habitats, especially marshes. It remains fairly common in open country with low human disturbance during migration and in winter.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Ferruginous Hawk ( <i>Buteo regalis</i> )	SSC	Winter visitor to California, with the bulk of breeding range in the Great Basin to the east. Small numbers breed in the northeast corner of the state; hunts in open country from low perches.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Burrowing Owl ( <i>Athene cunicularia</i> )	SSC	Inhabits open, dry, nearly level or level grassland. Found in coastal Southern California. Will occupy man-made niches such as banks and ditches, piles of broken concrete, and even abandoned structures.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	FE, SE	Occurs in riparian habitats along rivers, streams, or other wetlands where dense growths of willows ( <i>Salix</i> spp.) or other plants are present, often with a scattered overstory of cottonwood ( <i>Populus</i> spp.).	<b>Low.</b> Not likely to occur on-site. Habitat on-site not suitable for this species. Surveys performed during spring 2007 yielded negative results.

Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	FE, SE	Species selects dense vegetation low in riparian zones for nesting; most frequently located in riparian stands between 5 and 10 years old. When mature riparian woodland is selected, vireos nest in areas with a substantial robust understory of willows as well as other plant species	<b>Low.</b> Not likely to occur on-site. Habitat on-site is marginal at best for this species. Surveys performed during spring 2007 yielded negative results.
California Horned Lark ( <i>Eremophila alpestris actia</i> )	SSC	Breeds throughout coastal California and the San Joaquin Valley; breeds in bare and short-grass areas in open grassland, desert washes, wetland edges, along dirt roads and other disturbed areas, and even in recently burned areas. It cannot tolerate intensive activity at the nest site, which is located directly on the ground.	<b>High.</b> A few individuals were noted prior to the breeding season in the study area but outside of the project site. Not likely to occur on-site except as occasional visitors due to lack of suitable habitat. Activity at proposed site would likely discourage this species from nesting nearby.
Coastal California Gnatcatcher ( <i>Polioptila californica californica</i> )	FT, SSC	Year-round resident of sage scrub of several subtypes; within California. It extends east into western San Bernardino County and well across cismontane Riverside County.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Yellow-breasted Chat ( <i>Icteria virens</i> )	SSC	Nests in low thickets in riparian habitats, eats a variety of insects, and has the unusual habit of singing both day and night. It is a local and uncommon breeder and rare migrant across Southern California.	<b>High.</b> One individual observed in the creek, near to the project site, judged to be a migrant. Not likely to occur on-site other than as a rare migrant. Habitat on-site is marginal for this species.
Ashy (Southern California) Rufous-crowned Sparrow ( <i>Aimophila ruficeps canescens</i> )	SSC	Fairly common, widespread, and generally fairly conspicuous resident of rocky grassland and patchy shrub habitats, often including areas with disturbance.	<b>High.</b> One individual observed in grassland near the project site but no indication of nesting on or adjacent to site. Not likely to occur on-site apart from occasional wandering. Habitat on-site is marginal for this species.
Bell's Sage Sparrow ( <i>Amphispiza belli belli</i> )	SSC	Uncommon resident of chaparral and sage scrub from Northern California south into Baja California. Typical habitat includes shaded, sandy to gravelly soils at the bases of shrubs with sage scrub.	<b>Low.</b> Not likely to occur on-site. Habitat on-site is marginal at best for this species.
San Diego Black-tailed Jackrabbit ( <i>Lepus californicus bennettii</i> )	SSC	Common throughout state except at high elevations in herbaceous and desert shrub areas, sage scrub, grasslands, open chaparral, and woodland/forest areas; relatively disturbance tolerant.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.



Scientific Name Common Name	Sensitivity Status <sup>1</sup>	General Habitat Description	Potential to Occur within the Survey Area
Northwestern San Diego Pocket Mouse ( <i>Chaetodipus</i> [ <i>Perognathus fallax</i> ] <i>fallax</i> )	SSC	Found in sandy herbaceous areas, usually in association with rocks and coarse gravel in southwest California, coastal areas, and desert border areas in Riverside County. Vegetation community preferences include sage scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, and desert scrub.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
Stephens' Kangaroo Rat ( <i>Dipodomys stephensi</i> )	FE, ST	Found in Riverside and San Diego Counties; often found in ecotones or boundaries between habitat types (especially grasslands and sage scrub). Prefers areas with < 50% perennial cover. Soil requirements include the ability to support required vegetation types and densities and compaction characteristics suitable to burrowing (i.e., stable, but not too difficult to dig).	<b>Low.</b> Not likely to occur on-site. Reconnaissance survey performed during June 2007 concluded that the proposed project area lacks suitable habitat for this species.
Los Angeles Pocket Mouse ( <i>Perognathus longimembris brevinasus</i> )	SSC	Found in open ground; prefers fine sandy soils (for burrowing) but is also found commonly on gravel washes and on stony soils within brush and woodland habitats. It is rarely found on sites with a high cover of rocks.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.
San Diego Desert Woodrat ( <i>Neotoma lepida intermedia</i> )	SSC	Distributed from central California southward well into Baja California; locally common in a variety of sunny shrub habitats, frequently in rocky and/or steep terrain and upper drainages. Often builds its dens low in cactus or rock crevices but will use other sites as needed.	<b>Low.</b> Not likely to occur on-site due to lack of suitable habitat.

**STATUS DEFINITIONS**

**USFWS**

- FE: Species designated as endangered under the federal ESA. Endangered = any species in danger of extinction throughout all or a significant portion of its range.
- FT: Species designated as threatened under the federal ESA. Threatened = species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- FPE: Proposed for federal listing as Endangered.
- SOC: Species of Concern.

**CDFG**

- ST: Threatened = (a species that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by the California ESA).
- SE: Endangered (a species is endangered when its prospects of survival and reproduction are in immediate jeopardy from one or more causes).
- SSC: Species of Special Concern.
- CFP: California Fully Protected species.

## 10.0 SURVEY RESULTS

Impacts associated with development of the proposed solar power generation facility would consist of the removal of 0.06 acre of willow riparian scrub (0.01-acre permanent loss, 0.05-acre temporary disturbance), all within Tocalota Creek, and 0.32 acre of nonnative annual grassland (0.05-acre permanent loss, 0.27-acre temporary disturbance), adjacent to Tocalota Creek, to widen the existing creek crossing. The remainder of the 5- to 6-acre proposed project footprint is disturbed area, supporting no natural community.

### 10.1 Plants

The literature review identified 10 sensitive plant species as having the potential to occur within the proposed project area based on geographic proximity (Table 2). After the reconnaissance survey conducted in February 2007, Jones & Stokes identified only three of the 10 special-status species as having any reasonable potential to occur on-site: smooth tarplant, paniculate tarplant, and Robinson's peppergrass. Focused surveys addressed these species during March, June, and August 2007. Three paniculate tarplant (CNPS List 4) individuals were observed at the crossing over Tocalota Creek, inside the project footprint. Given the work performed, there is no reasonable potential for more than a few individuals of any of these three non-listed species to occur. This is due to the limited extent of the site; the types of disturbance, which are not well-tolerated by these species; and failure to find additional individuals of any of these species during the fieldwork. The biologist who conducted the work, Kurt Campbell, is familiar with these species and sought both live and dead individuals of all three annual species.

### 10.2 Wildlife

The literature review identified 24 special-status wildlife species as having the potential to occur within the proposed project area based on geographic proximity (Table 3). Single individuals of three species, California Horned Lark, Yellow-breasted Chat, and Southern California Rufous-crowned Sparrow, were noted on or closely adjacent to the site during current work (see Table 3). None of these is anticipated to nest on the site, and use of the site by these species is anticipated to be both rare and limited to small numbers. None of the other 21 species identified in Table 3 are likely to occur within the proposed project area due to the absence of vegetation on the proposed project site pad and the activity level at the site (i.e., truck traffic, stockpiling material, and noise).

Focused surveys for least Bell's vireo and southwestern willow flycatcher were conducted within Tocalota Creek during spring and summer 2007. Neither of these bird species was observed during these studies and both are absent at this time.

A reconnaissance survey to assess the proposed project site for Stephens' kangaroo rat was conducted during June 2007. No sign of SKR was observed on or adjacent to the proposed project site by ENVIRA. As long as the current activities continue within the project area, it is unlikely that Stephens' kangaroo rat could colonize the area. The species is absent at this time.

### 10.3 Jurisdictional Delineation

A jurisdictional delineation was performed at the Tocalota Creek culvert crossing during July 2007. Tocalota Creek is described as an intermittent stream containing willow riparian scrub. Tocalota Creek meets the three parameters (i.e., hydrophytic vegetation, hydrology, and hydric soils) for wetlands in all the areas.

The culvert widening at Tocalota Creek would result in fill over 0.04 acre of U.S. Army Corps of Engineers (USACE) jurisdictional wetlands. This includes permanent impacts on 0.02 acre (40 linear feet) and temporary impacts on an additional 0.02 acre (60 additional linear feet)

The culvert widening at Tocalota Creek would result in impacts on 0.07 acre of state streambeds, including adjacent riparian vegetation. This includes permanent impacts on 0.03 acre and temporary impacts on an additional 0.04 acre.

## 11.0 REFERENCES

- American Ornithologists' Union. 1998. *Checklist of North American Birds*, 7th edition. American Ornithologists' Union, Washington, D.C.
- Behler, J.L., and F.W. King. 1998. *National Audubon Society Field Guide to North American Reptiles and Amphibians*. Alfred A. Knopf, New York. 743 pp.
- Bramlet, D.E. 1995. Habitat and Land Cover Classification System for the Southwestern Riverside County (Shipley) Multi-Species Reserve and Adjacent Areas. Unpublished draft, prepared for Metropolitan Water District.
- California Department of Fish and Game. 2007a. *California Natural Diversity (RareFind) Database*. California Department of Fish and Game, Natural Heritage Division, Sacramento.
- California Department of Fish and Game. 2007b. List of Special Animals. *Wildlife and Habitat Data Analysis Branch California Natural Diversity Database*.
- California Native Plant Society (CNPS). 2007. *Electronic Inventory of Rare and Endangered Vascular Plants of California*. California Native Plant Society, Sacramento.
- ENVIRA. 2007. Lake Skinner Stephens' Kangaroo Rat Habitat and Presence/Absence Assessment. Philippe Vergne, ENVIRA (USFWS TE-06872-1 and CDFG MOU for SKR). June 12.
- Hickman, J.C. (ed.). 1993. *The Jepson Manual; Higher Plants of California*. University of California Press, Berkeley.
- Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. State of California Department of Fish and Game, Non-game Heritage Program, Sacramento.
- Jones, J. K., R. Hoffmann, D. Rice, C. Jones, R. Baker, and M. Engstrom. 1992. *Revised Checklist of North American Mammals north of Mexico*. Occasional Papers: The Museum of Texas Tech University. 23 pp.
- Knecht, A.A. 1971. Soil Survey of Western Riverside Area, California. U.S. Department of Agriculture Soil Conservation Service.
- Metropolitan Water District of Southern California. 1991. Eastside Reservoir Project Final Environmental Impact Report. Los Angeles, CA.
- Metropolitan Water District of Southern California. 2003. Robert A. Skinner Filtration Plant Reliability and Quality Program. Los Angeles, CA. May.
- Munz, P.A. 1974. *A Flora of Southern California*. University of California Press, Berkeley.
- Sawyer, J.O., and T. Keeler-Wolf. n.d. *A Manual of California Vegetation*. California Native Plant Society, Sacramento.
- Sibley, D.A. 2000. *The Sibley Guide to Birds*. National Audubon Society. Alfred A. Knopf, New York. 544 pp.
- Small, A. 1994. *California Birds: Their Status and Distribution*. Ibis Publishing Company. Vista, California.

U.S. Fish and Wildlife Service. 2000. Survey Protocol for Southwestern Willow Flycatcher Revised: July 11, 2000. Available: <[http://www.fws.gov/ventura/sppinfo/protocols/swwf\\_protocol\\_memo.pdf](http://www.fws.gov/ventura/sppinfo/protocols/swwf_protocol_memo.pdf)>.

U.S. Fish and Wildlife Service. 2001. Survey Protocol for Least Bell's Vireo. Revised: January 19, 2001. Available: <[http://www.fws.gov/ventura/sppinfo/protocols/leastbellsvireo\\_survey-guidelines.pdf](http://www.fws.gov/ventura/sppinfo/protocols/leastbellsvireo_survey-guidelines.pdf)>.

Zeiner, D.C., W. F. Laudenslayer Jr., K.E. Mayer, M. White (eds.). 1990. *California's Wildlife Vol. 3: Mammals*. California Department of Fish and Game, The Resources Agency, Sacramento.

## 12.0 FIGURES

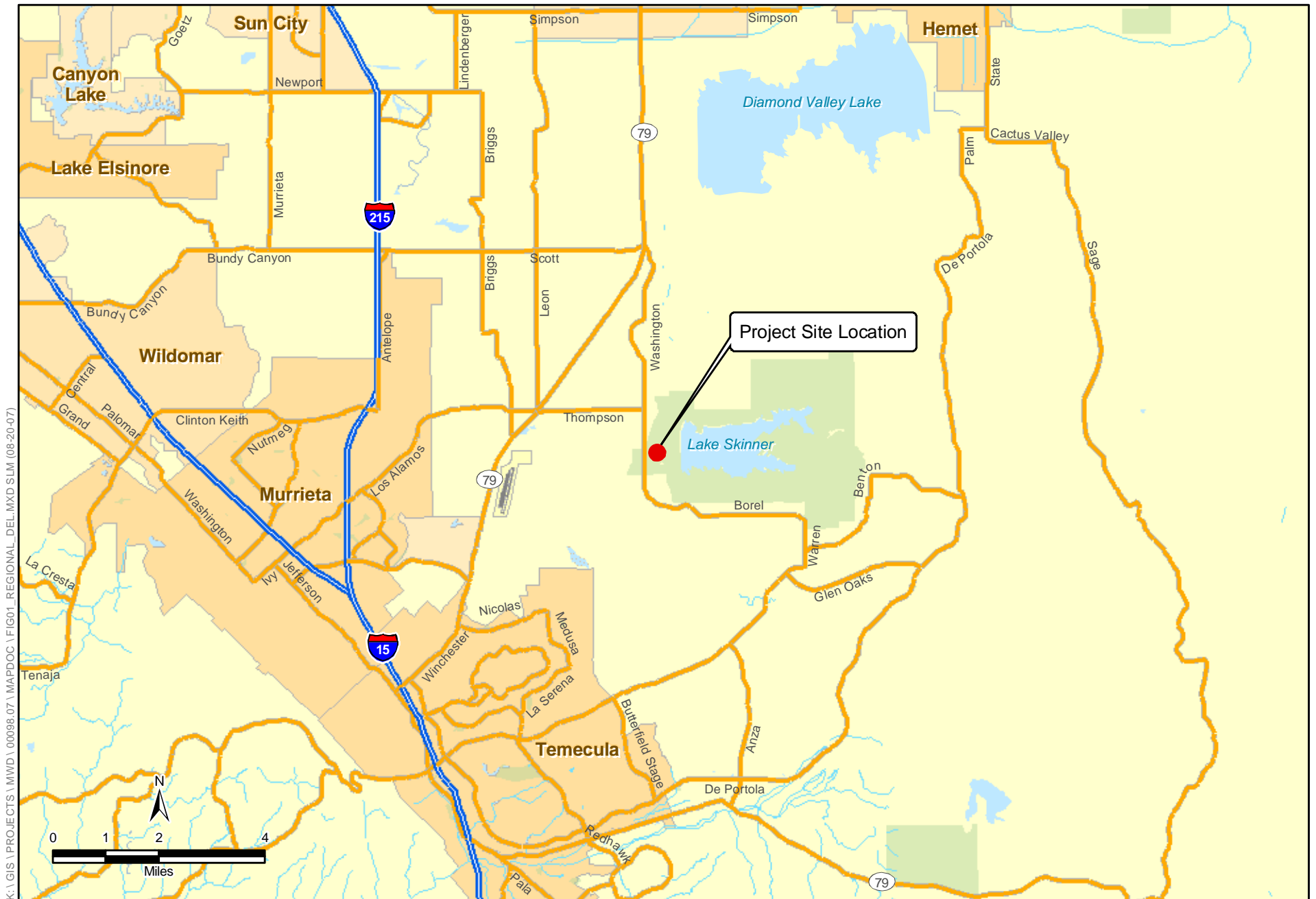
Figure 1 – Regional Map

Figure 2 – Vicinity Map

Figure 3 – Proposed Project Boundary

Figure 4 – Soils Map

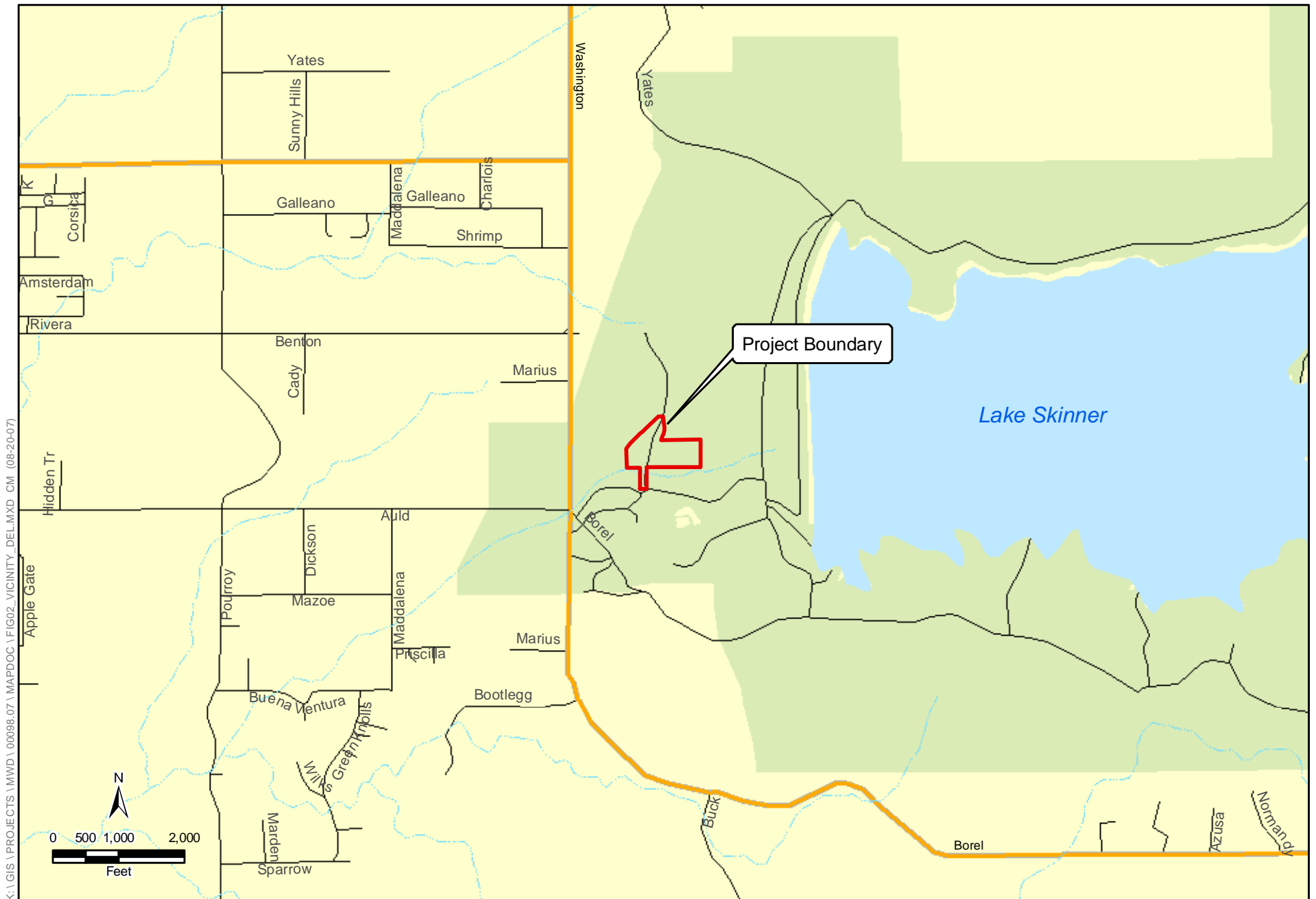
Figure 5 – Vegetation Map



K:\GIS\PROJECTS\MWD\00098.07\MAPDOC\FIG01\_REGIONAL\_DELMXD\_SLM(08-20-07)

SOURCE: ESRI Streetmap USA (2006)

**Figure 1**  
**Regional Map**  
**The Metropolitan Water District of Southern California**  
**Proposed Solar Power Generation Facility at Lake Skinner**



K:\GIS\PROJECTS\MWD\00098.07\MAPDOC\_V\FIG02\_VICINITY\_DELMXD\_CM (08-20-07)

SOURCE: ESRI Streetmap USA (2006); MWD



**Figure 2**  
**Vicinity Map**  
**The Metropolitan Water District of Southern California**  
**Proposed Solar Power Generation Facility at Lake Skinner**



SOURCE: ESRI USA Imagery (2007); MWD

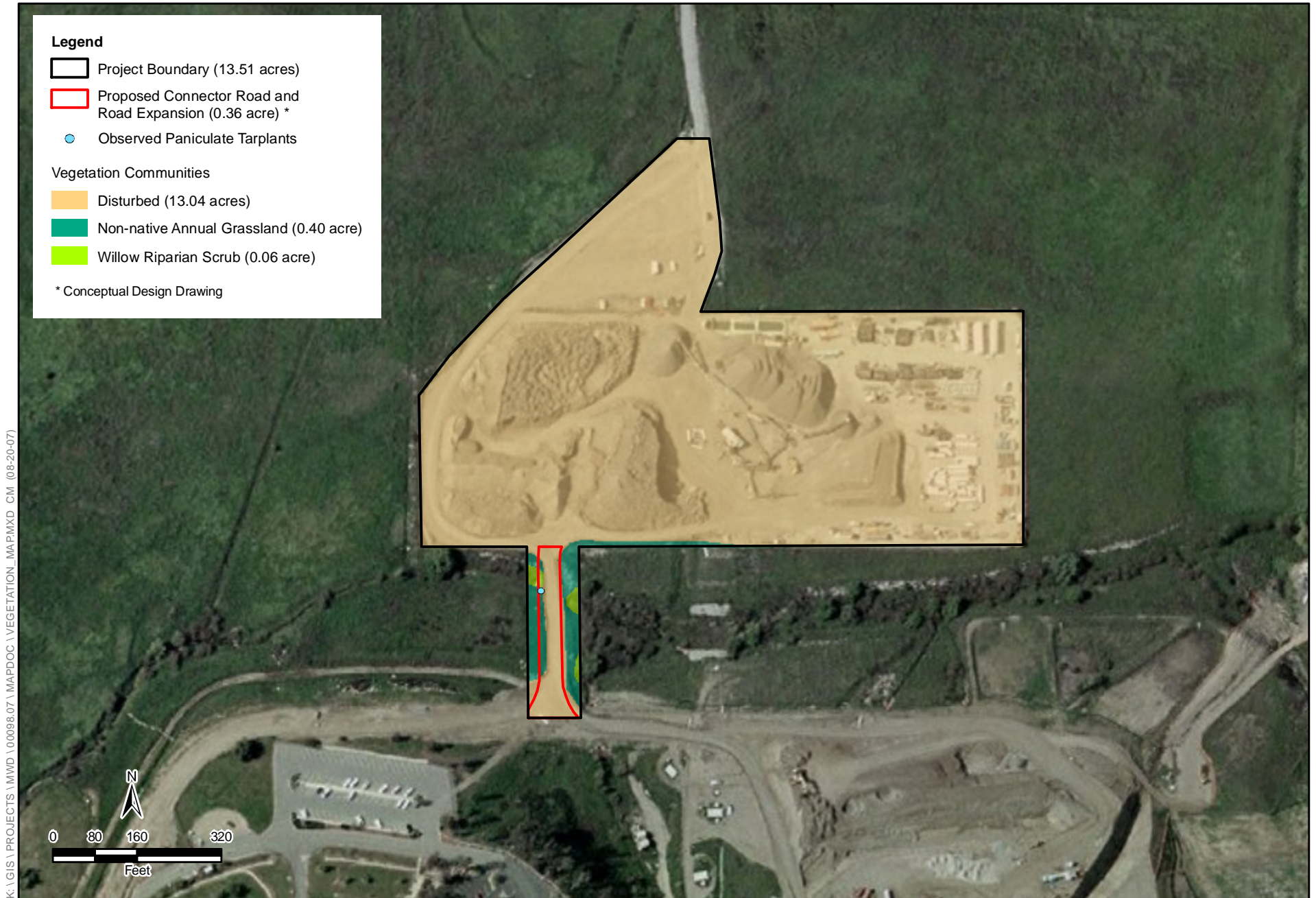
**Figure 3**  
**Proposed Project Boundary**  
**The Metropolitan Water District of Southern California**  
**Proposed Solar Power Generation Facility at Lake Skinner**





SOURCE: ESRI USA Imagery (2007); SSURGO

**Figure 4**  
**Soils Map**  
The Metropolitan Water District of Southern California  
Proposed Solar Power Generation Facility at Lake Skinner



SOURCE: ESRI USA Imagery (2007); MWD

**Figure 5**  
**Proposed Project and Vegetation Map**  
The Metropolitan Water District of Southern California  
Proposed Solar Power Generation Facility at Lake Skinner



**EXHIBIT A      PHOTOGRAPHS OF THE PROJECT AREA**



**Photo 1:** Looking northwest along haul road that crosses Tucalota Creek.



**Photo 2:** Looking northeast toward project site. Tucalota Creek is in the foreground.



**Photo 3:** Looking east toward Lake Skinner Dam.



**Photo 4:** Looking northeast toward stockpile. Tocalota Creek is in the foreground.

## EXHIBIT B VASCULAR PLANT SPECIES OBSERVED

The following plant species were observed in the study area by Jones & Stokes biologists during site surveys conducted at the proposed Solar Power Generation Facility at the Skinner Plant during spring 2007.

\*Nonnative species

### ANGIOSPERMAE: DICOTYLEDONAE

#### Amaranthaceae

*Amaranthus blitoides*

#### Apiaceae

*Daucus pusillus*

*Tauschia arguta*

*Tauschia parishii*

#### Asteraceae

*Ambrosia acanthicarpa*

*Ambrosia psilostachya*

*Artemisia californica*

*Artemisia douglasiana*

*Baccharis emoryi*

*Baccharis salicifolia*

\**Centaurea melitensis*

*Conyza canadensis*

*Deinandra paniculate*

*Encelia californica*

*Encelia farinosa*

*Ericameria palmeri*

*Filago californica*

*Gnaphalium bicolor*

*Helianthus annuus*

*Heterotheca grandiflora*

*Isocoma menziesii* var. *menziesii*

\**Lactuca serriola*

*Lessingia filaginifolia*

*Lessingia glandulifera* var. *glandulifera*

*Malacothrix saxatilis* var. *tenuifolia*

\**Picris echioides*

\**Senecio vulgaris*

\**Sonchus arvensis*

\**Xanthium strumarium*

#### Boraginaceae

*Amsinckia menziesii* var. *intermedia*

*Heliotropium curassavicum*

### DICOT FLOWERING PLANTS

#### Amaranth Family

Prostrate pigweed

#### Carrot Family

Rattlesnake weed

Southern tauschia

Parish's tauschia

#### Sunflower Family

Annual bur-sage

Western ragweed

Californiasagebrush

Mugwort

Emory baccharis

Mulefat

Tocalote

Common horseweed

Paniculate tarweed

California encelia

Brittlebush

Palmer's glodenbush

California filago

Bicolored cudweed

Western sunflower

Telegraph weed

Menzies' goldenbush

Prickly lettuce

Cudweed aster

Valley lessingia

Cliff malacothrix

Bristly ox-tongue

Common groundsel

Perennial sow-thistle

Common cocklebur

#### Borage Family

Common fiddleneck

Salt heliotrope

**Brassicaceae**\**Hirschfeldia incana***Cactaceae***Opuntia littoralis***Caprifoliaceae***Sambucus mexicana***Chenopodiaceae**\**Chenopodium album*\**Salsola tragus***Convolvulaceae**\**Convolvulus arvensis***Cucurbitaceae***Cucurbita foetidissima***Cuscutaceae***Cuscuta californica***Euphorbiaceae***Chamaesyce albomarginata**Croton californicus**Eremocarpus setigerus*\**Ricinis communis***Fabaceae***Lotus scoparius* var. *scoparius**Lotus strigosus*\**Medicago polymorpha***Frankeniaceae***Frankenia salina***Gentianaceae***Centaurium venustum***Geraniaceae**\**Erodium cicutarium***Hydrophyllaceae***Phacelia distans***Lamiaceae**\**Marrubium vulgare**Salvia apiana**Salvia mellifera***Mustard Family**

Shortpod mustard

**Cactus Family**

Coastal prickly pear

**Honeysuckle Family**

Mexican elderberry

**Goosefoot Family**

Lamb's quarters

Russian-thistle

**Morning-glory Family**

Field bindweed

**Gourd Family**

Calabazilla

**Dodder Family**

California witch's hair

**Spurge Family**

Rattlesnake spurge

California croton

Doveweed

Castor bean

**Legume Family**

Coastal deerweed

Strigose lotus

California burclover

**Frankenia Family**

Alkali heath

**Gentian Family**

Canchalagua

**Geranium Family**

Red-stemmed filaree

**Waterleaf Family**

Common phacelia

**Mint Family**

Horehound

White sage

Black sage

**Malvaceae**\**Malva parviflora***Polygonaceae***Eriogonum fasciculatum*\**Rumex crispus***Salicaceae***Populus fremontii* ssp. *fremontii**Salix exigua**Salix gooddingii**Salix laevigata**Salix lasiolepis***Solanaceae***Datura wrightii*\**Nicotiana glauca***Tamaricaceae**\**Tamarix ramosissima***Urticaceae***Urtica dioica* ssp. *holosericea***Mallow Family**

Cheeseweed

**Buckwheat Family**

California buckwheat

Curly dock

**Willow Family**

Western cottonwood

Narrow-leaved willow

Goodding's black willow

Red willow

Arroyo willow

**Nightshade Family**

Jimsonweed

Tree tobacco

**Tamarisk Family**

Mediterranean tamarisk

**Nettle Family**

Hoary nettle

**ANGIOSPERMAE: MONOCOTYLEDONAE MONOCOT FLOWERING PLANTS****Cyperaceae***Cyperus esculentus***Sedge Family**

Yellow umbrella-sedge

**Poaceae**\**Avena barbata*\**Avena fatua*\**Bromus madritensis* ssp. *rubens*\**Bromus diandrus*\**Bromus hordeaceus**Distichlis spicata**Leymus triticoides*\**Polypogon monspeliensis*\**Vulpia myuros***Grass Family**

slender oak

Wild oat

Foxtail chess

Ripgut brome

soft chess

Saltgrass

Beardless wild-rye

Rabbitfoot grass

Foxtail fescue

**Typhaceae***Typha domingensis***Cat-tail Family**

Southern cat-tail

Taxonomy and scientific nomenclature conform to Hickman (1993) and Roberts (1998).





## EXHIBIT C WILDLIFE SPECIES OBSERVED

The following wildlife species were observed in the study area by Jones & Stokes biologists during site surveys conducted at the proposed Solar Power Generation Facility at the Skinner Plant during spring 2007.

\*Nonnative species

### LEPIDOPTERA

#### Papilionidae

*Papilio zelicaon*  
*Papilio rutulus rutulus*

#### Pieridae

\**Pieris rapae*  
*Anthocharis sara*

#### Nymphalidae

*Vanessa cardui*

#### Lycaenidae

*Apodemia mormo virgulti*

### AMPHIBIA

#### Hylidae

*Hyla regilla*

### REPTILIA

#### Iguanidae

*Sceloporus occidentalis*  
*Uta stansburiana*

### AVES

#### Cathartidae

*Cathartes aura*

#### Anatidae

*Anas platyrhynchos*

#### Accipitridae

*Accipiter cooperi*  
*Buteo lineatus*

#### Falconidae

*Falco sparverius*

### BUTTERFLIES

#### Swallowtails

Anise swallowtail  
Western tiger swallowtail

#### Whites, Orangetips, and Sulphurs

Cabbage butterfly  
Sara orangetip

#### Brush-footed Butterflies

Painted lady

#### Metalmarks, Hairstreaks, Coppers, and Blues

Behr's metalmark

### AMPHIBIANS

#### Treefrogs

Pacific treefrog

### REPTILES

#### Iguanid Lizards

Western fence lizard  
Side-blotched lizard

### BIRDS

#### New World Vultures

Turkey vulture

#### Swans, Geese and Ducks

Mallard

#### Kites, Hawks, Eagles, and Ospreys

Cooper's hawk  
Red-shouldered hawk

#### Falcons

American kestrel

**Odontophoridae***Callipepla californica***Charadriidae***Charadrius vociferus***Laridae***Larus* sp.**Columbidae***Zenaida macroura***Cuculidae***Geococcyx californianus***Trochilidae***Calypte anna**Calypte costae***Picidae***Picoides nuttallii***Tyrannidae***Contopus sordidulus**Empidonax difficilis**Sayornis nigricans**Sayornis saya**Myiarchus cinerascens**Tyrannus vociferans**Tyrannus verticalis***Vireonidae***Vireo gilvus***Corvidae***Corvus brachyrhynchos**Corvus corax***Alaudidae***Eremophila alpestris***Hirundinidae***Tachycineta thalassina**Stelgidopteryx serripennis**Hirundo rustica**Petrochelidon pyrrhonota***Aegithalidae***Psaltriparus minimus***New World Quail**

California quail

**Plovers and Lapwings**

Killdeer

**Jaegers, Gulls, and Terns**

Gull

**Pigeons and Doves**

Mourning dove

**Cuckoos, Roadrunners**

Greater roadrunner

**Hummingbirds**

Anna's hummingbird

Costa's hummingbird

**Woodpeckers**

Nuttall's woodpecker

**Tyrant Flycatchers**

Western wood-pewee

Pacific-slope flycatcher

Black phoebe

Say's phoebe

Ash-throated flycatcher

Cassin's kingbird

Western kingbird

**Vireos**

Warbling vireo

**Jays, Magpies, and Crows**

American crow

Common raven

**Larks**

Horned lark

**Swallows**

Violet-green swallow

Northern rough-winged swallow

Barn swallow

Cliff swallow

**Bushtits**

Bushtit

**Troglodytidae**

*Thryomanes bewickii*  
*Troglodytes aedon*

**Turdidae**

*Sialia mexicana*

**Timaliidae**

*Chamaea fasciata*

**Mimidae**

*Toxostoma redivivum*

**Sturnidae**

\**Sturnus vulgaris*

**Ptilogonatidae**

*Phainopepla nitens*

**Parulidae**

*Dendroica townsendi*  
*Oporornis tolmiei*  
*Geothlypis trichas*  
*Wilsonia pusilla*  
*Icteria virens*

**Thraupidae**

*Piranga ludoviciana*

**Emberizidae**

*Pipilo maculatus*  
*Pipilo crissalis*  
*Aimophila ruficeps canescens*  
*Passerculus sandwichensis*  
*Melospiza melodia*  
*Zonotrichia leucophrys*

**Cardinalidae**

*Guiraca caerulea*  
*Passerina amoena*

**Icteridae**

*Agelaius phoeniceus*  
*Sturnella neglecta*  
*Icterus cucullatus*  
*Icterus bullockii*

**Fringillidae**

*Carpodacus mexicanus*  
*Carduelis psaltria*  
*Carduelis tristis*

**Wrens**

Bewick's wren  
House wren

**Solitaires, Thrushes, and Allies**

Western bluebird

**Babblers**

Wrentit

**Mimic Thrushes**

California thrasher

**Starlings**

European starling

**Silky-Flycatchers**

Phainopepla

**Wood Warblers**

Townsend's warbler  
MacGillivray's warbler  
Common yellowthroat  
Wilson's warbler  
Yellow-breasted chat

**Tanagers**

Western tanager

**New World Sparrows**

Spotted towhee  
California towhee  
Southern California rufous-crowned sparrow  
Savannah sparrow  
Song sparrow  
White-crowned sparrow

**Cardinalid Finches**

Blue grosbeak  
Lazuli bunting

**American Orioles**

Red-winged blackbird  
Western meadowlark  
Hooded oriole  
Bullock's oriole

**Fringillid Finches**

House finch  
Lesser goldfinch  
American goldfinch

**MAMMALIA**

**Leporidae**

*Sylvilagus audubonii*

**Sciuridae**

*Spermophilus beecheyi*

**Geomyidae**

*Thomomys bottae*

**Canidae**

*Canis latrans*

**Cervidae**

*Odocoileus hemionus*

**MAMMALS**

**Rabbits and Hares**

Audubon cottontail

**Squirrels**

Beechey's ground squirrel

**Pocket Gophers**

Botta's pocket gopher

**Foxes, Wolves, and Allies**

Coyote

**Deer, Elk, and Allies**

Mule deer

Taxonomy and nomenclature follows American Ornithologists' Union (The A.O.U. Checklist of North American Birds, 7<sup>th</sup> Ed. American Ornithologists' Union, Washington D.C. 1998.).

**Appendix C**  
**CULTURAL RESOURCES MEMO**



**MEMO**

TO: Shilpa Trisal

FROM: Mark Robinson

DATE: 13 March 2007

RE: Cultural Resources Study for the Lake Skinner Solar Project

The proposed Metropolitan Water District of Southern California (Metropolitan) Solar Power facility at Robert A. Skinner Water Treatment Plant (Skinner Plant) lies in an area that has been subject to previous cultural resources work. To confirm this, previous documents were reviewed, including a record search at the Eastern Information Center. This record search was conducted on March 6, 2007.

Results of the record search indicate that the project area was previously surveyed, as well as the surrounding quarter section. No cultural resources were located during these surveys. Six prehistoric sites and one historic site have been recorded within a one-mile radius of the project area. All of these sites are located within the uplands south of Tualota Creek, or at the base of Bachelor Mountain. The project area, within the Tualota Creek floodplain, appears to have a low potential to encompass significant cultural resources. Because the area has been previously surveyed, no survey was conducted for this project.

The project site is currently being used for construction and materials staging for the Oxidation Retrofit Program (ORP) at the Skinner Plant Reliability. Use of the site for construction and materials staging was addressed in a Mitigated Negative Declaration (MND) prepared in 2004. Archaeological and paleontologic monitoring was conducted as 2004 MND mitigation during grading and establishment of the 10.3-acre construction use area for the ORP Project, the area of the present Project, during which time no cultural resources were found. Given that grading has already occurred in the project area, the potential for discovery of cultural or fossil resources during the present project is low.





Robert A. Skinner Water Treatment Plant  
Solar Power Generation Facility

Negative Declaration

Responses to Comments

SCH #2007081122  
Report No. 1390

August 2007



**MWD**

*METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA*

**1.0           RESPONSES TO COMMENTS****1.1           INTRODUCTION**

Public review of the Negative Declaration (ND) for the Robert A. Skinner Water Treatment Plant Solar Power Generation Facility began on August 23, 2007 and ended on September 21, 2007. Only two comment letters were received from public agencies. These letters, their written comments, together with the Metropolitan response to those comments, are included immediately following this page.

**1.2           LIST OF AGENCIES COMMENTING ON THE NEGATIVE  
DECLARATION****STATE AGENCIES**

- A. Native American Heritage Commission
- B. Governor's Office of Planning and Research, State Clearinghouse

**NATIVE AMERICAN HERITAGE COMMISSION, LETTER DATED  
SEPTEMBER 4, 2007**

Response 1: Jones & Stokes conducted a record search for the proposed project at the California Historic Resources Information Center's (CHRIS) Eastern Information Center, which maintains records for Riverside County, on March 6, 2007. The CHRIS Eastern Information Center was previously contacted for record searches for the same project area by Applied EarthWorks in 2001, as well as for surveys conducted in the 1990s for the Southwestern Riverside County Multi-Species Reserve (Reserve).

Response 2: An archaeological survey report was prepared by Applied EarthWorks, Inc. in 2001, for the Oxidation Retrofit Program (ORP) at the Skinner Plant that included the proposed project site. This survey is sufficient for the current project, and an additional survey and report are not required. Also, reports of surveys for the Reserve were prepared in 1996.

Response 3: No new search of the Sacred Lands Files is necessary for the proposed project as prior research does not indicate any sacred sites or traditional cultural properties in the Skinner Plant. Native American groups and individuals participated in the Diamond Valley Lake (Eastside Reservoir) and Southwestern Riverside County Multi-Species Reserve survey and testing programs from 1988 through 2000. Numerous consultations took place with Native American elders and Native American individuals participated in surveys in the Skinner Plant that included the proposed project site. No sacred sites or traditional cultural properties were indicated as existing in the proposed project area during this extensive Native American involvement.

Response 4: As a standard practice for construction at the Skinner Plant, an archaeological monitor will be present at the site during trenching as noted in the Proposed Negative Declaration, under item V(b). Also, archaeological and paleontologic monitoring of the current project area was conducted in 2004 as mitigation during grading and establishment of a 10.3-acre construction use area for the Oxidation Retrofit Program Project, during which time no cultural resources were found.

Response 5: As noted in item V(d) of the Proposed Negative Declaration, if human remains are discovered during construction, the coroner and designated Native American representatives would be notified in accordance with Public Resources Code Section 5097.98, Health and Safety Code Section 7050.5, and State CEQA Guidelines. Also, archaeological and paleontologic monitoring of the current project area was conducted in 2004 as mitigation during grading and establishment of a 10.3-acre construction use area for the Oxidation Retrofit Program Project, during which time no cultural resources were found.

Response 6: These provisions are specifically cited as part of item V(d) in the Proposed Negative Declaration.

Response 7: If cultural resources are located, Metropolitan will avoid them if possible or will follow all applicable laws and treat any discovered resources through standard archaeological practices. These include, but are not limited, to, manual or mechanical excavations, monitoring, soils testing, photography, mapping, or drawing to adequately recover the scientifically consequential information from and about the archaeological resource.

**OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE,  
LETTER DATED SEPTEMBER 24, 2007**

Response 1: Comment noted.

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
e-mail: [ds\\_nahc@pacbell.net](mailto:ds_nahc@pacbell.net)



September 4, 2007

Dr. Debbie Drezner

**METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

700 N. Alameda Street  
Los Angeles, CA 90012

Re: SCH#2007081122 CEQA Notice of Completion: Negative Declaration for Robert A. Skinner Water Treatment Plant Solar Power Generation Facility, French Valley Area, Riverside County, California

Dear Dr. Drezner:

The Native American Heritage Commission is the state's Trustee Agency for Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

- √ Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ <http://www.ohp.parks.ca.gov/1068/files/IC%20Roster.pdf> The record search will determine:
  - If a part or the entire APE has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded in or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- √ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- √ Contact the Native American Heritage Commission (NAHC) for:
  - \* A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section:
  - The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- √ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.
  - \* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

1  
2  
3  
4  
5

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

6

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

7

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton  
Program Analyst

Attachment: List of Native American Contacts

**Native American Contacts**

Riverside County

September 4, 2007

**Cahuilla Band of Indians**

Anthony Madrigal, Jr., Interim-Chairperson

P.O. Box 391760 Cahuilla

Anza , CA 92539

tribalcouncil@cahuilla.net

(951) 763-2631

(951) 763-2632 Fax

**Soboba Band of Mission Indians**

Robert J. Salgado, Chairperson

P.O. Box 487 Luiseno

San Jacinto , CA 92581

varres@soboba-nsn.gov

(951) 654-2765

(951) 654-4198 - Fax

**Pala Band of Mission Indians**

Robert H. Smith, Chairperson

12196 Pala Mission Road, PMB 50 Luiseno

Pala , CA 92059 Cupeno

(760) 891-3500

(760) 742-1411 Fax

**Santa Rosa Band of Mission Indians**

John Marcus, Chairman

P.O. Box 609 Cahuilla

Hemet , CA 92546

srtribaloffice@aol.com

(951) 658-5311

(951) 658-6733 Fax

**Pechanga Band of Mission Indians**

Pault Macarro, Cultural Resource Center

P.O. Box 1477 Luiseno

Temecula , CA 92593

(951) 308-9295 Ext 8106

(951) 676-2768

(951) 506-9491 Fax

**Soboba Band of Luiseño Indians**

Bennae Calac, Cultural Resource Director

P.O. Box 487 Luiseno

San Jacinto , CA 92581

bcalac@soboba-nsn.gov

(951) 663-8332

(951) 654-4198 - FAX

**Ramona Band of Mission Indians**

Joseph Hamilton, vice chairman

P.O. Box 391670 Cahuilla

Anza , CA 92539

admin@ramonatribe.com

(951) 763-4105

(951) 763-4325 Fax

**Pechanga Band of Mission Indians**

Mark Macarro, Chairperson

P.O. Box 1477 Luiseno

Temecula , CA 92593

tbrown@pechanga-nsn.gov

(951) 676-2768

(951) 695-1778 Fax

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American with regard to cultural resources for the proposed SCH#2007081122 CEQA Notice of Completion; Negative Declaration for Robert A. Skinner Water Treatment Plant Solar Power Generation Facility; French Valley; Riverside County, California



**Native American Contacts  
Riverside County  
September 4, 2007**

**Willie Pink**  
48310 Pechanga Road Luiseno  
Temecula , CA 92592  
wjpink@hotmail.com  
(909) 936-1216  
Prefers e-mail contact

**Soboba Band of Luiseno Indians**  
Harold Arres, Cultural Resources Manager  
P.O. Box 487 Luiseno  
San Jacinto , CA 92581  
harres@soboba-nsn.gov  
(951) 654-2765  
FAX: (951) 654-4198

**Cahuilla Band of Indians**  
Maurice Chacon, Cultural Resources  
P.O. Box 391760 Cahuilla  
Anza , CA 92539  
cbandodian@aol.com  
(951) 763-2631  
  
(951) 763-2632 Fax

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

**This list is only applicable for contacting local Native American with regard to cultural resources for the proposed SCH#2007081122 CEQA Notice of Completion; Negative Declaration for Robert A. Skinner Water Treatment Plant Solar Power Generation Facility; French Valley; Riverside County, California**



STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



ARNOLD SCHWARZENEGGER  
GOVERNOR

CYNTHIA BRYANT  
DIRECTOR

September 24, 2007

Debbie Drezner  
Metropolitan Water District of Southern California  
700 N. Alameda Street  
Los Angeles, CA 90012

Subject: Robert A. Skinner Water Treatment Plant Solar Power Generation Facility  
SCH#: 2007081122

Dear Debbie Drezner:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on September 21, 2007, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2007081122  
**Project Title** Robert A. Skinner Water Treatment Plant Solar Power Generation Facility  
**Lead Agency** Metropolitan Water District of Southern California

**Type** Neg Negative Declaration  
**Description** Proposed construction of a 1-megawatt solar power generation facility within Metropolitan's Lake Skinner facility consisting of ground-mounted solar panels on approximately 5 to 6 acres of previously graded, disturbed land.

**Lead Agency Contact**

**Name** Debbie Drezner  
**Agency** Metropolitan Water District of Southern California  
**Phone** (213) 217-5687 **Fax**  
**email**  
**Address** 700 N. Alameda Street  
**City** Los Angeles **State** CA **Zip** 90012

**Project Location**

**County** Riverside  
**City** Hemet  
**Region**  
**Cross Streets** Benton Road and Washington Street  
**Parcel No.** 964-030-010  
**Township** 7S **Range** 2W **Section** 3 **Base** SB

**Proximity to:**

**Highways** 79  
**Airports** French Valley  
**Railways**  
**Waterways** Tualota Creek  
**Schools** French Valley Elementary, Lavorgna Elementary  
**Land Use** Water Filtration Plant / R-R / Public Facilities

**Project Issues** Air Quality; Wetland/Riparian

**Reviewing Agencies** Resources Agency; Regional Water Quality Control Board, Region 8; Department of Parks and Recreation; Native American Heritage Commission; Integrated Waste Management Board; Public Utilities Commission; Department of Health Services; Department of Fish and Game, Region 6; Department of Conservation; Caltrans, District 8; Caltrans, Division of Aeronautics; Department of Toxic Substances Control; State Water Resources Control Board, Clean Water Program; California Energy Commission

**Date Received** 08/23/2007 **Start of Review** 08/23/2007 **End of Review** 09/21/2007

STATE OF CALIFORNIA

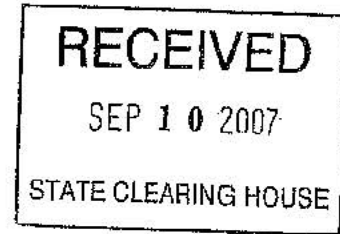
Arnold Schwarzenegger, Governor

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
 SACRAMENTO, CA 95814  
 (916) 653-6251  
 Fax (916) 657-5390  
 Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
 e-mail: [ds\\_nahc@pacbell.net](mailto:ds_nahc@pacbell.net)



September 4, 2007



clear  
 9/21/07  
 e

Dr. Debbie Drezner

**METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

700 N. Alameda Street  
 Los Angeles, CA 90012

Re: SCH#2007081122: CEQA Notice of Completion, Negative Declaration for Robert A. Skinner Water Treatment Plant Solar Power Generation Facility, French Valley Area, Riverside County, California

Dear Dr. Drezner:

The Native American Heritage Commission is the state's Trustee Agency for Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

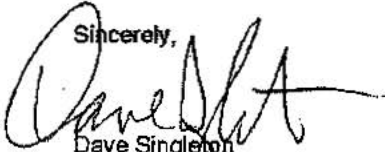
- ✓ Contact the appropriate California Historic Resources Information Center (CHRIS). Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ <http://www.ohp.parks.ca.gov/1068/files/IC%20Roster.pdf> The record search will determine:
  - If a part or the entire APE has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded in or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission (NAHC) for:
  - \* A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity that may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section.
  - The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact (APE). In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s).
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- ✓ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.
  - \* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,



Dave Singleton  
Program Analyst

Attachment: List of Native American Contacts