

DRAFT
**BIOLOGICAL RESOURCES REPORT FOR THE PROPOSED LANWEST
SOLAR FARM LLC PROJECT, SAN DIEGO COUNTY, CALIFORNIA**

(Existing Conditions Only)

PROJECT NUMBER 60212653

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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
ACRONYMS AND ABBREVIATIONS	v
EXECUTIVE SUMMARY	vii
CHAPTER 1 – INTRODUCTION	1
1.1 Purpose of Report	1
1.2 Proposed Project Location and Description.....	1
1.2.1 Project Location	1
1.2.2 Project Description.....	1
1.3 Survey Methods	9
1.3.1 Vegetation Mapping Survey	10
1.3.2 Oak Woodland Assessment	10
1.3.3 Rare Plant Survey	11
1.3.4 Quino Checkerspot Butterfly Survey.....	11
1.3.5 Jurisdictional Wetlands Delineation	12
1.3.6 Survey Limitations.....	13
1.4 Environmental Setting	13
1.4.1 Regional Context	13
1.4.2 Climate.....	14
1.4.3 Hydrology	16
1.4.4 Soils.....	17
1.4.5 Vegetation Communities	20
1.4.6 Flora	27
1.4.7 Fauna.....	27
1.4.8 Sensitive Biological Resources.....	30
1.4.9 Wetlands/Jurisdictional Waters	49
1.4.10 Habitat Connectivity and Wildlife Corridors.....	50
1.5 Applicable Regulations	54
1.5.1 Federal Regulations and Standards	54
1.5.2 State Regulations and Standards.....	57
1.5.3 Local Regulations and Standards.....	60

CHAPTER 2 – REFERENCES	65
CHAPTER 3 – LIST OF PREPARERS	73

APPENDICES

A	Soitec Solar LanWest/East Preapplication Summary Letter
B	45-day Summary Report for 2011 Focused Quino Checkerspot Butterfly Surveys
C	Jurisdictional Delineation Letter Report
D	Floral Compendium
E	Sensitive Plant Species Known or Potentially Occurring
F	Wildlife Compendium
G	Sensitive Wildlife Species Known or Potentially Occurring

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Regional Map.....	2
2 Vicinity Map	3
3 Aerial View of Project Area	4
4 Regional Conservation and Land Ownership	15
5 Soils in Project Area	18
6 Vegetation Communities and Cover Types	22
7 Sensitive Plants Documented within the Project Area	33
8 Sensitive Species Documented within Project Vicinity	36
9 Sensitive Wildlife Species Documented within the Project Area.....	40
10 Jurisdictional Wetlands and Waters/Oak Root Protection Zones	51

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Survey Dates and Personnel for Biological Surveys Conducted within the Project Area	9
2 Temperature and Precipitation Data (1948–2010) for the Campo Weather Station (041424).....	16
3 Soils Occurring within the Project Area	17
4 Vegetation Communities within the Project Area	20
5 Potential Jurisdictional Waters of the U.S. and State Occurring within the Project Area	49

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
AMSL	above mean sea level
AOU	American Ornithologists' Union
APN	Assessor's Parcel Number
BGEPA	Bald and Golden Eagle Protection Act
BLM	Bureau of Land Management
BMO	Biological Mitigation Ordinance
BRR	Biological Resource Report
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
County	County of San Diego
CPV	concentrating photovoltaic
CWA	Clean Water Act
DC	direct current
DPLU	Department of Planning and Land Use
ECMSCP	East County Multiple Species Conservation Program
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FCA	Focused Conservation Area
Gen-tie	generation tie in
GPS	Global Positioning System
HLP	Habitat Loss Permit
HA	Hydrologic Area
HSA	Hydrologic Subarea
HU	Hydrologic Unit
HUC	Hydrologic Unit Code
I-8	Interstate 8
ITP	Incidental Take Permit
JDLR	Jurisdictional Delineation Letter Report

kV	kilovolt
MBTA	Migratory Bird Treaty Act
MSCP	Multiple Species Conservation Program
MW	megawatt
NCCP	Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
NMFS	National Marine Fisheries Service
OHWM	ordinary high water mark
POI	point of interconnection
PPA	power purchase agreement
PRC	Public Resources Code
RCA	Resource Conservation Area
RPO	Resource Protection Ordinance
RWQCB	Regional Water Quality Control Board
SCADA	supervisory control and data acquisition
SDG&E	San Diego Gas and Electric
SR	State Route
SSC	State Species of Special Concern
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
V	volt
WCB	Wildlife Conservation Board
WDR	Waste Discharge Requirement
°F	degrees Fahrenheit

EXECUTIVE SUMMARY

AECOM, on behalf of LanWest Solar Farm LLC, has prepared this Biological Resources Report for the proposed LanWest Solar Farm Project (Proposed Project) located in an unincorporated area of San Diego County, just east of Boulevard, California. Sensitive biological resources are known or have the potential to occur within and adjacent to the project area as identified during biological studies and surveys conducted for the Proposed Project in 2011/2012. These sensitive biological resources have the potential to be impacted by the Proposed Project. Therefore, the purpose of this report is to describe the existing biological resources within and adjacent to the project area; assess the potential impacts to these biological resources associated with the Proposed Project; and recommend measures to avoid, minimize, and mitigate significant impacts consistent with federal, state, and local rules and regulations including the California Environmental Quality Act (CEQA) and County of San Diego (County) Resource Protection Ordinance.

The Proposed Project is a concentrating photovoltaic power plant with alternating current (AC) generating capacity up to approximately 5.44 megawatts (MW) AC. The Proposed Project would be composed of as many as approximately 264 concentrating photovoltaic trackers grouped into four building blocks with up to about 66 trackers and one pair of 630 to 680-kilovolt (kV) inverters each. Each inverter pair is equipped with a small step-up transformer to step the voltage up to 12.5kV, at which level it would interconnect to the local distribution system. The AC inverter capacity determines the nameplate capacity of each building block to be 1.26 to 1.36 MW AC; therefore, with four building blocks and two inverters per building block, the total project capacity is 5.0 to 5.4 MW AC. The Proposed Project would also include an electrical collection system, communication lines within each building block, the construction of a small switch station at or near the southwest corner of the project area, and a 12.5kV dedicated generation tie in (gen-tie) line from the switch station across Old Highway 80 and southwest to the Boulevard substation, a distance of approximately 0.75 mile. The Proposed Project would be constructed on approximately 36.68 acres of relatively flat to gently sloping land. About 17.98 additional acres are included in the project area and are proposed for use as project open space.

Land ownership within and immediately adjacent to the project area is private. Public lands occur within the vicinity of the project area. The Bureau of Land Management administers lands to the northeast, east, southeast, and south of the project area, including the 38,692-acre McCain Valley Resource Conservation Area and the 14,741-acre Carrizo Gorge Wilderness. Additionally, the California Department of Fish and Wildlife (CDFW) manages the Walker Canyon Ecological Reserve, located east of the project area. Finally, the Cleveland National

Forest, administered by the U.S. Forest Service, is located northwest of the project area. In accordance with County of San Diego Guidelines (2010), the entire project area plus 100 feet onto adjoining properties was surveyed to evaluate on-site and immediately adjacent off-site land. The total project area is approximately 54.66 acres.

Several sensitive biological resources are known to occur within and adjacent to the project area based on direct or indirect observations made during the surveys and investigations that were conducted for the Proposed Project during 2011/2012. Other sensitive biological resources were determined to have the potential to occur within and adjacent to the project area based on evaluations made during these surveys and investigations. Biological surveys and investigations conducted for the Proposed Project include vegetation mapping surveys, oak woodland surveys, focused rare plant surveys, a jurisdictional wetlands delineation, and focused Quino checkerspot butterfly (*Euphydryas editha quino*) protocol surveys.

Sensitive vegetation communities occur within and adjacent to the project area, including southern willow scrub, non-vegetated channel, big sagebrush scrub, granitic chamise chaparral, red shank chaparral, semi-desert chaparral (including rock outcrop subtype), wildflower field, coast live oak woodland, and mixed oak woodland. Some of these sensitive vegetation communities, or portions thereof, have been subject to extensive grazing. In addition, potentially jurisdictional “waters of the U.S.” and “waters of the state” were delineated within the project area during surveys conducted in 2011. Approximately 0.93 acre of potential jurisdictional waters was delineated within the project area. Impacts to potential jurisdictional waters of the U.S. and state, including a 50-foot buffer, would be avoided to the extent possible. Unavoidable impacts to waters within the project area would require authorization under Section 404 of the Clean Water Act, certification of compliance under Section 401 of the Clean Water Act, issuance of Waste Discharge Requirements or waiver under Article 4 of Porter-Cologne Water Quality Control Act, a 1602 Streambed Alteration Agreement from the CDFW, and issuance of discretionary development permits and/or determining compliance under Section 86.602 of the County Resource Protection Ordinance. Any impacts to state or federal jurisdictional areas would be considered adverse and significant and potential mitigation would be required.

Five sensitive plant species were documented from the project area during 2011 rare plant surveys: Jacumba milk-vetch (*Astragalus douglasii* var. *perstrictus*), a California Native Plant Society (CNPS) List 1B.2 and County List A species; Tecate tarplant (*Deinandra floribunda*), a CNPS List 1B.2 and County List A species; desert larkspur (*Delphinium parishii* ssp. *subglobosum*), a CNPS List 4 and County List D species; sticky geraea (*Geraea viscida*), a CNPS list 2.3 and County List B species; and desert beauty (*Linanthus bellus*), a CNPS List 2.3

and County List B species. Nineteen additional sensitive plant species were determined to have moderate to high potential to occur within the project area.

Five sensitive wildlife species were documented from the project area during 2011/2012 biological surveys: coastal western whiptail (*Aspidoscelis tigris stejnegeri*), a County Group 2 species; coast horned lizard (*Phrynosoma coronatum blainvillii*), a CDFW Species of Special Concern (SSC) and County Group 2 species; San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), a CDFW SSC and County Group 2 species; southern mule deer (*Odocoileus hemionus fuliginata*), a County Group 2 species; and mountain lion (*Puma concolor*), a County Group 2 species. Twenty-nine additional sensitive wildlife species were determined to have moderate to high potential to occur within the project area.

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CHAPTER 1

INTRODUCTION

1.1 PURPOSE OF REPORT

AECOM, on behalf of LanWest Solar Farm LLC, has prepared this Biological Resources Report (BRR) for the proposed LanWest Solar Farm Project (Proposed Project) in an unincorporated area of San Diego County, just east of Boulevard, California. Sensitive biological resources are known or have the potential to occur within and adjacent to the project area as identified during biological studies and surveys conducted for the Proposed Project in 2011/2012. These sensitive biological resources have the potential to be impacted by the Proposed Project. Therefore, the purpose of this report is to describe the existing biological resources within and adjacent to the project area; assess the potential impacts to these biological resources associated with the Proposed Project; and recommend measures to avoid, minimize, and mitigate significant impacts consistent with federal, state, and local rules and regulations including the California Environmental Quality Act (CEQA) and the County of San Diego (County) Resource Protection Ordinance (RPO).

1.2 PROPOSED PROJECT LOCATION AND DESCRIPTION

1.2.1 Project Location

The 54.66-acre project area lies within the unincorporated area of San Diego County just east of Boulevard, California, in the southeastern portion of the county (Figure 1). The project area is located at an elevation of approximately 3,300 feet above mean sea level (AMSL) and is within Sections 21 and 28 of Township 17S, Range 7E of the Live Oak Springs U.S. Geological Survey (USGS) Quadrangle (Figure 2). The project area is approximately 0.5 mile west of McCain Valley Road, which runs north to south, and is bordered by Old Highway 80 to the south and Interstate 8 (I-8) to the north. The project area consists of Assessor's Parcel Numbers (APNs) 612-09-113 and 612-03-018 (Figure 3).

1.2.2 Project Description

1.2.2.1 Project Components

The Proposed Project is a concentrating photovoltaic (CPV) power plant with alternating current (AC) generating capacity up to approximately 5.44 megawatts (MW) AC. The Proposed Project



Source: Soitec 2011; AECOM 2011; ESRI 2011

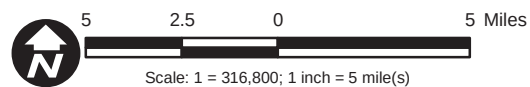
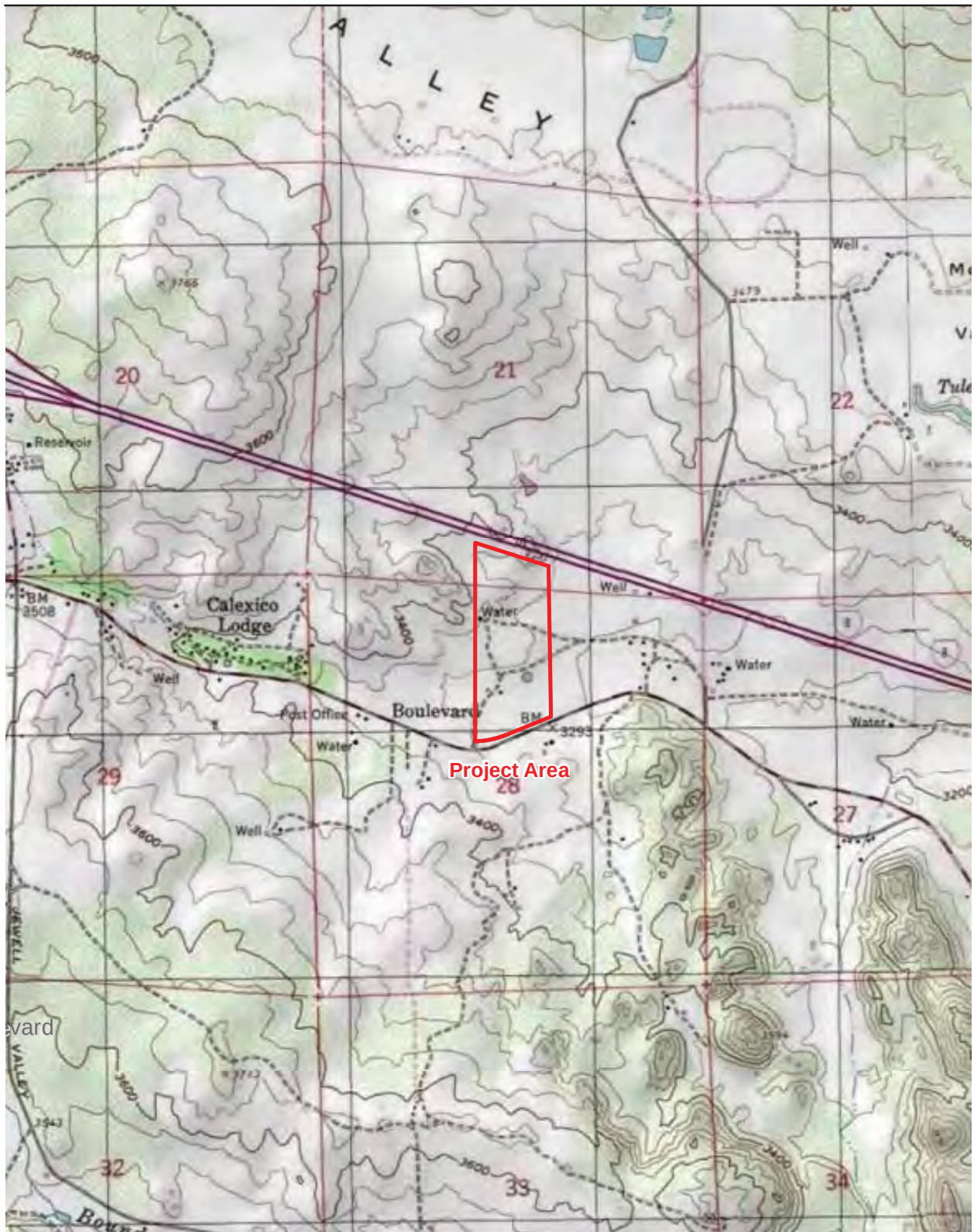


Figure 1
Regional Map



Source: USGS; Soitec 2011; AECOM 2011

Live Oak Springs USGS Quadrangle, San Diego County

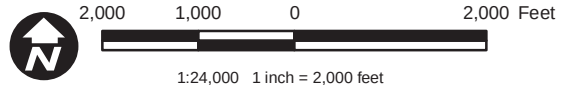


Figure 2
Vicinity Map



Source: Bing 2011; Soitec 2011; AECOM 2011;

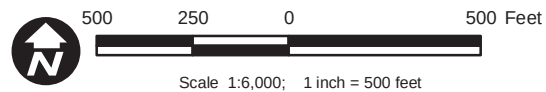


Figure 3
Aerial View of Project Area

would be composed of as many as approximately 264 CPV trackers grouped into four building blocks with up to about 66 trackers and one pair of 630- to 680-kilovolt (kV) inverters per building block. Each inverter pair is equipped with a small step-up transformer to step the voltage up to 12.5 kV, at which level it would interconnect to the local distribution system. The AC inverter capacity determines the nameplate capacity of each building block to be 1.26 to 1.36 MW AC; therefore, with four building blocks and two inverters per building block, the total project capacity is 5.0 to 5.4 MW AC. The Proposed Project would also include an electrical collection system, communication lines within each building block, the construction of a small switch station at or near the southwest corner of the project area, and a 12.5kV dedicated generation tie in (gen-tie) line from the switch station across Old Highway 80 and southwest to the Boulevard substation, a distance of approximately 0.75 mile. Additionally, approximately 17.98 additional acres are included in the project area and would be designated as project open space.

Each building block in its standard configuration measures approximately 656 feet east/west and 531 feet north/south and is comprised of up to 66 Soitec Concentrix^R CX-S530 dual-axis trackers. Trackers are arranged generally in an array comprised of 6 to 8 east/west rows with up to 8 to 12 trackers in each row. Spacing between trackers is 69 feet north/south and 82 feet east/west, subject to reasonable adjustment to accommodate site-specific constraints (i.e. site topography). Power within each building block is delivered through a 1,000-volt (V) direct current (DC) underground collection system from the trackers to the pair of inverters. Each inverter pair would be equipped with a step up transformer to convert the power from the 1.26kV or 1.36 kV (depending on the inverter capacity) on the “low side” to 12.5 kV on the “high side”.

Individual tracker dimensions are approximately 48 feet across by 24 feet tall. Each tracker would be mounted on a 28-inch diameter steel post likely to be vibration pile-driven or integrated into a concrete foundation designed to suit the onsite surface and subsurface conditions and materials. In its most vertical position, the top of each tracker would not be more than 35 feet above grade and the lower edge would not be less than 1 foot above the ground. In its horizontal “stow” mode (for high winds); each tracker would have a minimum ground clearance of 11 feet. Solar CPV modules are mounted on and comprise, en masse, the surface of each tracker. The dimensions, maximum height, and ground clearance for all trackers would be the same.

The Proposed Project site would be fenced along the entire property boundary for security. Signage for electrical safety would be placed along the perimeter of the project area warning the public of the high voltage and the need to keep out as well as within the project where

appropriate. Some localized security related lighting, on-site security personnel, and/or remotely monitored alarm system may be required during construction. During operations, while no use of lighting as a preventative measure or permanent on-site security presence is anticipated, approval for installation of remote monitored cameras and alarm system(s) and for perimeter and safety lighting is proposed with such lighting to be utilized only on an as-needed basis for emergencies, protection against security breach, or unscheduled maintenance and trouble shooting (such as may be occasionally required).

Power from the Proposed Project would be delivered to the nearby Boulevard substation by a dedicated 12.5 kV distribution line linking the four building blocks and extending an additional distance of approximately 0.75 mile from the southwest corner of the site, across Old Highway 80, and southwest to the Boulevard Substation. The point of interconnection (POI) contemplated by the interconnection documents is to either the existing Boulevard Substation owned by San Diego Gas and Electric (SDG&E) or to a new Boulevard East substation proposed by SDG&E to replace the existing substation and immediately to the east. Interconnection to the former, if implemented, would be temporary until the new substation is energized.

1.2.2.2 Project Construction

Construction of the Proposed Project would involve selective clearing and grubbing of vegetation, some grading, construction of CPV foundations, trenching for the electrical collection system and communication lines within each building block, installation of small concrete footing at each pair of inverters, construction of the small switch station, and installation of the short 12.5 kV dedicated gen-tie line from the switch station to the Boulevard Substation. The project area is relatively level and installation of each array would follow the existing grade with grading for minor leveling purposes as appropriate to enable primary and secondary road network completion, compliance with fire regulations, and CPV unit and electrical collection system installation.

Selective clearing and grubbing would be required for construction and access and as necessary to comply with fire code. Trenching for the electrical collection system and communication lines within each building block would entail a trench up to approximately three feet deep and one to two feet wide. The trenches would be filled with base material above and below the conductors and communications lines to ensure adequate thermal conductivity and electrical insulating characteristics. Material from the foundation and trench excavations would be negligible and used for site leveling, foundation pads, inverter and transformer pads, and the switch station pad. The trackers would be assembled on-site. Recycling during construction would be in compliance

with the County of San Diego Construction Demolition and Debris Management Plan requirements (in accordance with County Ordinance 68.508-68.518). The construction period would be between 6 and 12 months.

During construction, the Proposed Project would use water to suppress fugitive dust during grading and soil compaction. For site preparation and grading, it is assumed that approximately 0.20 acre-feet (65,000 gallons) of water per acre would be used during the first two months or 40 workdays of site construction. For fugitive dust control, it is estimated that approximately 1.75 acre-feet (570,239 gallons) of water would be used per week during six months of construction. Additional water would be used for hydrating the concrete used on-site; however, this would be imported. It is assumed that approximately 30 gallons of water would be used per cubic yard of concrete. As such, the Proposed Project would require approximately 12.84 acre-feet (4,183,052 gallons) of water during construction. Less water-intensive methods to implement dust suppression are under review including: (i) use of soil stabilizers, (ii) more tightly phasing construction activities, and/or (iii) compressing the entire construction schedule to reduce the time period over which dust suppression measures would be required.

The project area would be re-vegetated, except around project components and where primary and/or secondary service road access is required. Disturbed areas would be re-vegetated as follows: (i) areas around each tracker would be re-vegetated with native species, but still allowing for operations and maintenance access and fire suppression, (ii) areas not directly needed for construction or operations maintenance (that have been disturbed) would be re-vegetated with native species and allowed to grow to normal heights except where such growth is limited by fire protective measures or in creates shading that would compromise electricity generation, and (iii) no re-vegetation is proposed for secondary access roads that would be utilized for routine operations (including washing).

1.2.2.3 Project Operation and Maintenance

Operations of the Proposed Project would entail off-site monitoring through a supervisory control and data acquisition (SCADA) system utilizing on-site sensors or a comparable system that would maintain tracker orientation towards the sun. At night, the trackers would be positioned vertically to minimize dust collection. When winds are high, the trackers would be positioned in a horizontal mode. The PV trackers and communication/monitoring system onsite would require minimal usage of grid-provided electricity for operations use. Operations and maintenance personnel, as well as equipment storage would be located offsite, at a nearby central facility for all Soitec Solar operations.

Operations and maintenance of the CPV units would include in-place panel washing as frequently as up to approximately every 6 weeks to 2 months by mobile crews who would also be available for dispatch whenever on-site repairs or other maintenance are required. To the extent water supplies from existing on-site wells, or wells from the contiguous LanEast Solar Farm LLC project area are inadequate, water would be delivered in a tanker truck and transferred to panel washing trucks. Each panel-washing truck would carry water treatment equipment and truck-mounted panel washing booms. No more than 24 gallons of water would be required to wash each tracker, with a good possibility that much less water would be required. Panel washing would occur on-site for approximately 4 to 6 days per washing cycle.

As previously discussed, the project area is bounded by I-8 to the north, Old Highway 80 to the south, and McCain Valley Road 0.5 mile to the east. Primary access would be from McCain Valley Road and would be controlled by a security gate directly. The primary access road would be 20 feet wide, paved with decomposed granite, and would extend for approximately 0.5 mile. A secondary service road would be located on the southern boundary of the project area for personnel to access the switch station.

1.2.2.4 Project Decommissioning Plan

If constructed, the Proposed Project would operate, at a minimum, for the life of its long-term power purchase agreement (PPA). The initial term of the PPA is for 25 years with additional terms anticipated. The lifespan of the Proposed Project is estimated to be 30 to 40 years or longer. It is likely, due to the establishment of the Proposed Project infrastructure (both physical and contractual), that the continued operation of the Proposed Project for a longer term beyond the initial PPA term is feasible.

At the end of the useful life of the Proposed Project, two alternative scenarios are possible: (i) proposed renewal of the Proposed Project permits and land use approvals as may be applied for and received at that time, which would enable either a) refurbishment or redevelopment of the site with updated technology, or (ii) decommissioning of the site.

Decommissioning of the Proposed Project would entail disassembly of the solar farm and restoration of the site. Impacts associated with closure and decommissioning of the Proposed Project would be temporary as all above ground equipment to a depth of two feet below grade would be removed and salvaged or recycled. The site would be re-graded and re-vegetated as is consistent with the current zoning (RL-80) or future applicable zoning. Removal of remaining

below ground improvements would entail additional ground disturbance and restoration, but may be implemented if financially viable.

1.3 SURVEY METHODS

Biological surveys for the project area were performed from March 30, 2011 to January 5, 2012, by AECOM biologists and subcontractors (Table 1). Prior to field surveys, a query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) was conducted to determine which sensitive species have the potential to occur within the project area. Additionally, a list of potentially occurring sensitive species was provided by the County (Appendix A). Survey dates and personnel, including relevant permit information, are summarized in Table 1. Biological surveys and investigations conducted for the Proposed Project include vegetation mapping surveys, oak woodland surveys, focused rare plant surveys, a jurisdictional wetlands delineation, and focused Quino checkerspot butterfly (*Euphydryas editha quino*; Quino) protocol surveys. Information about these survey methodologies is provided below.

Table 1. Survey Dates and Personnel for Biological Surveys Conducted within the Project Area

Date	Personnel
Vegetation Mapping Survey	
4/21/2011	Bonnie Hendricks, Erin Bergman
10/28/2011	Bonnie Hendricks, Erin Bergman
Rare Plant Survey	
4/20/2011	Fred Sproul, Erin Bergman
4/21/2011	Bonnie Hendricks, Erin Bergman
6/7/2011	Kyle Harper, Margie Mulligan
10/28/2011	Bonnie Hendricks, Erin Bergman
Oak Woodland Survey	
12/21/2011	Erin Bergman, Joshua Zinn
12/22/2011	Erin Bergman, Joshua Zinn
1/4/2012	Erin Bergman, Joshua Zinn
1/5/2012	Joshua Zinn
Jurisdictional Wetlands Delineation	
11/8/2011	Joshua Zinn
12/9/2011	Brian Felten, Joshua Zinn
12/12/2011	Joshua Zinn
Quino Checkerspot Butterfly Focused Survey	
3/30/2011 (Week 1)	Ken Osborne (Permit # 837760-6)
4/4/2011 (Week 2)	Mike Couffer (Permit # 782703-8)
4/13–15/2011 (Week 3)	Erin Bergman (Permit # 820658-4), Mike Couffer (Permit # 782703-8)

Date	Personnel
4/20/2011 (Week 4)	Mike Couffer (Permit # 782703-8)
4/26–28/2011 (Week 5)	Ken Osborne (Permit # 837760-6), Mike Couffer (Permit # 782703-8)
5/4/2011 (Week 6)	Bonnie Hendricks (Permit # 820658-4)

1.3.1 Vegetation Mapping Survey

Preliminary vegetation mapping notes were made during the spring rare plant surveys on April 21, 2011. Complete vegetation mapping was conducted on foot within the project area on October 28, 2011, by Bonnie Hendricks and Erin Bergman. This effort provided comprehensive coverage data for the project area. The mapping also included a 100-foot buffer surrounding the project area. The 100-foot buffer was not accessed on foot but was mapped from adjacent parts of the project area using aerial photography. All plant species observed in the project area were noted, and plants that could not be identified in the field were collected and identified later using taxonomic keys. Animal species observed directly or detected from calls, tracks, scat, nests, or other sign were also noted during the vegetation mapping surveys. The *Biological Resource Mapping Requirements* established by the County were used to assess and map the vegetation communities within the project area (County of San Diego 2010). Vegetation communities were classified using the 1986 Holland classification system, as modified by Thomas Oberbauer (1996, revised 2005) and the County of San Diego (2010). Sawyer et al. (2009) and CDFG (2010) classifications were used to provide additional detail where appropriate, such as denoting special or sensitive vegetation communities that are either known or believed to be of high priority for inventory in the CNDDDB due to their unique nature, limited distribution (i.e., rarity), or importance for special-status wildlife species. Communities were mapped by hand in the field on a 1-inch-equals-200-feet aerial photograph and later screen-digitized in the office using ArcGIS software.

1.3.2 Oak Woodland Assessment

AECOM conducted oak woodland assessments on December 21-22, 2011 and January 4-5, 2012 (Table 1). Oak woodlands were mapped with sub-meter accuracy using a global positioning system (GPS). Individual oaks presenting symptoms of pathogens were also mapped using GPS. The oak woodlands were qualitatively assessed for their ambient health and ecological function at the time of the surveys. The oak woodland assessment followed the applicable County definitions for oak woodlands. In some cases, individual oaks more than 200 feet apart from established oak woodlands were included based upon ecological function within the project area.

1.3.3 Rare Plant Survey

AECOM conducted rare plant surveys during three phenological time periods to capture the blooming periods of all potential rare plant species (i.e., early spring, late spring, and fall 2011) (Table 1). Surveys were conducted on foot using meandering transects to cover the entire project area in accordance with CNPS (2001) botanical survey guidelines. Rare plants detected were counted and mapped with sub-meter accuracy using a global positioning system (GPS) unit and incorporated into ArcGIS software. All plant species observed in the project area were noted, and plants that could not be identified in the field were collected and identified later using a microscope with taxonomic keys. Specimens that were especially difficult to identify were compared to the reference collection at the San Diego Natural History Museum and their identity was confirmed by Dr. Jon Rebman, Curator of Botany.

1.3.4 Quino Checkerspot Butterfly Survey

The entire project area occurs within the USFWS-recommended Quino survey area (USFWS 2005). Therefore, in accordance with the *Quino Checkerspot Butterfly (Euphydryas editha quino) Survey Protocol Information* (USFWS 2002), a habitat assessment of the project area was conducted by qualified biologists on March 25, 2011, prior to the first protocol-level survey. Protocol-level surveys were determined to be necessary due to the presence of suitable Quino habitat throughout the project area. Potential habitat surveyed for Quino consisted of all habitat except for open water (cattle ponds) and developed areas.¹ Results of the habitat assessment did not reveal the presence of any excludable areas (per USFWS 2002); therefore, all habitats were included in the Quino survey area.² All closed-canopy chaparral, riparian forest, and oak woodland habitats in the Quino survey area were included because these areas were small and contained open patches of habitat with the potential to support Quino.

Following completion of a formal habitat assessment, ten protocol-level Quino surveys were conducted within the Quino survey area during a 6-week period between March 30, 2011, and May 4, 2011 (Table 1). Surveys were conducted by permitted biologists under optimal climatic

¹ A 19.11-acre corridor at the south end of the project area, along Old Highway 80, was excluded from Quino habitat assessments and focused surveys. Habitat within this area was recently assessed for Quino for the Tule Wind Project (see HDR Engineering, Inc. 2011). See Appendix B for a map displaying the area excluded from 2011 focused Quino surveys.

² Portions of the Quino survey area were excluded for the final survey (6th week) based on the following factors: increased evidence of heavy cattle grazing with the onset of spring, a lack of host plant populations, a lack of butterfly activity, and sparse nectaring resources. Therefore, approximately 38.12 acres within the project area were surveyed during survey 6.

conditions for detecting species. If weather conditions were out of protocol, biologists waited for the weather conditions to improve before proceeding with surveys. Surveys were conducted by walking meandering transects through all potentially suitable habitat, scanning the ground, surrounding bushes, and searching for nectar sources for Quino. Biologists recorded any potential Quino host plant populations, all species of flowering plants (potential nectar sources), and all species of butterflies observed. Potential Quino host plants were mapped with sub-meter accuracy using a GPS unit. Detailed survey methodology and results are included in the Quino 45-day report (AECOM 2011) submitted to USFWS (see Appendix B).

1.3.5 Jurisdictional Wetlands Delineation

Prior to conducting the field delineation for potential jurisdictional waters of the U.S. and state (including wetlands), AECOM ecologists Brian Felten and Joshua Zinn reviewed historical land use of the project area, local and regional climactic data, and areas with topographical configurations and vegetative signatures occurring within the project area that may suggest the potential or presence of jurisdictional waters of the U.S. and state at the time of the field survey. Post-delineation data were also compared and confirmed. Surveys for potential County Environmentally Sensitive Lands in the Form of Aquatic Features were assessed and delineated within the project survey area pursuant to Section 86.602 of the RPO and in accordance with the federal and state delineation methodologies.

An AECOM ecologists initially conducted a general field reconnaissance of the project area identifying areas (including the limits) supporting potential state and federal jurisdictional waters (including wetlands) on November 8, 2011 (Table 1). After the initial field reconnaissance was completed, a formal delineation of jurisdictional waters (including wetlands) occurring within the survey area was conducted by two AECOM ecologists on December 9 and 12, 2011 (Table 1). Formal field delineations utilized the latest federal and state guidance, methodologies, mapping standards. Formal delineations for waters of the U.S. in the form of wetlands were based on the three-parameter method.³

All acquired field data were obtained by recording the presence (including extents, types, and boundaries) of potential jurisdictional waters using a Trimble XH subfoot accuracy handheld GPS unit. All acquired field data were submitted to AECOM GIS specialists for post-field processing. Post-field analysis, using Trimble GPS Analyst (Version 2.1) GIS software to code, define,

³ The three-parameter method requires the simultaneous presence (co-occurrence) of wetland hydrology, hydric soil, and hydrophytic vegetation for an area to be classified as a wetland (Environmental Laboratory 1987).

designate, and edit all acquired GPS field data representing potential jurisdictional waters occurring within the project area, was conducted in tandem by an AECOM GIS specialist and the ecologist who performed the fieldwork.

Please see the jurisdictional delineation letter report (JDLR) for a detailed discussion of the field delineation methodology (Appendix C).

1.3.6 Survey Limitations

For the botanical surveys described above, three blooming periods were captured (early spring, late spring, and fall) for optimal chances of detection of a full range of floral diversity expected within the project area. Additionally, due to above-average rainfall during the 2010/2011 wet season, plant population growth was not limited by rainfall (NOAA 2011). Given the ample winter precipitation, abundant wildflowers, well-coordinated timing of the surveys relative to blooming periods of rare plant populations, as well as the high qualifications of the project botanists, AECOM is confident that our rare plant survey results are valid on all portions of the project area.

Surveys specifically aimed at detection of the full range of wildlife species, including avian species, were not conducted. However, notes were taken for incidental wildlife observations made during protocol-level Quino surveys and during vegetation mapping and rare plant surveys to establish a general baseline of wildlife diversity within the project area. Avian surveys will be conducted for the Proposed Project and the results summarized in a subsequent letter report.

1.4 ENVIRONMENTAL SETTING

This section describes the existing environmental setting of the project area, including the regional context of the site, soil types, vegetation communities, plant species, wildlife species, rare and sensitive plant and wildlife species either known or potentially occurring in the project area, jurisdictional waters, and wildlife corridors. The information provided in the following sections is based on the biological surveys conducted within the project area, as described above in Section 1.3. This section also includes available regional data.

1.4.1 Regional Context

The Proposed Project is located in an unincorporated portion of San Diego County, east of the community of Boulevard (Figures 1 and 2). The project area is located in a desert transition zone and is characterized by gently sloping hillsides and shallow valleys with rock outcrops and a few

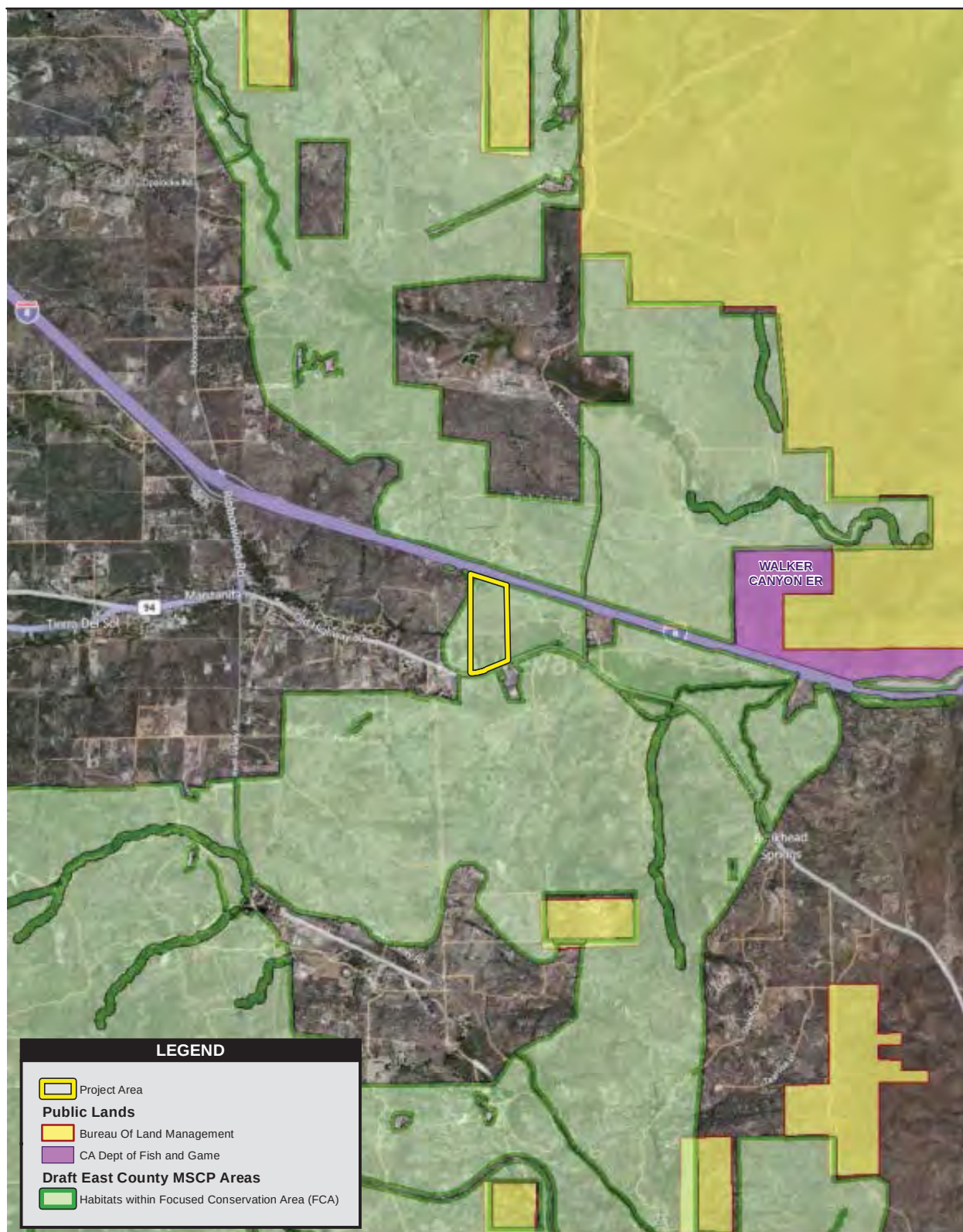
small hills scattered throughout the site. The project area is within the Boulevard Community Planning Area of the County's General Plan; the land use designation is Rural Lands with a permitted density of one dwelling unit per 80 acres (RL-80). Existing zoning is General Rural (S92) and the project area is currently used for grazing. The project area is located at an elevation of approximately 3,300 feet AMSL.

The Proposed Project is located within the County's draft East County Multiple Species Conservation Program (ECMSCP) Plan Area. More specifically, the project area falls within a preliminarily delineated Focused Conservation Area (FCA) of the ECMSCP Plan Area (County of San Diego 2008) (Figure 4). While the ECMSCP has not yet been finalized, location within a preliminary FCA suggests that the project area has some regional conservation value. Nevertheless, because this plan is not yet finalized, the Proposed Project is not subject to conditions of the ECMSCP.

Public lands occur within the vicinity of the project area (Figure 4). The Bureau of Land Management (BLM) administers lands northeast, east, southeast, and south of the project area, including the 38,692-acre McCain Valley Resource Conservation Area (RCA) and the 14,741-acre Carrizo Gorge Wilderness. Additionally, CDFW manages the Walker Canyon Ecological Reserve, located east of the project area. Finally, the Cleveland National Forest, administered by the U.S. Forest Service, is located northwest of the project area.

1.4.2 Climate

Southern California, including San Diego County, has a Mediterranean climate characterized by mild wet winters and arid summers. The growing season is generally considered to be 365 days per year in this region. Monthly temperature and precipitation data recorded at the Western Regional Climate Center's (2011) Campo sampling station (041424)—the closest sampling station with sufficient data—are presented in Table 2. As noted in Table 2, annual average maximum temperature for the area is approximately 76 degrees Fahrenheit (°F), while the annual average minimum temperature is approximately 41°F. Average total precipitation for the Campo weather station is 14.82 inches per year, with highest monthly rainfall totals occurring between November and April (Table 2).



Source: Bing 2011; Soitec 2011; AECOM 2011; SanGIS 2011

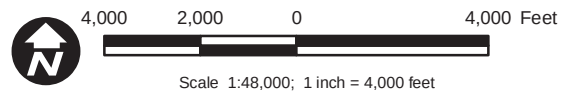


Figure 4
Regional Conservation and
Land Ownership

**Table 2. Temperature and Precipitation Data (1948–2010)
for the Campo Weather Station (041424)**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (°F)	62.0	63.6	66.2	71.2	77.8	86.6	93.8	93.6	89.3	79.6	69.3	62.6	76.3
Average Min. Temperature (°F)	33.6	33.9	35.0	36.9	40.8	44.7	52.4	52.9	48.7	41.9	36.3	32.7	40.8
Average Total Precipitation (in.)	3.08	2.75	2.30	1.10	0.32	0.07	0.33	0.51	0.35	0.69	1.26	2.07	14.82

1.4.3 Hydrology

The project area is located within the southwest portion of the approximately 653 square mile Carrizo Creek Watershed (Hydrologic Unit Code [HUC]: 18100202). Partially contained within the Carrizo Creek Watershed is the 1,501-square-mile Anza Borrego Hydrologic Unit (HU: 722.00). Within the Anza Borrego Hydrologic Unit is the approximately 135-square-mile Jacumba Hydrologic Area (HA: 722.70). Within the Jacumba Hydrologic Area is the approximately 110-square-mile McCain Hydrologic Subarea (HSA: 722.71). All watersheds are located within the approximately 19,865-square-mile Regional Water Quality Control Board (RWQCB) Colorado River Region (RWQCB Region 7).

The project area is populated by two small (and limited) unvegetated ephemeral dry washes (or drainage features)⁴ that both transition and convert into swale features near their terminuses.⁵ Although these unvegetated ephemeral dry washes do not exceed 1,300 linear feet in length (before transitioning into swales and/or swale complexes), they are the major aquatic features occurring within the project area. Although small and limited, these ephemeral channels can be classified as single-thread, discontinuous ephemeral streams. These types of riverine features are best developed in semi-arid climates (Tooth 2000). Additional hydrologic details of the project area can be found in the jurisdictional delineation letter report (JDLR) prepared for the Proposed Project (Appendix C).

⁴ Ephemeral streams are characterized by sands and gravels. These sediments are characterized by exceedingly high infiltration rates and typically present seasonal flow. Ephemeral stream transmission/infiltration losses can be high enough that surface flow duration can range from a single day of high-volume surface flow to seasonal flow (Whitford 2002).

⁵ Swales are microtopographic features that convey surface water in low volume and short duration (hours to days [usually in sheetflow]) and are commonly associated with riverine features (Hauer and Lamberti 2007).

1.4.4 Soils

The soil series that occur within the project area are noted in Table 3 and depicted in Figure 5. Characteristics of these soils are found in the U.S. Department of Agriculture (USDA) Soil Survey of San Diego Area, California (USDA 1973), and the local hydric soil list (USDA 1992). The following soils series descriptions are taken from the Natural Resource Conservation Service Soils Series Classification Database (Soils Survey Staff n.d.).

Table 3. Soils Occurring within the Project Area

Soil Series	Phase	Acres
La Posta	La Posta rocky loamy coarse sand, 5 to 30% slopes, eroded	27.45
Mottsville	Mottsville loamy coarse sand, 2 to 9% slopes	26.74
Tollhouse	Tollhouse rocky coarse sandy loam, 5 to 30% slopes, eroded	0.48

1.4.4.1 La Posta Series

The La Posta series has grayish brown and brown, slightly acid and neutral, loamy coarse sand A horizons grading to weathered acid igneous rock at a depth of 29 inches. These soils occur in hilly mountainous areas that are moderately sloping to very steep. The soils formed in residuum weathered from granitic rocks. The following La Posta soil inclusion occurs within the project area: La Posta rocky loamy coarse sand, 5 to 30% slopes, eroded (LcE2) (Table 3).

La Posta soils occur at elevations of 2,000 to 4,500 feet. The climate is subhumid mesothermal with warm dry summers and cool moist winters. The mean annual precipitation is 15 to 20 inches. Mean annual temperature is about 56°F; average January temperature is about 45°F and average July temperature is about 70°F. The freeze-free season is 170 to 225 days. La Posta soils are somewhat excessively drained with medium or rapid runoff and rapid permeability. Native vegetation is mainly annual grasses and forbs, chamise, red shank, manzanita, scrub oak, and a few scattered oak trees along drainages.



Source: Bing 2011; Soitec 2011; AECOM 2011; USGS 2011

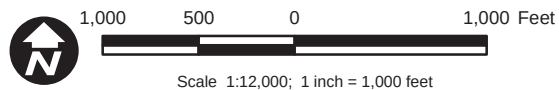


Figure 5
Soils in Project Area

1.4.4.2 Mottsville Series⁶

The Mottsville series consists of very deep, excessively drained soils that formed in alluvium derived from granitic rocks. Mottsville soils occur on gently sloping (0 to 15%) alluvial fans, fan remnants, and fan aprons. The following Mottsville soil inclusion occurs within the project area: Mottsville loamy coarse sand, 2 to 9% slopes (MvC) (Table 3).

Mottsville soils occur at elevations of 4,500 to 5,300 feet. The climate is semiarid with cool moist winters and warm dry summers. The mean annual precipitation is 10 to 12 inches. Mean annual temperature is 46.4°F to 51.8°F and the frost-free period is 90 to 110 days. Mottsville soils have negligible or very low surface runoff, rapid or very rapid permeability, and high saturated hydraulic conductivity. These soils are susceptible to rare flooding for extremely brief periods throughout the year. Native vegetation is mainly big sagebrush, antelope bitterbrush, Anderson's peachbrush, and needlegrasses.

1.4.4.3 Tollhouse Series

The Tollhouse series consists of shallow, somewhat excessively or excessively drained soils that formed in material weathered from granite and closely related coarse crystalline rocks. Tollhouse soils are on strongly sloping to very steep mountain slopes. Rock outcrops are common to many soils of this series. The following Tollhouse soil inclusion occurs within the project area: Tollhouse rocky coarse sandy loam, 5 to 30% slopes, eroded (ToE2) (Table 3).

Tollhouse soils occur at elevations of 2,000 to about 8,000 feet. The climate is subhumid mesothermal with warm dry summers and wet cold winters. Mean annual precipitation is 10 to 35 inches. Snow is infrequent and soon melted. The mean annual temperature is 52°F to 57°F; average January temperature is about 40°F to 50°F and average July temperature is 70°F to 78°F. The freeze-free season is about 140 to 225 days. Native vegetation is primarily chaparral consisting of whitethorn manzanita, California laurel, interior live oak, and California buckeye. Naturalized grasses and forbs may occur in some locations.

⁶ The current description of the Mottsville soil series has been revised to narrow the range of the series to western Nevada and eastern California (east of the Sierra Nevada). The description notes that Mottsville soils mapped in the San Diego area need correlation to another series. This correlation has not yet occurred and, thus, the existing Mottsville soil series description is presented for the purposes of this report.

1.4.5 Vegetation Communities

Twelve vegetation communities occur within the project area and associated 100-foot buffer areas, including two types of riparian and wetland vegetation communities (southern willow scrub and non-vegetated channel), eight types of upland vegetation communities (big sagebrush scrub, chamise chaparral, red shank chaparral, semi-desert chaparral, semi-desert chaparral [rock outcrop], wildflower field, coast live oak woodland, and mixed oak woodland), and two other cover types (disturbed habitat and developed). Slight variations within specific community types exist. In addition, portions of the project area are extensively grazed. As a result, some vegetation communities, or portions thereof, have been identified as occurring in a disturbed condition. The riparian, wetland, and upland vegetation communities present within the project area are described below, summarized in Table 4, and depicted in Figure 6. The Holland (1986) numeric code system (as modified by Thomas Oberbauer 1996 [revised 2005] and Oberbauer et al. 2008) of classifying vegetation communities is noted for each cover type in the descriptions below and also provided in Table 4.

Table 4. Vegetation Communities within the Project Area

Vegetation Communities	Holland Code¹	Acres²
<i>Wetland/Riparian Habitat</i>		
Southern Willow Scrub (Disturbed) ³	63320	0.59
Non-Vegetated Channel	64200	0.68
<i>Upland Habitat</i>		
Big Sagebrush Scrub	35210	6.48
Big Sagebrush Scrub (Disturbed)	35210	5.30
Granitic Chamise Chaparral	37210	1.98
Granitic Chamise Chaparral (Disturbed)	37210	1.62
Red Shank Chaparral ³	37300	3.41
Semi-Desert Chaparral ³	37400	14.58
Semi-Desert Chaparral (Rock Outcrop) ^{3,4}	37400	2.96
Semi-Desert Chaparral (Disturbed) ³	37400	3.26
Wildflower Field (Disturbed) ³	42300	10.67
Coast Live Oak Woodland	71160	0.07
Coast Live Oak Woodland (Disturbed)	71160	1.57
Mixed Oak Woodland (Palmer's Oak) (Disturbed) ³	77000	0.47
<i>Other Cover Types⁵</i>		
Disturbed Habitat	11300	1.02
Total =		54.66

-
- ¹ Based on Holland (1986) and Oberbauer (1996, revised 2005) as revised by the County of San Diego (2008).
- ² Values represent acreage of vegetation communities within the project area, excluding the 100-foot buffer. Acreages rounded to the nearest hundredth after summation.
- ³ Vegetation communities considered to be of high priority for inventory in the CNDDDB (CDFG 2010).
- ⁴ The rock outcrop subtype of semi-desert chaparral corresponds with the Sawyer et al. (2009) association of holly-leaf cherry chaparral (*Prunus ilicifolia* alliance). Although subtypes of semi-desert chaparral are not recognized in Holland (1986), this community warrants its own mapping under Sawyer et al. (2009) as it represents unique stands of holly-leaf cherry within a County recognized special feature, i.e., rock outcrops.
- ⁵ Developed land is not included in this table because it was mapped exclusively within the 100-foot buffer (see Figure 6). Therefore, acreage calculations are not available.

1.4.5.1 Riparian and Wetlands

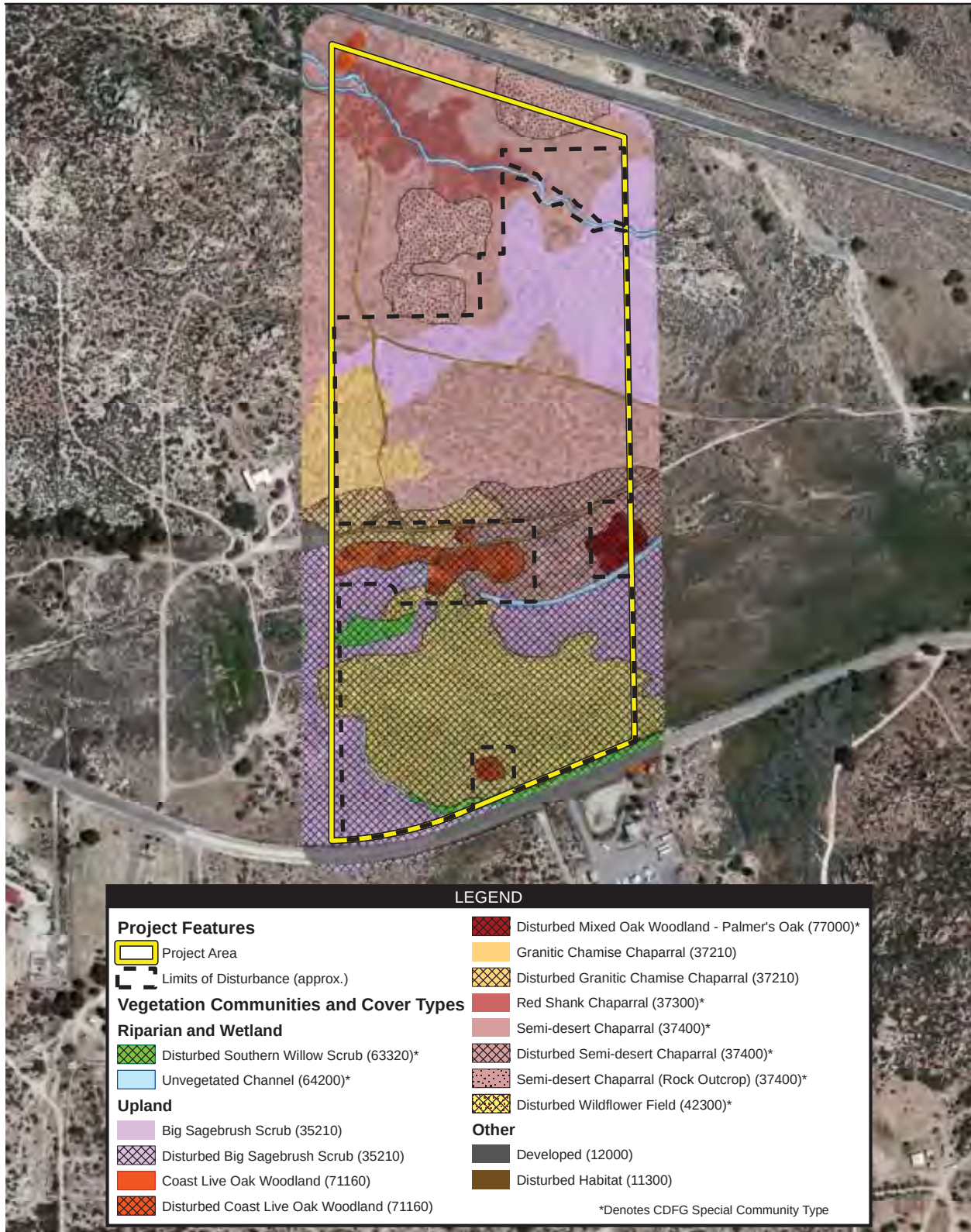
Southern Willow Scrub (63320)

According to Holland (1986) and Oberbauer et al. (2008), southern willow scrub is a thick, broad-leaved, winter-deciduous riparian habitat dominated by willows. Understory development is inhibited by the thickness of these stands. Southern willow scrub occurs next to stream channels with sandy to fine gravelly deposits where repeated flooding occurs. This community is considered a high-priority vegetation community for inventory by the CNDDDB (CDFG 2010).

Southern willow scrub occurs within a channel along the southern boundary of the project area and in a swale on the southwestern portion of the project area. These two areas of southern willow scrub encompass approximately 0.59 acre (Table 4 and Figure 6). On-site this community is dominated by red willow (*Salix laevigata*) in association with arroyo willow (*Salix lasiolepis*), tarragon (*Artemisia dracunculus*), and blue elderberry (*Sambucus nigra* ssp. *caerulea*). Associated species found within the understory include herbaceous alkaline species, salt heliotrope (*Heliotropium curassavicum*), Mexican rush (*Juncus mexicanus*), and barley (*Hordeum* spp.).

Non-Vegetated Channel (64200)

According to the modified Holland classification system (Oberbauer et al. 2008), non-vegetated channel consists of the sandy, gravelly, or rocky fringe of waterways or flood channels. This vegetation community is unvegetated on a relatively permanent basis due to variable water lines, although some weedy species of grasses may grow along the outer edges of the wash. Vegetation cover is usually less than 10%.



Source: Soitec 2011; AECOM 2011; Bing 2011

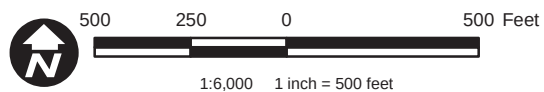


Figure 6
Vegetation Communities and Cover Types

Non-vegetated channel occurs in several drainage channels or swales within the project area, encompassing approximately 0.68 acre (Table 4 and Figure 6). Within the project area, Tecate tarplant (*Deinandra floribunda*), a California Native Plant Society (CNPS) List 1B plant species, was present in some areas of the non-vegetated channels.

1.4.5.2 Uplands

Big Sagebrush Scrub (35210)

According to the Holland (1986) and Oberbauer et al. (2008), big sagebrush scrub is composed of mostly soft-woody shrubs, 1.6 to 6.5 feet tall, usually with bare ground underneath and between shrubs. This vegetation community is dominated by big sagebrush (*Artemisia tridentata*) and growth occurs mostly in late spring and early summer. The community occurs on a wide variety of soils and terrain, and is distributed extensively throughout the Intermountain West, usually occurring between 4,000 and 9,000 feet. In San Diego County, the big sagebrush scrub often occurs in alluvial washes along dry margins of high desert and montane valleys.

Big sagebrush scrub occurs in several locations within the project area adjacent to chaparral, oak woodland, and wildflower field habitats. This community encompasses approximately 11.78 acres, of which 5.30 acres have been mapped as disturbed big sagebrush scrub due to grazing pressure (Table 4 and Figure 6). Big sagebrush scrub within the project area is dominated by big sagebrush in association with mountain buckwheat (*Eriogonum fasciculatum* var. *polifolium*), foothill buckwheat (*Eriogonum wrightii*), broom matchweed (*Gutierrezia sarothrae*), California evening-primrose (*Oenothera californica* ssp. *californica*), and brome grasses (*Bromus* spp.).

Granitic Chamise Chaparral (37210)

Granitic chamise chaparral is defined as chamise chaparral occurring on granitic soil. According to the modified Holland classification system (Oberbauer et al. 2008), chamise chaparral is 3 to 10 feet tall and is overwhelmingly dominated by chamise (*Adenostoma fasciculatum*) with associated species contributing little to cover. The community is adapted to repeated fires by stump sprouting. Mature stands are densely interwoven with very little herbaceous understory or litter. Chamise chaparral is often found on xeric slopes and ridges. This is the predominant chaparral type in San Diego County.

Granitic chamise chaparral occurs on low-lying hills in the western portion of the project area. This community encompasses approximately 3.60 acres, of which 1.62 acres has been mapped as disturbed granitic chamise chaparral due to grazing pressure (Table 4 and Figure 6). Within the

project area, this community is dominated by chamise in association with Mohave yucca (*Yucca schidegera*), among other native chaparral shrub and herbaceous species.

Red Shank Chaparral (37300)

According to Holland (1986) and Oberbauer et al. (2008), red shank chaparral is very similar to chamise chaparral (37200), but typically taller (6.5 to 13 feet) and somewhat more open. Red shank chaparral often forms nearly pure stands (at least 50% cover) of redshank (*Adenostoma sparsifolium*), which flowers in midsummer, in contrast to the spring flowering of chamise. This community is found most commonly on interior cismontane slopes between 300 and 6,000 feet, usually confined to granitic soils. Red shank chaparral is considered a high-priority vegetation community for inventory by the CNDDDB (CDFG 2010).

Red shank chaparral occurs on slopes in the northern portion of the project area, encompassing approximately 3.41 acres (Table 4 and Figure 6). Within the project area, this community is dominated by redshank with other associated shrub species, including chamise and point-leaf manzanita (*Arctostaphylos pungens*).

Semi-Desert Chaparral (37400)

According to the modified Holland classification system (Oberbauer et al. 2008), semi-desert chaparral is very similar to northern mixed chaparral (37110), but more open and not quite so tall (5 to 10 feet). Several of the dominant taxa (*Juniperus*, *Eriogonum*, *Opuntia*, etc.) are not broad-leaved sclerophylls. Semi-desert chaparral is less fire-prone than other chaparrals due to lower fuel loads. The community is most common at elevations between 2,000 and 5,000 feet and, in San Diego County, is found on the high desert plateaus and escarpment of the Peninsular Range. Semi-desert chaparral is considered a high-priority vegetation community for inventory by the CNDDDB (CDFG 2010).

Semi-desert chaparral occurs on slopes throughout the central and northern portions of the project area, encompassing approximately 20.80 acres (Table 4 and Figure 6). Of these 20.80 acres, 2.96 acres were mapped as the rock outcrop subtype and 3.26 acres were mapped as disturbed semi-desert chaparral. The rock outcrop subtype is not formally recognized by Holland (1986) but represents unique stands of holly-leaf cherry within a County-recognized special feature (i.e., rock outcrops). Generally, semi-desert chaparral within the project area is dominated by scrub oak (*Quercus xacutidens*), chamise, holly-leaf cherry, interior flat-topped buckwheat (*Eriogonum fasciculatum* spp. *polifolium*), foothill buckwheat (*Eriogonum wrightii* var. *membranaceum*), and mountain mahogany (*Cercocarpus betuloides*). Common desert

transition species include cholla cactus (*Cylindropuntia californica* var. *parkeri*), Mojave yucca, ephedra (*Ephedra californica*), and desert apricot (*Prunus fremontii*).

Wildflower Field (42300)

According to the modified Holland classification system (Oberbauer et al. 2008), wildflower field is an amorphous “grab bag” of mostly native, herb-dominated types noted for conspicuous annual wildflower displays. Wildflower field is usually found on fairly poor, sandy sites (droughty, low in nutrients) and often associated with grasslands or oak woodlands on surrounding, more productive sites. In southern California, this vegetation community is found below 5,000 feet. Wildflower field is considered a high-priority vegetation community for inventory by the CNDDB (CDFG 2010).

Wildflower field occurs in the southern low-lying portion of the project area, encompassing approximately 10.67 acres (Table 4 and Figure 6). This community has been heavily grazed and is mapped entirely as disturbed wildflower field. Dominant species include common goldfields (*Lasthenia gracilis*), short-beak filaree (*Erodium brachycarpum*), and red brome (*Bromus madritensis* ssp. *rubens*). Other associated species include small wreath plant (*Stephanomeria exigua* ssp. *exigua*), smooth slender buckwheat (*Eriogonum gracile* var. *incultum*), and glaucous barley (*Hordeum murinum* ssp. *glaucum*).

Coast Live Oak Woodland (71160)

According to the modified Holland classification system (Oberbauer et al. 2008), coast live oak woodland is dominated by coast live oak (*Quercus agrifolia*) and typically found on north-facing slopes and shaded ravines. The shrub layer is poorly developed and the herb component is continuous. Usually found below 4,000 feet, coast live oak woodland occurs on the outer South Coast Ranges and coastal slopes of the Transverse and Peninsular ranges.

Coast live oak woodland occurs in the southern low-lying portion of the project area, north of the wildflower field and encompassing approximately 1.64 acres (Table 4 and Figure 6). Of these 1.64 acres, 1.57 acres were identified as disturbed coast live oak woodland due to grazing pressure. Within the project area, coast live oak woodland varies from an open to dense tree community with interior coast live oak (*Quercus agrifolia* var. *oxyadenia*) as the dominant overstory species.

Mixed Oak Woodland (77000)

According to the modified Holland classification system (Oberbauer et al. 2008), mixed oak woodland is a broad leaved, sclerophyllous woodland that occurs at higher elevations where several oak species share dominance. Mixed oak woodland occurs in the southern low-lying portion of the project area and encompasses approximately 0.47 acre (Table 4 and Figure 6). Within the project area, this community shares dominance among interior coast live oak (*Quercus agrifolia* var. *oxydenia*), Palmer's oak (*Quercus palmeri*), hybrid oak (*Quercus x acutidens*), and Muller's oak (*Quercus cornelius mulleri*). Mixed oak woodland within the project area was mapped as disturbed due to grazing pressure onsite.

1.4.5.3 Other Cover Types

Disturbed Habitat (Holland 11300)

As defined in County guidelines (2008), disturbed land includes areas in which the vegetative cover composes less than 10% of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction from previously legal human activity; or where the vegetative cover is greater than 10%, there is soil surface disturbance and compaction, and the presence of building foundations and debris (e.g., irrigation piping, fencing, old wells, abandoned farming or mining equipment) resulting from legal activities (as opposed to illegal dumping). Vegetation on disturbed land (if present) will have a high predominance of non-native and/or weedy species that are indicators of surface disturbance and soil compaction, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow-thistle (*Sonchus oleraceus*). Although non-native grasses may be present on disturbed land, they do not dominate the vegetative cover. Examples of disturbed land include the following activities, if performed under legal means: recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites. Dirt roads within the project area were mapped as disturbed habitat, totaling approximately 1.02 acres (Table 4 and Figure 6).

Developed (Holland 12000)

Developed land supports no native vegetation and may be additionally characterized by the presence of human-made structures such as buildings or roads and ornamental vegetation associated with these human-made structures. The level of soil disturbance is such that only the most ruderal or ornamental plant species would be expected.

Developed land was mapped along Old Highway 80 and within the 100-foot buffer of the project area (Figure 6). No developed land was mapped within the project area.

1.4.6 Flora

A total of 300 plant species have been recorded within, and adjacent to, the project area, with 260 species (87%) encountered considered native and the remaining 40 species (13%) considered nonnative and/or naturalized into the area (Appendix D).⁷ Sensitive plant species observed or potentially occurring in the project area are discussed in Section 1.4.8.2 below and listed in Appendix E.

1.4.7 Fauna

The majority of the project area ranges from moderate to high value for wildlife species. Scrub, chaparral, and oak woodland habitats within the project area provide foraging and nesting habitat for a variety of migratory and resident bird species, and other wildlife species. Wildflower field provides foraging habitat for a variety of raptor species. Rock outcroppings within the project also provide cover and foraging opportunities for a variety of wildlife species, including reptiles and mammals. Finally, wetland features within the project area provide habitat important to amphibian and invertebrate species.

A list of the wildlife species incidentally observed within and adjacent to the project area during focused Quino surveys, vegetation mapping, and rare plant surveys is provided in Appendix F.⁸ Sensitive wildlife species incidentally observed or potentially occurring in the project area are discussed in Section 1.4.8.3 below and listed in Appendix G.

⁷ The project area was initially part of a larger survey area that was separated into three separate projects (LanWest Solar Farm LLC, LanEast Solar Farm LLC, and Rugged Solar LLC). LanEast Solar Farm LLC is located adjacent to the Proposed Project (on the eastern boundary of LanWest). Rugged Solar LLC is located directly north of I-8. All three sites were surveyed concurrently. Therefore, Appendix D represents plant species detected for all project areas.

⁸ The project area was initially part of a larger survey area that was separated into three separate projects (LanWest Solar Farm LLC, LanEast Solar Farm LLC, and Rugged Solar LLC). LanEast Solar Farm LLC is located adjacent to the Proposed Project (on the eastern boundary of LanWest). Rugged Solar LLC is located directly north of I-8. All three sites were surveyed concurrently. Therefore, Appendix F represents wildlife species detected for all project areas.

1.4.7.1 Invertebrates

The distribution of many species of the order Lepidoptera (moths and butterflies) is generally defined by the distribution of their larval food plants and habitats. The project area has boulders and hills that could be used as hill topping areas for certain butterfly species to search for mates. Forty-eight species of Lepidoptera were observed within and adjacent to the project area. The species most frequently detected during 2011 Quino surveys include Behr's metalmark (*Apodemia mormo*), common buckeye (*Junonia coenia*), Acmon blue (*Icaria acmon*), sandhill skipper (*Polites sabuleti*), and desert pearly marble (*Euchloe hyantis*). A full list of invertebrate species observed within or near the vicinity of the project area is provided in Appendix F.

1.4.7.2 Fish

No fish species were documented from the project area during 2011/2012 surveys. While wetland features exist within the project area, these features do not appear suitable to support native fish populations.

1.4.7.3 Amphibians

All amphibians require moisture for at least a portion of their life cycle, with many requiring a permanent water source for habitat and reproduction. However, terrestrial amphibian species have adapted to more arid conditions and are not completely dependent on a perennial or standing source of water. These species avoid desiccation by burrowing beneath the soil or leaf litter during the day and during the dry season, and emerging only when temperatures are low and humidity is high. Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year within some habitat types, depending on a variety of factors such as amount of vegetation cover, elevation, and the slope aspect. No amphibian species were documented within the project area during 2011/2012 surveys.

1.4.7.4 Reptiles

The diversity and abundance of reptile species typically vary with vegetation community and character. Many reptiles are restricted to certain vegetation communities and soil types, although some of these species will also forage in a variety of vegetation communities. Other species are more ubiquitous, using a variety of vegetation types for foraging and shelter. Most species occurring in open areas use rodent burrows for cover and protection from predators and extreme weather conditions. Rock outcroppings provide cover and foraging opportunities for reptiles.

Three reptile species were observed within and adjacent to the project area during 2011/2012 surveys: coast horned lizard (*Phrynosoma coronatum blainvillii*), granite spiny lizard (*Sceloporus orcutti*), and coastal western whiptail (*Aspidoscelis tigris stejnegeri*) (Appendix F).

1.4.7.5 Birds

The diversity of bird species varies with respect to the character, quality, and diversity of vegetation communities. Riparian habitat (including southern willow scrub), grassland, oak woodland, and scrub and chaparral habitats typically support a moderate to high diversity of bird species. Fifty-four bird species were incidentally detected within and adjacent to the project area during focused surveys for Quino, rare plant surveys, and vegetation mapping surveys (Appendix F).

Common bird species incidentally observed within and adjacent to the project area during biological surveys include, but were not limited to, red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), California quail (*Callipepla californica*), killdeer (*Charadrius vociferus*), mourning dove (*Zenaida macroura*), acorn woodpecker (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), Say's phoebe (*Sayornis saya*), western kingbird (*Tyrannus verticalis*), common raven (*Corvus corax*), western scrub jay (*Aphelocoma californica*), oak titmouse (*Baeolophus inornatus*), cliff swallow (*Petrochelidon pyrrhonota*), northern rough-winged swallow (*Stelgidopteryx serripennis*), bushtit (*Psaltiriparus minimus*), Bewick's wren (*Thryomanes bewickii*), blue-gray gnatcatcher (*Polioptila caerulea obscura*), western bluebird (*Sialia mexicana*), wrentit (*Chamaea fasciata*), northern mockingbird (*Mimus polyglottos*), yellow-rumped warbler (*Dendroica coronata*), orange-crowned warbler (*Vermivora celata*), California towhee (*Pipilo crissalis*), spotted towhee (*Pipilo maculatus*), lark sparrow (*Chondestes grammacus*), white-crowned sparrow (*Zonotrichia leucophrys*), bullock's oriole (*Icterus bullockii*), and house finch (*Carpodacus mexicanus*).

In accordance with County guidance (see Appendix A), avian surveys will be conducted for the Proposed Project. Avian surveys directed at determining use of the site by raptors, Lewis' woodpecker (*Melanerpes lewis*), and other avian species that may be impacted by the Proposed Project will be conducted during appropriate seasons within the project area. The results of these surveys and potential impacts to sensitive avian species associated with the Proposed Project will be documented in a subsequent letter report.

1.4.7.6 Mammals

The habitats present within the project area provide foraging opportunities for a variety of mammal species. In addition, rock outcroppings provide cover, nesting sites, denning sites, and foraging opportunities for mammals. Most mammal species are nocturnal and must be detected either during daytime surveys by observing their signs—such as tracks, scat, and burrows—or during nighttime trapping surveys. Six mammal species were detected (directly or indirectly) within and adjacent to the project area during biological surveys, including Audubon’s cottontail (*Sylvilagus audubonii*), San Diego black-tailed jackrabbit (*Lepus californica bennettii*), woodrat species (*Neotoma* sp.), bobcat (*Felis rufus*), mountain lion (*Puma concolor*), and southern mule deer (*Odocoileus hemionus fuliginata*) (Appendix F).

Bats occur throughout most of southern California and may use any portion of the project area as foraging habitat. In addition, there is potential for some bat species to roost within rock outcroppings or trees within the project area. Because surveys were conducted during daylight hours and did not include focused efforts to locate roosting bats, no bats were detected within the project area. However, based on existing conditions of the project area, the pallid bat (*Antrozous pallidus*), Townsend’s big-eared bat (*Corynorhinus townsendii*), greater western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillei*), small-footed myotis (*Myotis ciliolabrum*), fringed myotis (*Myotis thysanodes*), and Yuma myotis (*Myotis yumanensis*) have moderate potential to roost and/or forage within the project area (see Appendix G).

1.4.8 Sensitive Biological Resources

Several sensitive vegetation communities, plant species, wildlife species, and wetland resources are known to occur or have the potential to occur within the project area, as identified and/or detected during biological studies. Local, state, and federal agencies regulate these sensitive biological resources and require an assessment of their presence or potential presence to be conducted in the project area prior to the approval of the Proposed Project. The CNDDB, administered by CDFW, provides an inventory of plant and animal species as well as vegetation communities that are considered sensitive by state and federal resource agencies, academic institutions, and conservation groups such as the CNPS. In general, the principal reason an individual taxon (species, subspecies, or variety) is considered sensitive is the documented or perceived decline or limitation of its population size or geographical extent and/or distribution resulting in most cases from habitat loss. In addition, wildlife movement corridors or linkages are considered sensitive by local, state, and federal resource and conservation agencies because these corridors allow wildlife to move between adjoining open space areas that are becoming more

isolated as open space becomes increasingly fragmented from urbanization, rugged terrain, or changes in vegetation (Beier and Loe 1992).

The following sections present the sensitive vegetation communities, plant species, wildlife species, wildlife corridors, and wetland resources that are either known to occur or potentially occur in the project area and immediate vicinity based on a query of the CNDDDB or the presence of suitable habitat and/or other requisite components. The local, state, or federal regulations or guidelines that protect these resources and the definitions for these sensitive biological resources are also discussed.

1.4.8.1 Sensitive Vegetation Communities

For the purposes of this report, sensitive vegetation communities are defined as vegetation assemblages, associations, or subassociations that support or potentially support sensitive plant or wildlife species (such as County Group A plants, Group 1 wildlife species, state-listed and federally listed species), have significant cumulative losses throughout the region, have relatively limited distribution, or have particular value to wildlife. Typically, sensitive vegetation communities are considered sensitive whether or not they have been disturbed. Sensitive vegetation communities are regulated by various local, state, and federal resource agencies. The CNDDDB provides an inventory of vegetation communities that are considered sensitive by state and federal resource agencies, academic institutions, and conservation groups such as the CNPS. Determination of the level of sensitivity is based on the Nature Conservancy Heritage Program Status Ranks that classify both species and plant communities on a global and statewide basis according to the number and size of remaining occurrences and recognized threats such as proposed development, habitat degradation, and invasion by nonnative species.

Nine sensitive vegetation communities totaling approximately 53.64 acres occur within the project area. Table 4 and Figure 6 provide numerical and visual descriptions of these sensitive vegetation communities, which include southern willow scrub, non-vegetated channel, big sagebrush scrub, granitic chamise chaparral, red shank chaparral, semi-desert chaparral (including rock outcrop subtype), wildflower field, coast live oak woodland, and mixed oak woodland.⁹ Of these, red shank chaparral and semi-desert chaparral (including rock outcrop subtype) are classified with an S3.2 CDFW state sensitivity ranking, indicating that these are considered a “threatened” (10,000–50,000 acres exist statewide) natural plant community;

⁹ Some of these sensitive vegetation communities, or portions thereof, have been subject to extensive grazing. Thus, some communities have been mapped as occurring in a disturbed condition.

wildflower field is classified with an S2.2 CDFW state sensitivity ranking, indicating that it is considered a “threatened” (2,000–10,000 acres exist statewide) natural plant community; and southern willow scrub is classified with an S2.1 CDFW state sensitivity ranking, indicating that it is considered a “very threatened” (2,000–10,000 acres exist statewide) natural plant community. The remaining sensitive vegetation communities (non-vegetated channel, big sagebrush scrub, granitic chamise chaparral, coast live oak woodland, and mixed oak woodland) are considered “sensitive habitat lands” per the County’s RPO largely because they are known to support populations of sensitive species. Mitigation would be required for the direct impacts to the sensitive habitats noted in this section (see Chapter 4).

1.4.8.2 Sensitive Plants

For the purposes of this report, plant species are considered sensitive if they are (1) listed or proposed for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS); (2) listed or proposed for listing as rare, threatened, or endangered by CDFW or other local conservation organizations or specialists; (3) on List 1B (considered endangered throughout its range) or List 2 (considered endangered in California but more common elsewhere) of the CNPS’s *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2009); and/or (4) listed on the County Rare Plant List (County of San Diego 2010).

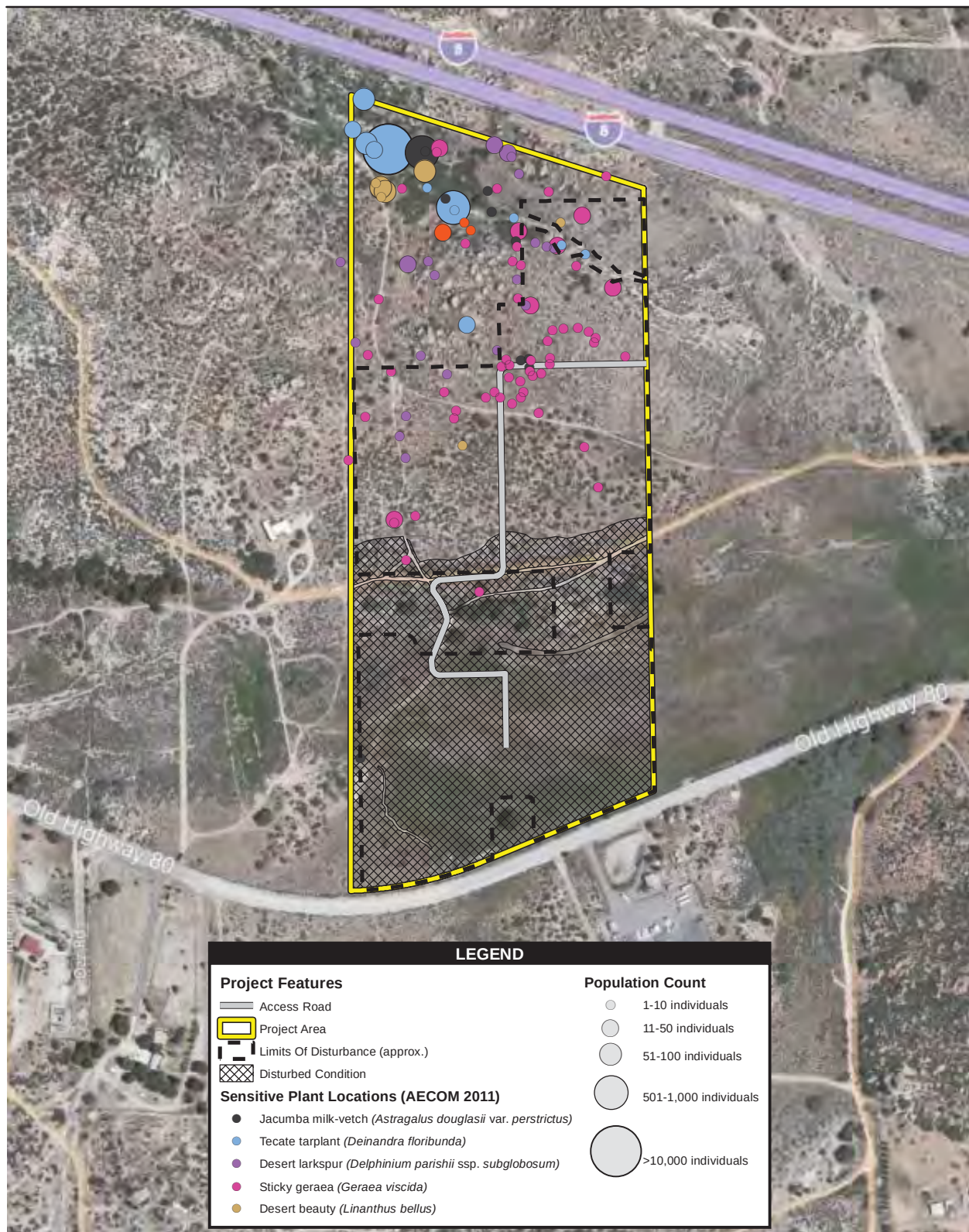
Appendix E summarizes all sensitive plant species that have or were analyzed to have the potential to occur within or adjacent to the project area. This table also includes species that are known historically from the region but are not expected to occur within the project area based on a lack of suitable habitat.

Sensitive Plant Species Documented within the Project Area

Focused surveys for sensitive plants were conducted for the Proposed Project on April 20 and 21, June 7, and October 28, 2011 by qualified AECOM botanists. As described in the following section, five sensitive plant species were documented within the project area during 2011 rare plant surveys (Appendix E; Figure 7).

Jacumba Milk-Vetch (Astragalus douglasii var. perstrictus)

Jacumba milk-vetch is a CNPS List 1B.2 and County List A species. Additionally, this species is proposed for coverage under the draft ECMSCP. This perennial herb in the pea or bean family (Fabaceae) blooms from April through June. It occurs in chaparral, cismontane woodland,



Source: Bing 2011; Soitec 2011; AECOM 2011;

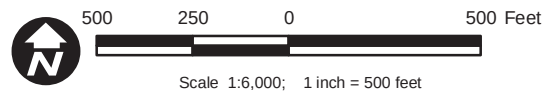


Figure 7
Sensitive Plants Documented
within the Project Area

pinyon and juniper woodland, riparian scrub, valley and foothill grassland, and rocky communities at elevations of 2,953 to 4,495 feet.

Numerous occurrences of Jacumba milk-vetch were documented within the project area during 2011 surveys (Figure 7). These populations were most abundant on the northern portion of the project area. These populations occur within wildflower field, semi-desert chaparral, red shank chaparral, and big sagebrush scrub (including both disturbed and undisturbed habitat types). The largest populations on-site occur within big sagebrush scrub and red shank chaparral.

Tecate Tarplant (Deinandra floribunda)

Tecate tarplant is a CNPS List 1B.2 and a County List A species. Additionally, this species is proposed for coverage under the draft ECMSCP. This species, in the sunflower family (Asteraceae), blooms from August through October in chaparral and coastal scrub habitats. It is an annual herb and occurs at elevations of 229 to 4,002 feet.

Numerous occurrences of Tecate tarplant were documented within the northern portion of the project area during 2011 surveys (Figure 7). These populations were most abundant in the northwestern corner of the site inside and around a large wash. Populations of this species were detected in or around riparian communities, particularly in dry sandy washes classified as non-vegetated channels.

Desert Larkspur (Delphinium parishii ssp. subglobosum)

Desert larkspur is a CNPS List 4.3 and a County List D species. This perennial herb of the buttercup family (Ranunculaceae) blooms from March through June in chaparral, cismontane woodland, pinyon and juniper woodland, and Sonoran desert scrub habitats. Desert larkspur occurs at elevations of 1,969 to 5,906 feet.

Numerous occurrences of desert larkspur were documented within the project area during the 2011 surveys (Figure 7). Populations of this species were most abundant on the northern portion of the site. These populations occur within semi-desert chaparral, semi-desert chaparral (rock outcrop), red shank chaparral, and big sagebrush scrub. The most abundant populations of desert larkspur within the project area were documented in semi-desert chaparral habitat.

Sticky Geraea (Geraea viscida)

Sticky geraea is a CNPS List 2.3 and a County List B species. Additionally, this species is proposed for coverage under the draft ECMSCP. This perennial herb of the sunflower family (Asteraceae) blooms from March through May in chaparral habitats. Sticky geraea occurs at elevations of 328 to 3,937 feet.

Numerous occurrences of sticky geraea were documented within the project area during 2011 surveys (Figure 7). These populations occur within coast live oak woodland, semi-desert chaparral, red shank chaparral, granitic chamise chaparral, and big sagebrush scrub. These populations were most abundant on the northern portion of the site within big sagebrush scrub.

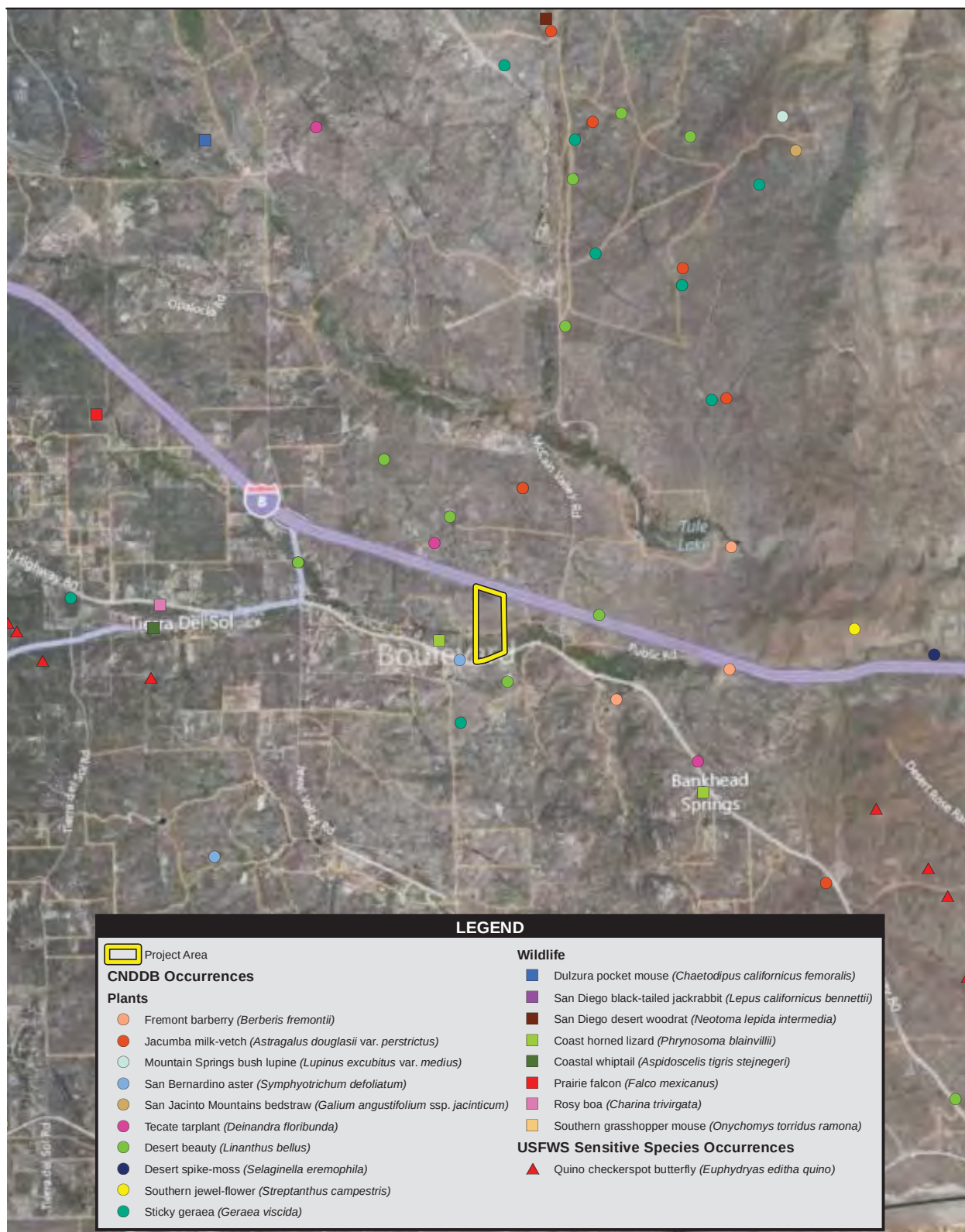
Desert Beauty (Linanthus bellus)

Desert beauty is a CNPS List 2.3 and a County List B species. Additionally, this species is proposed for coverage under the draft ECMSCP. This annual herb of the phlox family (Polemoniaceae) blooms from April through May in chaparral habitats. Desert beauty occurs at elevations of 3,281 to 5,493 feet.

Numerous occurrences of desert beauty were documented within the project area during 2011 surveys (Figure 7). These populations were most abundant on the northern portion of the site within semi-desert chaparral, semi-desert chaparral (rock outcrop) red shank chaparral, and big sagebrush scrub. The largest populations on-site occur within big sagebrush scrub and red shank chaparral.

Sensitive Plant Species Documented within the Project Vicinity and Other Potentially Occurring Sensitive Plant Species

Appendix E includes all sensitive plant species that have been documented within the vicinity of the project area and/or have potential to occur within the project area. Some species listed in Appendix E are depicted in Figure 8. Of those species potentially present, 19 are considered to have a high or moderate potential to occur because they have been recently documented from the project vicinity and/or suitable habitat is present. Species that are federally and/or state listed and/or listed on the County Rare Plant List A or B are discussed in more detail below.



Source: Bing 2011; Soitec 2011; AECOM 2011; CDFG 2011; USFWS 2011

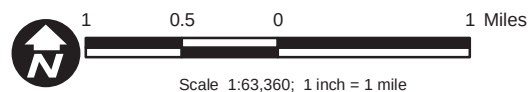


Figure 8
Sensitive Species Documented
within Project Vicinity

Orcutt's Brodiaea (Brodiaea orcuttii)

Orcutt's brodiaea is a CNPS List 1B.1 and County List A species. Additionally, this species is proposed for coverage under the draft ECMSCP. This herbaceous perennial species blooms from May through July in association with vernal moist grasslands and mima mound topography, and within the periphery of vernal pools, streams, and seeps. This species occurs at elevations of less than 5,300 feet.

This species has moderate potential to occur within the project area. The species is known from the La Posta area, but the majority of the species' distribution is west of State Route (SR) 79.

Campo Clarkia (Clarkia delicata)

Campo clarkia is a CNPS List 1B.2 and County List A species. Additionally, this species is proposed for coverage under the draft ECMSCP. This annual herb of the evening primrose family (Onagraceae) is found in chaparral, cismontane woodland, and gabbroic habitats. Campo clarkia occurs at elevations of 770 to 3,280 feet.

This species has moderate potential to occur on-site. Campo clarkia is known from the western side of the Cleveland National Forest, west to Mission Trails Regional Park.

Laguna Mountains Goldenbush (Ericameria cuneata var. macrocephala)

Laguna Mountains goldenbush is a CNPS List 1B.3 and County List A species. Additionally, this species is proposed for coverage under the draft ECMSCP. This perennial shrub of the sunflower family (Asteraceae) blooms from September through December in chaparral habitats. The species occurs at elevations of 3,920 to 6,102 feet.

This species has moderate potential to occur within the project area. Laguna Mountains goldenbush is distributed throughout the eastern portion of the Cleveland National Forest, north into Cuyamaca Rancho State Park.

California Hulsea (Hulsea californica)

California hulsea is a CNPS List 1B.3 and County List A species. Additionally, this species is proposed for coverage under the draft ECMSCP. This perennial herb of the sunflower family

(Asteraceae) blooms from April through June in chaparral habitats. California hulsea occurs at elevations of 656 to 5,003 feet.

This species has high potential to occur on-site and was detected in 2011 near McCain Valley Road by AECOM botanists during surveys conducted for an adjacent project. Occurrences of this species were documented in chamise chaparral habitat.

Slender-Leaved Ipomopsis (Ipomopsis tenuifolia)

Slender-leaved ipomopsis is a CNPS List 2.3 and County List B species. This perennial herb of the phlox family (Polemoniaceae) blooms from March through May in chaparral, pinyon and juniper woodland, Sonoran desert scrub, and gravelly or rocky habitats. This species occurs at elevations of 328 to 3,937 feet.

This species has high potential to occur on-site. The species' distribution ranges from Boulevard through Anza Borrego Desert State Wilderness, and does not go east of In Ko Pa County Park.

Desert Spike-Moss (Selaginella eremophila)

Desert spike-moss is a CNPS List 2.2 and County List B species. This perennial rhizomatous herb of the spike-moss family (Selaginellaceae) blooms from May through July in chaparral, Sonoran desert scrub, and gravelly or rocky habitats. This species occurs at elevations of 656 to 2,952 feet.

This species has moderate potential to occur within the project area. Desert spike-moss is distributed throughout Anza Borrego Desert State Wilderness.

Southern Jewelflower (Streptanthus campestris)

Southern jewelflower is a CNPS List 1B.3 and County List A species. This perennial herb of the mustard family (Brassicaceae) blooms from May through July in chaparral, lower montane coniferous forest, pinyon and juniper woodland, and rocky habitats. This species occurs at elevations of 2,953 to 7,546 feet.

This species has high potential to occur on-site as it was documented by AECOM botanists in 2011 during surveys conducted for an adjacent project. Occurrences of this species were documented in red shank chaparral habitat.

1.4.8.3 Sensitive Wildlife

For the purposes of this report, wildlife species are considered sensitive if they are (1) listed or proposed for listing as threatened or endangered by USFWS or CDFW; (2) designated as a fully-protected species by CDFW; (3) designated as a species of special concern (SSC) by CDFW; and/or (4) listed on the County Sensitive Animal List (County of San Diego 2010). In addition, raptors (birds of prey) and active raptor nests are protected by California Fish and Game Code (CFGC) 3503.5, which states that it is “unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird” unless authorized (CDFG 1991). The federal Migratory Bird Treaty Act (MBTA), which restricts the killing, taking, collecting, selling, or purchasing of native bird species or their parts, nests, or eggs, also provides legal protection for almost all breeding bird species occurring in the United States.

Appendix G summarizes all sensitive wildlife species that are known or have the potential to occur within or adjacent to the project area. This table also includes species that are known historically from the region but are not expected to occur within the project area based on a lack of suitable habitat. According to the CNDDDB (CDFG 2011) and other data, several sensitive wildlife species are historically known to occur within the vicinity of the project area (Figure 8).

Focused Quino protocol surveys conducted for the Proposed Project in 2011 did not reveal the presence of this federally listed species. Although two small Quino host plant populations (dark-tip bird’s beak [*Cordylanthus rigidus*]) were found in the project area, the low abundance and late emergence of this species and the absence of other host plants (dotseed plantain [*Plantago erecta*], Coulter’s snapdragon [*Antirrhinum coulterianum*], and southern Chinese houses [*Collinsia concolor*]) substantially diminish the potential of host resources to support a Quino population in the project area. Therefore, this species was determined to be absent from the project area.

Sensitive Wildlife Species Documented within the Project Area

Five sensitive wildlife species were detected within the project area: coastal western whiptail, coast horned lizard, San Diego black-tailed jackrabbit, southern mule deer, and mountain lion (Appendix G). These species are described below and depicted in Figure 9.



Source: Bing 2011; Soitec 2011; AECOM 2011;

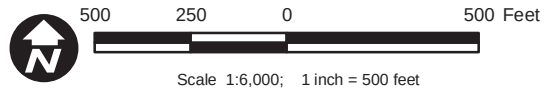


Figure 9
Sensitive Wildlife Species
Documented within the Project Area

Coastal Western Whiptail (Aspidoscelis tigris stejnegeri)

The coastal western whiptail is a CDFW special animal (State of California 2011) and a County Group 2 species. The coastal western whiptail is found in coastal southern California, mostly west of Peninsular Ranges and south of Transverse Ranges, and north into Ventura County. Within the species' range it is found in open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations (Benes 1969). Within the project area, coastal western whiptail observations were made in the northern portion of the site within semi-desert chaparral and big sagebrush scrub habitats (Figure 9).

Coast Horned Lizard (Phrynosoma coronatum blainvillii)

The coast horned lizard is a CDFW SSC (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. This lizard ranges from coastal southern California to the desert foothills and into Baja California, Mexico. In San Diego County, it has a wide range but spotty distribution. It is often associated with coastal sage scrub, especially areas of level to gently sloping ground with well-drained loose or sandy soil, but it can also be found in annual grasslands, chaparral, oak woodland, riparian woodland, and coniferous forest between 30 and 7,030 feet (Jennings and Hayes 1994). This reptile typically avoids dense vegetation, preferring 20 to 40% bare ground in its habitat. The coast horned lizard can be locally abundant in areas where it occurs, with densities near 20 adults per acre. Adults are active from late March through late August, and young are active from August through November or December. They are largely dependent on native harvester ants (*Pogonomyrmex* sp.) for food. Populations along the coast and inland have been severely reduced by loss of habitat. A single coast horned lizard was observed once within the project area during 2011 surveys (Figure 9). The individual was observed on an access road within semi-desert chaparral.

San Diego Black-Tailed Jackrabbit (Lepus californicus bennettii)

The San Diego black-tailed jackrabbit is a CDFW SSC (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. It ranges from near Mt. Pinos (at the Kern-Ventura County line) southward and west of the Peninsular Range into Baja California, Mexico (Hall 1981). This species can be found throughout southern California, with the exception of high-altitude mountains. It occupies open or semi-open habitats, such as coastal sage scrub and open chaparral areas. Forested and thick chaparral regions are not suitable (Bond 1977). The San Diego black-tailed jackrabbit breeds

throughout the year, with the greatest number of births occurring from April through May. The species is strictly herbivorous, preferring habitat with ample forage such as grasses and forbs. Declines in San Diego black-tailed jackrabbit populations are due to loss of suitable habitat as a result of urban development. Nine observations of this species were recorded within scrub and chaparral habitats in the central and northern portions of the project area (Figure 9).

Southern Mule Deer (Odocoileus hemionus fuliginata)

The southern mule deer is a County Group 2 species. The range of the southern mule deer extends throughout the western United States, including the four deserts of the southwest. This species moves between various zones from the forest edges at higher elevations to the desert floor, depending on the season. While southern mule deer occupies almost all types of habitat within its range, it prefers arid, open areas and rocky hillsides. Seasonal movements involving migrations from higher elevations (summer ranges) to lower winter ranges are associated, in part, with decreasing temperatures, severe snow storms, and snow depths that reduce mobility and food supply. Deep snows ultimately limit usable range to a fraction of the total. Southern mule deer in the arid southwest may migrate in response to rainfall patterns. No southern mule deer were observed; however, mule deer tracks were observed in the northwestern portion of the project area, along a small trail in semi-desert chaparral (Figure 9).

Mountain Lion (Puma concolor)

The mountain lion is a County Group 2 species. Mountain lions are widespread but uncommon in California, ranging from sea level to alpine meadows. The species is most abundant in riparian and brushy habitats, in areas where mule deer (their primary food source) are present. Home ranges for adult animals are from 5 to 25 square miles; males have larger home ranges than females. The mountain lion breeding season is year-round (Beier et al. 1995). The main threat to the mountain lion is human encroachment into habitat and habitat fragmentation. The mountain lion has shown a dramatic decline in southern California due to habitat fragmentation, restriction of movement, and increased encounters with humans (Dickson and Beier 2002). Mountain lion scat was observed in the northern portion of the project area, along the edge of a sandy wash (Figure 9).

Sensitive Wildlife Species Documented within the Project Vicinity and Other Potentially Occurring Sensitive Wildlife Species

Appendix G includes all sensitive wildlife species that have been documented within the vicinity of the project area and/or have potential to occur within the project area. Some species listed in

Appendix G are known historically from the region but are no longer expected to occur within the project area based on a lack of suitable habitat. Of those species potentially present, 29 are considered to have a high or moderate potential to occur because they have been recently documented from the project vicinity and/or suitable habitat is present. Species that are federal and/or state listed, and/or designated as a CDFW SSC, and/or designated as a fully protected species by CDFW are discussed in more detail below.

Belding's Orange-Throated Whiptail (Aspidoscelis hyperythrus beldingi)

The orange-throated whiptail is a CDFW SSC (State of California 2011) and a County of San Diego Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. The great majority of the geographic distribution of this species occurs in Baja California south of the international border (Stebbins 2003). Within the United States, its distribution is restricted to the coastal belt from near sea level to approximately 3,400 feet ranging from the United States/Mexico border northward up through the south-facing slopes of the Transverse Mountains in San Bernardino County. This species is most often associated with sparsely vegetated patches of coastal sage scrub and chamise chaparral (Lemm 2006). While the project area is near the elevational limit of the orange-throated whiptail's distribution, the species was observed north of the project area during 2011 surveys. Therefore, there is high potential for the species to occur within the project area.

Tricolored Blackbird (Agelaius tricolor)

The tricolored blackbird is a CDFW SSC within its nesting colonies (State of California 2011) and is a County Group 1 species. Additionally, this species is proposed for coverage under the draft ECMSCP. This species' distribution is centered in the Sacramento/San Joaquin valleys of California, but it is known to occur within San Diego County. Tricolored blackbirds nest in large, dense colonies in freshwater marsh or willow scrub vegetation in proximity to freshwater and forages in agricultural areas, lakeshores, and damp lawns. The species will forage in nearby grassland, pasture, or agricultural fields (Unitt 2004). The tricolored blackbird was observed east of the project area during 2011 surveys. There is moderate potential for the species to forage within wildflower field habitat of the project area.

Golden Eagle (Aquila chrysaetos)

The golden eagle is a federally protected species under the Bald and Golden Eagle Protection Act (BGEPA), is fully protected by California (State of California 2011), and is a County Group 1 species. Additionally, this species is proposed for coverage under the draft ECMSCP.

This eagle occurs throughout the United States and is an uncommon resident in San Diego County. The nesting population in San Diego County is concentrated in the foothill zone and coastal lowlands. Golden eagles nest on cliffs or boulders, or in large trees. This species requires vast foraging areas to prey on small mammals. Ideal foraging habitat includes vegetation communities such as grassland, open chaparral, and coastal sage scrub. Several golden eagle territories in the coastal lowland have been eliminated by urbanization, agricultural development, and other human disturbances (Unitt 1984).

Suitable nesting habitat was not found within the project area. It is also unlikely that eagles nest within 4,000 feet¹⁰ of the project area. However, golden eagle territories are known to exist within 10 miles¹¹ of the project area (WRI, pers. comm. 2011). Big sagebrush scrub, semi-desert chaparral, and wildflower field provide suitable foraging habitat for the golden eagle within the project area. Therefore, there is high potential for this species to forage within the project area.

Swainson's Hawk (Buteo swainsoni)

The Swainson's hawk is listed as threatened by California (State of California 2011) and is a County Group 1 species. Additionally, this species is proposed for coverage under the draft ECMSCP. The species breeds throughout much of the western United States and Canada, and in northern Mexico (Woodbridge 1998). In California, Swainson's hawks are locally common to rare breeders, with the majority of known territories located in the Central Valley and Great Basin bioregions (Woodbridge 1998). The species no longer breeds in southern California (Unitt 2004). Swainson's hawks inhabit a wide variety of open habitats, ranging from prairie to shrub steppe to desert and intensive agricultural systems (Woodbridge 1998). They nest within riparian forest or in remnant riparian trees and forages in agricultural lands (such as fallow fields and alfalfa fields) (Estep 1989; Babcock 1995). Swainson's hawks typically avoid mountainous terrain or steep canyons (Woodbridge 1998). The species feeds on a variety of mammalian, avian, and insect prey (Woodbridge 1998).

The Swainson's hawk was detected north of the project area during 2011 surveys. However, as mentioned above, the species no longer nests in southern California, including San Diego County. Therefore, this species is expected as an occasional and temporary visitor of the project area. There is moderate potential for the species to use the project area as stopover habitat during

¹⁰ County guidelines (2010) require a 4,000 foot "no-disturbance zone" around eagle nest locations.

¹¹ USFWS (2010) recommends assessing golden eagle use on and within a 10-mile perimeter of a project footprint.

annual migration from wintering habitat in South America to suitable breeding areas in western North America.

Northern Harrier (Circus cyaneus hudsonius)

The northern harrier is a CDFW SSC (State of California 2011) and a County Group 1 species. Additionally, this species is proposed for coverage under the draft ECMSCP. Northern harriers winter throughout most of North America, from southern Canada to Central America and the Caribbean Islands (MacWhirter and Bildstein 1996). Their breeding range extends from Canada and Alaska to the northwestern United States, with some year-round residents in coastal California and northern Baja California, Mexico. In San Diego County, the northern harrier is a fairly common migrant in the winter and a rare summer breeder (Unitt 1984). The northern harrier most commonly nests on the ground at the edge of marshes but will also nest on grasslands, in fields, or in areas of sparse shrubs (MacWhirter and Bildstein 1996). Northern harriers hover close to the ground while foraging in grasslands, agricultural fields, and coastal marshes. Their diet consists of small and medium-sized rodents, birds, reptiles, and frogs. The range of this species has been reduced as a result of urbanization and agricultural development. The northern harrier was documented east of the project area during 2011 surveys. However, the species is only expected as a winter visitor in wildflower field habitat and the more open areas of scrub and chaparral communities on-site; breeding within the project area is unlikely.

Yellow Warbler (Dendroica petechia)

The yellow warbler is CDFW SSC (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. The yellow warblers nesting in San Diego County and most migrants are *D. p. morcomi* (Unitt 1984). However, per the American Ornithologists' Union (AOU), *D. p. brewsteri* (Grinnell 1903) is considered not separable from *D. p. morcomi* (AOU 1953); therefore, they have been addressed as sensitive herein.

The yellow warbler breeds from northern Alaska and Canada southward to the middle United States, and in the western United States southward into Mexico. It also breeds from southern Florida, throughout the Caribbean and Central American coasts to northern South America. This warbler winters in Mexico, and Central and South America. In coastal San Diego County, breeding yellow warblers are most widespread from Carlsbad north and more localized farther south (Unitt 2004). At low elevations, this species is confined to larger streams, while in the foothills and mountains, it takes advantage of narrow strips and patches of riparian trees. Yellow warblers strongly favor surface water, but this is probably not essential as long as groundwater

suffices to support tall trees (Unitt 2004). This species occurs most commonly in riparian woodlands dominated by willows. It remains a fairly common species in mature riparian woodland on the California coastal slope. The yellow warbler was detected east of the project area during 2011 surveys. In addition, suitable breeding habitat was found south of the project area. Although suitable breeding habitat is limited on-site, there is high potential for the species to use the project area as foraging or dispersal habitat.

Loggerhead Shrike (Lanius ludovicianus)

The loggerhead shrike is a CDFW SSC (State of California 2011) and a County Group 1 species. Additionally, this species is proposed for coverage under the draft ECMSCP. This species inhabits most of the continental United States and Mexico and is a year-round resident of southern California. The loggerhead shrike prefers open habitat with perches for hunting and fairly dense shrubs for nesting (Yosef 1996). In southern California, loggerhead shrikes inhabit grasslands, agricultural fields, chaparral, and desert scrub (Unitt 1984). Their breeding season is from March through August. Loggerhead shrikes are highly territorial and usually live in pairs in permanent territories (Yosef 1996). They feed on small reptiles, mammals, amphibians, and insects that they often impale on sticks or thorns before eating. Loggerhead shrike populations are declining, likely as a result of urbanization and loss of habitat as well as, to a lesser degree, pesticide use (Yosef 1996). The loggerhead shrike was documented east of the project area during 2011 surveys. There is high potential for the species to nest and forage within big sagebrush scrub and chaparral habitat of the project area.

Pallid Bat (Antrozous pallidus)

The pallid bat is a CDFW SSC (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. Pallid bats are colonial and roost in caves, mine tunnels, rock crevices, buildings, and trees. This species flies later in the evening and feeds near the ground, occasionally landing to pick up prey. This species eats beetles, grasshoppers, Jerusalem crickets, moths, scorpions, flightless arthropods, and sometimes lizards. This species is a natural pollinator for several cacti species (Burt and Grossenheider 1976; Kays and Wilson 2002; Wilson and Ruff 1999). Potentially suitable roosting habitat for the pallid bat is present within rock outcroppings associated with the semi-desert chaparral habitat in the project area. In addition, wildflower field and shrub habitats within the project area provide potentially suitable foraging habitat for the species.

Ringtail (Bassariscus astutus)

The ringtail is fully protected by California (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. The species is widely distributed, common to uncommon permanent resident at low to middle elevations (Grinnell et al. 1937; Schempf and White 1977). Ringtails occur in various riparian habitats, and in brush stands of most forest and shrub habitats (Ahlborn 2005). Hollow trees, logs, snags, cavities in talus and other rocky areas, and other recesses are important for cover and dens (Ahlborn 2005). The species is usually not found more than 0.6 mile from a permanent water source (Ahlborn 2005). Suitable habitat is present within the project area, including rock outcroppings. However, the nearest permanent water source is approximately 1.05 miles from the project area (Tule Lake). Therefore, there is only moderate potential for the species to occur within the project area.

Northwestern San Diego Pocket Mouse (Chaetodipus fallax fallax)

The northwestern San Diego pocket mouse is a CDFW SSC (State of California 2011) and a County Group 2 species. This species is often found in coastal sage scrub, chaparral, and grassland habitat throughout San Diego County. The main habitat requirement for this species is the presence of low-growing vegetation or rocky outcroppings, as well as sandy soils for digging burrows (Lackey 1996). Potentially suitable habitat for the species exists within the rocky and open areas associated with the wildflower field, scrub, and chaparral habitats of the project area.

Townsend's Big-eared Bat (Corynorhinus townsendii)

Townsend's big-eared bat is a CDFW SSC (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. This bat species is found throughout California in all but subalpine and alpine habitats (Harris 2000). The species is most abundant in mesic habitats and requires caves, mines, tunnels, buildings, or other human-made structures for roosting (Harris 2000). Roosting sites are the most important limiting resource (Harris 2000). The species forages over habitat edges or in forest and woodland habitats within approximately 9 miles of roost sites. The species is relatively specialized for feeding on moths (Harris 2000). The Townsend's big-eared bat numbers have declined steeply in California, including San Diego County. Oak woodland and wetland habitats within the project area have the potential to support foraging Townsend's big-eared bats.

Greater Western Mastiff Bat (Eumops perotis californicus)

The greater western mastiff bat is a CDFW SSC (State of California 2011) and a County Group 2 species. It is found in arid and semiarid, rocky canyons where it roosts in crevices and shallow caves on the sides of cliffs and rock walls. It is also known to inhabit coastal scrub, grasslands, and chaparral. It occurs from central California southeast to southern Nevada, central Arizona, and west Texas and south into northern Baja California, northern Sinaloa, and Zacatecas, Mexico. Potentially suitable roosting habitat for the species is present within rock outcroppings associated with the semi-desert chaparral habitat in the project area. In addition, wildflower field and shrub habitats within the project area provide potentially suitable foraging habitat for the species.

Western Red Bat (Lasiurus blossevillii)

The western red bat is a CDFW SSC (State of California 2011) and a County Group 2 species. This species is solitary and roosts in broad leaved trees, especially cottonwoods and willows, and sometimes in orchard trees. Western red bats are often found near streams, and their preferred food is moths (Kays and Wilson 2002; Wilson and Ruff 1999). Potentially suitable roosting habitat for the western red bat is present within oak woodland habitats associated with the project area. In addition, wildflower field, shrub, and woodland habitats within the project area provide potentially suitable foraging habitat for the species.

American Badger (Taxidea taxus)

The American badger is a CDFW SSC (State of California 2011) and a County Group 2 species. Additionally, this species is proposed for coverage under the draft ECMSCP. Badgers are residents of level, open areas in grasslands, agricultural areas, and open shrub habitats. This species digs large burrows in dry, friable soils and feeds mainly on fossorial mammals: ground squirrels, gophers, rats, mice, etc. Badgers are primarily active during the day but may become more nocturnal in proximity to humans. The home range of badgers has been measured to be 1,327 to 1,549 acres for males and 338 to 751 acres for females in Utah (Lindzey 1978), and 400 to 600 acres in Idaho (Messick and Hornocker 1981). Potentially suitable habitat for the American badger was found within the level, open areas of scrub, chaparral, and wildflower field habitats associated with the project area.

1.4.9 Wetlands/Jurisdictional Waters

Jurisdictional waters (including wetland and other aquatic environments/habitats) occurring within California are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), the RWQCB under Section 401 of the CWA, and the CDFW under Section 1600 et seq., of the CFGC. The project area contains waters that are both defined and regulated by all three agencies. The area of jurisdictional waters that would be regulated by each agency is provided in the following discussion. An expanded discussion of this topic is presented in the JDLR prepared for the Proposed Project (Appendix C).

1.4.9.1 Federal Waters

The extent and distribution of the potential jurisdictional waters of the U.S. within the project area is approximately 0.40 acre (Table 5 and Figure 10). Aquatic-related habitats have been classified according to both the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) as modified by Oberbauer (Oberbauer 1996, revised 2005) and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). Both classification systems incorporate a hierarchical structure of systems, subsystems, and classes to identify vegetation communities, wetland habitat types, and cover types. The vegetation occurring within the project area is typically associated with this semi-arid region of southern California.

Table 5. Potential Jurisdictional Waters of the U.S. and State Occurring within the Project Area

Potential Jurisdictional Waters Type	Vegetation Community (Holland 1986)	Wetland Habitat Type (Cowardin et al. 1979)	Area of Aquatic Resource in Project Area (acres) ¹	Regulatory Authority ²
Potential Jurisdictional Waters of the U.S. and State				
Other Waters	Drainage Features/ Nonvegetated Channel (64200)	Riverine; Unconsolidated Bottom, Sand, Intermittently Flooded, Fresh	0.40	CDFW, RWQCB, and USACE
Subtotal Potential Waters of the U.S. and State			0.40	
Potential Jurisdictional Waters of the State, Exclusively				
Vegetated Swale ³	Southern Willow Scrub (63320)	Palustrine; Scrub/Shrub Broad-leaved, Deciduous, Seasonally Flooded, Fresh	0.37	CDFW and RWQCB
Unvegetated Swale ³	Big Sagebrush Scrub (35210) ⁴	n/a ⁵	0.16	CDFW and RWQCB
Subtotal Potential Waters of the State			0.53	
Grand Total Potential Jurisdictional Waters			0.93	

¹ Jurisdictional waters acreage within the project area was determined by using ArcGIS. Acreages are rounded to the nearest hundredth.

² Although the County does provide regulations for “Environmentally Sensitive Lands” such as wetlands and other aquatic features, the delineated aquatic features occurring within the project area are not “jurisdictional waters of the County,” per se. However, all delineated features may meet the definition of wetland as outlined by Sec. 86.602 of Chapter 6 of the RPO and may still be subject to buffer requirements and mitigation, avoidance, and permitting requirements (if impacted) pursuant to the County’s RPO.

³ Based on Section 86.602 (q)(2)(aa) of the RPO, the swales may not be considered “wetlands” by the County.

⁴ Although this portion of the swale is unvegetated, it occurs within the larger big sagebrush scrub habitat.

⁵ Big Sagebrush Scrub is not considered an aquatic habitat by Cowardin et al. (1996). Swales are microtopographic features that convey surface water in low volume and short duration (hours to days [usually in sheetflow]) and are commonly associated with riverine features (Hauer and Lamberti 2007).

1.4.9.2 State Waters

As shown in Table 5 above, areas under the jurisdiction and regulatory administration of CDFW and the RWQCB include the 0.40 acre of potential jurisdictional waters of the U.S. and an additional 0.53 acre of swales (composed of vegetated swale [0.37 acre] and unvegetated swale [0.16 acre]) as potential jurisdictional waters of the state, exclusively (Table 5 and Figure 10).

1.4.10 Habitat Connectivity and Wildlife Corridors

Wildlife movement corridors or linkages are considered sensitive by local, state, and federal resource and conservation agencies because these corridors allow wildlife to move between adjoining open space areas that are becoming increasingly isolated as open space becomes increasingly fragmented from urbanization, rugged terrain, or changes in vegetation (Beier and Loe 1992). Numerous studies have concluded that many wildlife species would not likely persist over time because isolation through fragmentation would prohibit the infusion of new individuals and genetic information (Bennett 1990; Harris and Gallagher 1989; MacArthur and Wilson 1967; Soule 1987). However, corridors mitigate the effects of this fragmentation by (1) allowing wildlife to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Farhig and Merriam 1985; Harris and Gallagher 1989; Noss 1983; Simberloff and Cox 1987).

Wildlife movement activities typically fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal



Source: Soitec 2011; AECOM 2011; Bing 2011

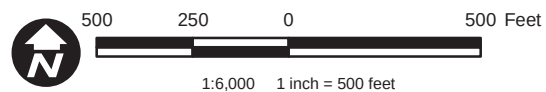


Figure 10
**Jurisdictional Wetlands and Waters/
 Oak Root Protection Zones**

migration; and (3) movements related to home range activities (foraging for food or water; defending territories; searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies such as “travel route,” “wildlife corridor,” and “wildlife crossing” to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this analysis, these terms are defined below.

Travel route – A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, or den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas, and provides a relatively direct link between target habitat areas.

Wildlife corridor – A piece of habitat, usually linear, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species.

Wildlife crossing – A small, narrow area, relatively short in length and generally constricted that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are human-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These wildlife crossings are often areas with reduced width along a movement corridor.

Large open space areas that have few or no human-made or naturally occurring physical constraints to wildlife movement may not have wildlife corridors but may be large enough to maintain viable populations of species; provide adequate food, water, and cover; and provide a variety of travel routes (canyons, ridgelines, trails, riverbeds, and others) without the movement of wildlife into other large open space areas. However, once an open space area becomes constrained and/or fragmented as a result of urban encroachment, the remaining linkage area that connects the larger open space areas can act as a corridor as long as it provides adequate space, cover, food, and water, and does not contain obstacles or distractions (e.g., human-made noise, lighting) that would generally hinder wildlife movement.

At a local level, the project area is part of a larger area of scattered rural residential uses and open space allowing relatively unconstrained wildlife movement. The project area supports foraging (e.g., wildflower fields) and cover (e.g., rock outcroppings, oak woodlands) habitat for migrating and resident wildlife species. Potential water sources for migrating or resident wildlife within and near the vicinity of the project area include several unnamed creeks, seeps, manmade ponds, and springs, and Tule Lake, located approximately 1 mile to the northeast. Thus, the project area and vicinity supports a variety of wildlife movement resources.

North/south wildlife movement is hindered by major roads within the project vicinity. Specifically, movement is encumbered by I-8 to the north and Old Highway 80 to the south. As a major transportation corridor, I-8 can be a significant barrier and source of mortality for large animals (CBI 2003). The degree for which transportation corridors, including I-8 and Old Highway 80, constrain movement does, however, vary with the frequency of travel and number of available crossings. As a rural, low-traffic road, Old Highway 80 represents less of a barrier to movement relative to the I-8 transportation corridor. Additionally, constraints on movement vary by species. For instance, winged species (e.g., birds, butterflies) are more able to move freely across significant transportation barriers such as I-8 than large mammals. Nevertheless, the McCain Valley Road undercrossing, east of the project area, may be used by larger species to access areas north of I-8. Culverts located just east of the project area, between the project area and McCain Valley Road, may also provide safe passage to areas north of I-8 for some species. Therefore, although movement is constrained, north/south movements may still occur.

In contrast, there are few barriers to east/west movement in the local vicinity of the project area. Therefore, the project area may serve as an important area for locally dispersing wildlife and movements related to home range activities in the east/west direction. Additionally, as discussed above, wildlife movement is currently hindered by existing transportation infrastructure; therefore, locally occurring species moving between SR-94/Old Highway 80 and I-8 would potentially be funneled through the project area. The impact of SR-94/Old Highway 80 on funneling movement through the project area is, however, less significant relative to I-8.

At a regional level, the location of the project area within a preliminarily delineated FCA of the ECMSCP Plan Area suggests that the project area is important to regional conservation and connectivity. Additionally, habitat within project area may provide open space that connects habitat between National Forest lands to the north and habitats in Baja California. The Las California Binational Conservation Initiative, a leading organization in international conservation planning, has identified important linkages along the international border with Mexico (CBI

2004). Specifically, the La Posta Linkage planning area lies to the west of the project area and has been identified as the last remaining connections between National Forest lands to the north and habitats in Baja California (CBI 2003, 2004). Nevertheless, the project area represents only a fraction of the open space available for wildlife migrating at the regional level.

At a larger scale, the project area falls within the Pacific Flyway—a major north/south migration route for birds that travel between North and South America. The Salton Sea, approximately 40 miles northeast of the project area, is an important stopover for many birds that travel the inland Pacific Flyway migration route (SDG&E 2009). Large numbers of shorebirds, including black-necked stilt (*Himantopus mexicanus*), American avocet (*Recurvirostra americana*), western sandpiper (*Calidris mauri*), and dowitchers (*Limnodromus* spp.), have been recorded at the Salton Sea and adjacent Imperial Valley during migration periods (Shuford et al. 2003). Migrating birds using this inland migration route of the Pacific Flyway may pass through the project area.

1.5 APPLICABLE REGULATIONS

Several federal, state, and local regulations have been established to protect and conserve biological resources. The descriptions below provide a brief overview of the regulations applicable to the resources that occur within or adjacent to the project area, and their respective requirements. Permits or other authorizations that could be required under these regulations if impacts would occur are noted where applicable. The final determination of whether permits are required is made by the regulating agencies.

1.5.1 Federal Regulations and Standards

1.5.1.1 Federal Endangered Species Act¹²

USFWS and the National Marine Fisheries Service (NMFS) administer the federal Endangered Species Act (ESA). Enacted in 1973, the ESA provides for the conservation of threatened and endangered species and their ecosystems. Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered and most species listed as threatened.¹³

¹² U.S. Code (USC) Title 16, Chapter 35, Sections 1531–1544.

¹³ The protection of threatened species under Section 9 is discretionary through a rule issued under Section 4(d) of the ESA. Until a “4(d) rule” is issued by NMFS, threatened anadromous fish or marine species are not protected by the ESA. By regulation, USFWS automatically affords Section 9 protection to threatened species at the time of listing. These protections later can be modified by USFWS through a 4(d) rule.

Take, as defined by the ESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Harm* is defined as “any act that kills or injures the species, including significant habitat modification.” For threatened and endangered plant species, Section 9 prohibits the “removal or reduction to possession” of any listed plant species “under federal jurisdiction” (i.e., on federal land). The ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in the ESA under Section 4(d), 7, and 10(a).

Formal consultation under Section 7 of the ESA would be required if the Proposed Project had the potential to affect the federally listed species that have been detected within or adjacent to the project area.

1.5.1.2 Migratory Bird Treaty Act¹⁴

The MBTA of 1918, as amended, implements various treaties and conventions between the United States and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful as is taking of any parts, nests, or eggs of such birds (16 USC 703). The definition of *taking* is different under MBTA from the definition under the ESA and includes only the death or injury of individuals of a migratory bird species or its eggs. *Take* under the MBTA does not include the concepts of harm and harassment as defined by the ESA. It is also important to note that the MBTA defines migratory birds broadly; most of the bird species documented from the project area are covered by the provisions of the MBTA.

No permit is issued under the MBTA; however, the Proposed Project would need to comply with the measures that would avoid or minimize effects on migratory birds.

1.5.1.3 Bald and Golden Eagle Protection Act¹⁵

The BGEPA prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Under the BGEPA, it is a violation to “...take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof...” *Take* is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect,

¹⁴ USC Title 16, Chapter 7, Subchapter II, Sections 703–712.

¹⁵ USC Title 16, Chapter 5A, Subchapter II, Sections 668 a–d.

molest, and disturb. *Disturb* is further defined in 50 Code of Federal Regulations (CFR) Part 22.3 as:

to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

Recent revisions to regulations implementing the BEGEPA authorize take of bald eagles and golden eagles under the following conditions: (1) where the take is compatible with the preservation of the bald eagle and golden eagle, (2) is necessary to protect an interest in a particular locality, (3) is associated with but not the purpose of an otherwise lawful activity, and (4) for individual instances of take the take cannot be avoided, or (5) for programmatic take the take is unavoidable even though advanced conservation practices are being implemented (50 CFR 22.26). Permits issued under this regulation usually authorize disturbance only; however, in limited cases a permit may authorize lethal take that results from but is not the purpose of an otherwise lawful activity.

For solar energy projects, USFWS recommends assessing golden eagle use on and within a 10-mile perimeter of a project footprint (USFWS 2010). A formal assessment of eagle use has not been conducted for the Proposed Project. However, golden eagles are known to nest within 10 miles of the project area (WRI, pers. comm. 2011). Further, the project area supports potentially suitable golden eagle foraging habitat. Therefore, the proposed project would need to comply with measures that would avoid or minimize effects on golden eagles in the project area.

1.5.1.4 Federal Water Pollution Control Act (Clean Water Act), 1972¹⁶

The Federal Water Pollution Control Act was first passed by Congress in 1948 and was subsequently amended multiple times. The CWA, as currently referenced, is the primary federal law that protects the physical, chemical, and biological integrity of the nation's waters, including lakes, rivers, wetlands, and coastal waters. Programs conducted under the CWA are directed at both point-source pollution (e.g., waste discharged from outfalls and filling of waters) and nonpoint-source pollution (e.g., runoff from roads, highways, and bridges). Under the CWA, the U.S. Environmental Protection Agency (EPA), federal agencies, and state agencies set effluent

¹⁶ USC Title 33, Ch. 26, Sub-Ch. I–VI.

limitations and issue permits under Sections 401, 402, and 404 of the CWA. These permits are the primary regulatory tools of the CWA. The EPA oversees all CWA permits.

The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters without a permit under its provisions. CWA Section 404 permits are issued by USACE for dredge/fill activities within wetlands or nonwetland waters of the U.S. CWA Section 401 certifications are issued by the RWQCB for activities requiring a federal permit or license that may result in discharge of pollutants into waters of the U.S.

Any proposed discharge of dredge or fill materials into federal jurisdictional waters within or adjacent to the project area would require a Section 404 permit from USACE and a Section 401 Water Quality Certification from RWQCB.

1.5.2 State Regulations and Standards

1.5.2.1 California Environmental Quality Act¹⁷

CEQA requires that significant environmental impacts of Proposed Projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented. CEQA applies to certain activities in California undertaken by either a public agency or a private entity that must receive some discretionary approval from a California government agency. CEQA does not specifically define what constitutes an “adverse effect” on a biological resource. Instead, lead agencies are charged with determining what specifically should be considered an impact.

An environmental document would be prepared for the Proposed Project in accordance with CEQA. The effects of the project on biological resources would be evaluated therein, in accordance with County guidelines.

1.5.2.2 California Fish and Game Code

The CFGC regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the California Endangered Species Act (CESA) (Sections 2050–2115) and Streambed Alteration Agreement

¹⁷ Public Resources Code (PRC) § 21000 et seq. and the State CEQA Guidelines, California Code of Regulations (CCR), §15000 et seq.

regulations (Sections 1600–1616), as well as provisions for legal hunting and fishing, and tribal agreements for activities involving take of native wildlife.

Any proposed impact to state-listed species within or adjacent to the project area would require a permit under CESA. Additionally, if an alteration is proposed to a state-defined wetland with a defined bed and bank, then Sections 1600–1616 of the CFGC would apply and a Streambed Alteration Agreement from CDFW would be required.

1.5.2.3 California Endangered Species Act¹⁸

CESA generally parallels the main provisions of the federal ESA and is administered by CDFW. CESA prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. *Take* is defined under the California Fish and Game Code as any action or attempt to “hunt, pursue, catch, capture, or kill.” Therefore, take under CESA does not include “the taking of habitat alone or the impacts of the taking.”¹⁹ Rather, the courts have affirmed that under CESA, “taking involves mortality.”

CESA allows exceptions to the take prohibition for take that occurs during otherwise lawful activities. The requirements of an application for incidental take permit (ITP) under CESA are described in Section 2081 of the CFGC. Incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and “fully mitigates” the impacts of this take. Therefore, any proposed impact to state-listed species within or adjacent to the project area would require an ITP under CESA.

1.5.2.4 Porter-Cologne Water Quality Control Act²⁰

The Porter-Cologne Water Quality Control Act is the primary state law concerning water quality and provides for statewide coordination of water quality regulations. It authorizes the State Water Board and RWQCBs to prepare management plans such as Regional Water Quality Plans (or Basin Plans) to address the quality of groundwater and surface water. The Porter-Cologne Water Quality Control Act also authorizes RWQCBs to issue Waste Discharge Requirements (WDRs) defining limitations on allowable discharge to waters of the state. In addition to issuing CWA Section 401 certifications on CWA Section 404 applications to fill waters, RWQCBs may

¹⁸ California Fish and Game Code, Division 3, Chapter 1.5, Sections 2050–2115.

¹⁹ *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 (2006).

²⁰ California Water Code, Division 7, Sections 13000–14958.

issue WDRs for such activities. Because the authority for WDRs is derived from the Porter-Cologne Water Quality Control Act and not the CWA, WDRs may apply to a somewhat different range of aquatic resources than do CWA Section 404 permits and CWA 401 Water Quality Certifications. Applicants that obtain a permit from USACE under Section 404 also must obtain certification of that permit by RWQCB.

Proposed discharges of waste that would affect state waters (that are not federal waters) within or adjacent to the project area would require a Report of Waste Discharge from RWQCB.

1.5.2.5 Natural Community Conservation Planning Act of 1991²¹

In 1991, California's Natural Community Conservation Planning Act (NCCPA) (CFGC, Section 2800 et seq.) was enacted to implement broad-based planning that balances appropriate development and growth with conservation of wildlife and habitat. Pursuant to the NCCPA, local, state, and federal agencies are encouraged to prepare Natural Community Conservation Plans (NCCPs) to provide comprehensive management and conservation of multiple species and their habitats under a single plan, rather than through preparation of numerous individual plans on a project-by-project basis. The NCCPA is broader in its orientation and objectives than CESA. Additionally, preparation of an NCCP is a voluntary action. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land use.

Project-specific permits under the NCCP are not issued; however, proposed County-authorized projects must comply with the state's NCCPA program. As previously stated, the Proposed Project is located within the boundaries of the draft ECMSCP. This plan is being developed in accordance with the NCCPA. However, because the ECMSCP is not yet finalized, the Proposed Project is not subject to the conditions of this plan.

1.5.2.6 California Oak Woodland Conservation Act

In 2001, the California Legislature passed the California Oak Woodland Conservation Act. This act established the Oak Woodland Conservation Program, administered by the Wildlife Conservation Board (WCB), which was designed to provide \$10 million to help local jurisdictions protect and enhance their oak woodland resources. It offers landowners, conservation organizations, and cities and counties an opportunity to obtain funding for projects

designed to conserve and restore California’s oak woodlands. It authorizes the WCB to purchase oak woodland conservation easements and provide grants for land improvements and oak restoration efforts. While the Oak Woodland Conservation Program is statewide in nature, it is designed to address oak woodland issues on a regional priority basis. This program provides a mechanism to achieve sustainable ranching and farming operations, along with healthy oak woodlands. No permit is issued under this act.

1.5.3 Local Regulations and Standards

1.5.3.1 San Diego County General Plan – Land Use Element (Chapter 3) and Conservation and Open Space Element (Chapter 5)

In August 2011, the San Diego County Planning Commission and Board of Supervisors adopted a comprehensive revision to the County’s General Plan. Overall, the plan is “based on a set of guiding principles designed to protect the County’s unique and diverse natural resources and maintain the character of its rural and semi rural communities” (County of San Diego 2011). The Land Use Element provides a framework to accommodate future development that is compatible with the character of unincorporated communities and the protection of valuable and sensitive natural resources. The Conservation and Open Space Element provides guiding principles for the conservation, management, and utilization of natural and cultural resources; the protection and preservation of open space; and the provision of park and recreation resources. This element addresses policies related to natural resources (biological, water, mineral, etc.), cultural resources, air quality, climate change, energy, and park and recreation facilities. The Conservation and Open Space Element includes policies to promote properly designed and maintained energy systems that reduce consumption of nonrenewable resources and reduce air pollutant emissions while minimizing impacts to natural resources and communities.

No permit is issued under these elements of the County’s General Plan; however, the Proposed Project would need to comply with the relevant policies of the elements noted above.

1.5.3.2 County of San Diego Zoning Ordinance

Land may also have a zoning designation or Special Area Regulation with certain restrictions pursuant to the County of San Diego Zoning Ordinance (Zoning Ordinance). For instance, lands

²¹ Section 2800 et seq. of the California Fish and Game Code, as amended January 1, 2003 (Chapter 4, sections 1 and 2 of California statutes 2002).

may have a zoning designation of S81 Ecological Resource Area Regulations. The few uses allowed on lands with this designation are subject to strict provisions and limitations. The Zoning Ordinance also applies to other Special Area Regulations with specific restrictions and provisions, including designator G (Sensitive Resource), R (Coastal Resource Protection Area), and V (Vernal Pool Area). In September 2010, the Board of Supervisors of the County approved amendments to the Zoning Ordinance regarding solar energy systems. These amendments set forth standards and procedures for installation and operation of solar energy systems to improve and enhance public welfare and safety, and to implement the County's General Plan. No permit is issued under this Zoning Ordinance.

1.5.3.3 Multiple Species Conservation Program and Biological Mitigation Ordinance²²

The Multiple Species Conservation Program (MSCP) is a long-term regional conservation plan designed to establish a connected preserve system that protects the County's sensitive species and habitats. The MSCP covers 582,243 acres over 12 jurisdictions. Each jurisdiction will have its own subarea plan to be implemented separately. The subarea plan for the southwestern portion of unincorporated lands within the County's jurisdiction covers 252,132 acres. The County's South County MSCP Subarea Plan is regulated by the Biological Mitigation Ordinance (BMO), which outlines the specific criteria and requirements for projects within MSCP boundaries. The Subarea Plan (adopted October 1997), the BMO (adopted March 1998), the Final MSCP Plan (dated August 1998), and the Implementation Agreement (signed March 1998) between the County and the wildlife agencies are the documents used to implement the MSCP plan for south San Diego County. The County's MSCP Subarea Plan and BMO provide specific criteria for project design, impact allowances, and mitigation requirements. The criteria contained within the BMO do not replace those required by the MSCP. All projects within the approved MSCP plan boundaries must conform to both the MSCP requirements and the County's policies under CEQA.

The project area is within the boundaries of the County's Draft ECMSCP, which is not yet approved. When the Final ECMSCP and associated BMO are approved, an Implementation Agreement between the County and wildlife agencies, specific to this area of unincorporated lands within the County's jurisdiction, will be signed.

1.5.3.4 Resource Protection Ordinance²³

²² County of San Diego, Multiple Species Conservation Program (MSCP), County of San Diego Subarea Plan, 1997 and County of San Diego, Biological Mitigation Ordinance, (Ord. Nos. 8845, 9246) 1998 (new series).

²³ County of San Diego, Resource Protection Ordinance, 2007 (Ord. Nos. 9842, 7968, 7739, 7685 and 7631).

The RPO was adopted in 1989 and amended in 1991 and 2007. The RPO restricts to varying degrees impacts to various natural resources including wetlands, wetland buffers, floodplains, steep slopes, sensitive habitat lands and historical sites. Certain permit types are subject to the requirement to prepare Resource Protection Studies under the RPO.

The RPO restricts uses in wetlands as defined by the ordinance. Aquaculture; scientific research; wetland restoration projects; limited removal of diseased or invasive plant species; and limited road-, driveway- or trail-crossings may be allowed when specific findings are made for these uses. In addition, the ordinance requires that a wetland buffer be provided to further protect the wetland resources. Improvements necessary to protect the adjacent wetlands and those uses allowed within the actual wetland are the only allowed uses within the buffer. For more explicit information on these requirements refer to the RPO.

The RPO also limits impacts to sensitive habitat lands. Sensitive habitat lands include unique vegetation communities and/or the habitat that is necessary to support a viable population of sensitive species, is critical to the proper functioning of a balanced natural ecosystem, or serves as a functioning wildlife corridor. Habitats considered sensitive or significant under CEQA are not necessarily considered RPO sensitive habitat lands. Examples of RPO sensitive habitat lands include, but are not limited to:

- Lands that include populations of sensitive species (such as County Group A plants, Group I wildlife species, state-listed and federally listed species).
- Lands that contain unique vegetation communities, such as maritime succulent scrub, southern coastal bluff scrub, coastal and desert dunes, calcicolous scrub, maritime chaparral, valley sacaton grassland, hardpan and claypan vernal pools, montane meadows, mesquite bosque, native grassland, and Torrey pine forest.

Examples of lands that would not be considered RPO sensitive habitat lands include, but are not limited to, coastal sage scrub, oak woodland, chaparral, and non-native grasslands, provided that these habitats (a) do not include populations of sensitive species (such as Group A plants, Group 1 wildlife species, state-listed and federally listed species); (b) are not critical to a balanced ecosystem; or (c) are not part of a functioning wildlife corridor.

Impacts to RPO sensitive habitat lands shall only be allowed when (a) all feasible measures have been applied to reduce impacts and (b) mitigation provides an equal or greater benefit to the affected species.

The ordinance includes the provision that when “the extent of environmentally sensitive lands on a particular legal lot is such that no reasonable economic use of such lot would be permitted by these regulations, then an encroachment into such environmentally sensitive lands to the minimum extent necessary to provide for such reasonable use may be allowed.”

1.5.3.5 Habitat Loss Permit Ordinance²⁴

The Habitat Loss Permit (HLP) Ordinance was adopted by the County in March 1994 in response to both the listing of CAGN as a federally threatened species, and the adoption of the NCCP by the State of California. Pursuant to the Special 4(d) Rule under the federal ESA, the County is authorized to issue “take permits” for CAGN (in the form of HLPs) in lieu of Section 7 or 10(a) permits typically required from USFWS. Although issued by the County, the wildlife agencies must concur with the issuance of an HLP for it to become valid as take authorization under the federal ESA.

The HLP Ordinance states that projects must obtain an HLP prior to the issuance of a grading permit, clearing permit, or improvement plan if the project will directly or indirectly impact any of several coastal sage scrub habitat types. The HLP Ordinance requires an HLP if coastal sage scrub will be impacted, regardless of whether the site is currently occupied by CAGN. HLPs are not required for projects within the boundaries of the MSCP, since take authorization is conveyed to those projects through compliance with the MSCP. HLPs are also not required for projects that have separately obtained Section 7 or 10(a) permits for take of CAGN. For more explicit information on these requirements, refer to the HLP Ordinance.

Until the Final ECMSCP and associated BMO are approved, and an Implementation Agreement between the County and wildlife agencies is signed, the Proposed Project will need to prepare appropriate NCCP 4(d) findings. However, the project area does not support Diegan coastal sage scrub habitat. Therefore, an HLP would not need to be obtained prior to implementation of the Proposed Project.

²⁴ County of San Diego, An Ordinance Amending the San Diego County Code to Establish a Process for Issuance of the Coastal Sage Scrub Habitat Loss Permits and Declaring the Urgency Thereof to Take Effect Immediately, Ordinance No. 8365. 1994, Title 8, Div 6, Ch. 1. Sections 86.101-86.105, 87.202.2.

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CHAPTER 2

REFERENCES

AECOM

- 2011 LanWest Solar Farm Project Quino Checkerspot Butterfly 45-Day Summary Report, Boulevard, California. December 2, 2011.

Ahlborn, G.

- 2005 Life History Account for Ringtail. California Wildlife Habitat Relationships (CWHR) System. California Department of Fish and Game and California Interagency Wildlife Task Group. Updated February 2005.

American Ornithologists' Union, The (AOU)

- 1953 *The Auk* 70 (3).

Babcock, K. W.

- 1995 *Home range and habitat use of breeding Swainson's hawks in the Sacramento Valley of California*. *Journal of Raptor Research* 29(3):193–197.

Beier, Paul, David Choate, and Reginald H. Barrett

- 1995 Movement Patterns of Mountain Lions during Different Behaviors. School of Environmental Science Policy and Management, University of California, Berkeley.

Beier, Paul, and Steven Loe

- 1992 A Checklist for Evaluating Impacts to Wildlife Movement Corridors. *Wildlife Society Bulletin* 20:434–440.

Benes, E. S.

- 1969 Behavioral Evidence of Color Discrimination by the Whiptail Lizard, *Cnemidophorus*. *Copeia* 1969:707–722.

Bennett, A. F.

- 1990 Habitat Corridors and the Conservation of Small Mammals in the Fragmented Forest Environment. *Landscape Ecology* 4:109–122.

Bond, S. I.

- 1977 Annotated List of the Mammals of San Diego County, California. *Trans. San Diego Soc. Nat. Hist.* 18:229–248.

Burt, W. H., and R. P. Grossenheider

- 1976 *A Field Guide to the Mammals: North America, North of Mexico: Third Edition.* Houghton Mifflin Company, Boston.

California Department of Fish and Game (CDFG)

- 1991 Fish and Game Code of California. Gould Publications, Inc.
- 1993 Southern California Coastal Sage Scrub Natural Community Conservation Planning Process Guidelines. CDFG and California Resources Agency, Sacramento, California.
- 2010 California Department of Fish and Game Wildlife Habitat Data Analysis Branch. The Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. September.
- 2011 California Department of Fish and Game. Rare Find 3.

California Native Plant Society (CNPS)

- 2001 Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. x + 388 pp.
- 2009 Inventory of Rare and Endangered Vascular Plants of California (online edition, v7-09d). California Native Plant Society. Sacramento, CA. Available at <http://www.cnps.org/inventory>.

California, State of

- 2011 *State and Federally Listed Endangered and Threatened Animals of California.* The Resources Agency, California Department of Fish and Game. January.

Conservation Biology Institute (CBI)

2003. La Posta linkage portfolio, San Diego County, California. Prepared for The San Diego Foundation. July.

2004 Las Californias Binational Conservation Initiative: A Vision for Habitat Conservation in the Border Region of California and Baja California. Prepared for The San Diego Foundation. September.

County of San Diego

2008 *East County Multiple Species Conservation Program Working Draft Focused Conservation Areas (FCA)*. Available at: http://www.sdcountry.ca.gov/dplu/mscp/docs/east_mscp_csa2_2_8x11.pdf.

2010 *County of San Diego Guidelines for Determining Significance to Biological Resources and Report Format and Content Requirements*. Fourth Revision (September).

Cowardin, L., V. Carter, F. Golet, and E. LaRoe

1979 *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of Interior. U.S. Fish and Wildlife Service. FWS/OBS-79/31. December.

Dickson, Brett G., and Paul Beier

2002 Home-Range and Habitat Selection by Adult Cougars in Southern California. *The Journal of Wildlife Management*. Vol. 66, No. 4 (October 2002), pp. 1235–1245.

Environmental Laboratory

1987 *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.

Estep, J. A.

1989 Biology, movements, and habitat relationships of the Swainson's hawk in the Central Valley of California. California Department of Fish and Game, Wildlife Management Division. Sacramento, CA.

Farhig, L., and G. Merriam

1985 Habitat Patch Connectivity and Population Survival. *Ecology* 66:1,762–1,768.

Grinnell, J.

1903 Call Notes of the Bush-tit. *Condor*, Vol. 5, pp. 85–87.

Grinnell, J., J. S. Dixon, and J. M. Linsdale

1937 Fur-bearing mammals of California. 2 Vols. Univ. California Press, Berkeley. 777 pp.

Hall, E. Raymond

1981 *Mammals of North America*. 2 vols. John Wiley and Sons. New York. 1,181 pp.

Harris, J.

2000 Life History Account for Townsend's Big-Eared Bat. California Wildlife Habitat Relationships (CWHR) System. California Department of Fish and Game and California Interagency Wildlife Task Group. Updated May 200.

Harris, L. D., and P. B. Gallagher

1989 New Initiatives for Wildlife Conservation: The Need for Movement Corridors. Pages 11–34 in *Defenders of Wildlife. In Defense of Wildlife: Preserving Communities and Corridors*. Defenders of Wildlife, Washington, D.C.

Hauer, F. R., and G. A. Lamberti (editors)

2007 *Methods in Stream Ecology*. Second Edition. London: Academic Press.

HDR Engineering, Inc.

2011 Draft Biological Technical Memorandum: Tule Wind Project. San Diego County, California. Prepared for U.S. Bureau of Land Management, California Desert District Office. February 2011.

Holland, R. F.

1986 *Preliminary Descriptions of the Terrestrial Natural Communities of California*. State of California, The Resources Agency.

Jennings, M. R., and M. P. Hayes

1994 *Amphibian and Reptile Species of Special Concern in California*. Final Report to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California. 225 pp.

Kays, R. W., and D. E. Wilson

2002 *Mammals of North America*. Princeton University Press.

Lackey, J.

1996 *Chaetodipus fallax*. Mammalian Species 517:1–4.

Lemm, J. M.

2006 Field Guide to Amphibians and Reptiles of the San Diego Region. California Natural History Guides, 89. University of California Press, Berkeley, California.

Lindzey, F. G.

1978 Movement Patterns of Badgers in Northwestern Utah. *J. Wildl. Manage.* 42:418–422.

MacArthur, R. H., and E. O. Wilson

1967 *The Theory of Island Biogeography*. Princeton University Press, New Jersey. 203 pp.

MacWhirter, R. B., and K. L. Bildstein

1996 Northern Harrier. *In* The Birds of North America, No. 210. pp. 1–29.

Messick, John P, and Maurice G. Hornocker

1981 Ecology of the Badger in Southwestern Idaho. *Wildlife Monographs* 76:1–53.

National Oceanic and Atmospheric Administration (NOAA)

2011 National Weather Forecast Office, San Diego, California. Observed Weather Report for Campo. Available at <http://www.nws.noaa.gov/climate/index.php?wfo=sgx>.

Noss, R. F.

1983 A Regional Landscape Approach to Maintain Diversity. *BioScience* 33(11): 700–706.

Oberbauer, Thomas

1996 *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions*.

-
- 2005 *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions*. Department of Planning and Land Use County of San Diego, San Diego, California. 6 pp. March.
- Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge
- 2008 *Draft Vegetation Communities of San Diego County*. Based on "Preliminary Descriptions of the Terrestrial Natural Communities for California," Robert F. Holland, PhD., October 1986. March.
- San Diego Gas and Electric (SDG&E)
- 2009 *Proponent's Environmental Assessment for the East County 500/230/69 kV Substation Project*. Volume II. August 2009.
- Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens
- 2009 *A Manual of California Vegetation* (Second Edition). California Native Plant Society, Sacramento, California.
- Schempf, P. F., and M. White.
- 1977 Status of six furbearer populations in the mountains of northern California. U.S. Dep. Agric., For. Serv., San Francisco, Calif. 51 pp.
- Shuford, D. W., N. Warnock, and R. L. McKernan
- 2003 Patterns of Shorebird Use of the Salton Sea and Adjacent Imperial Valley, California. In Press, *Studies in Avian Biology*. Accessed at: <http://www.prbo.org/cms/119#salton>.
- Simberloff, D. S., and J. Cox
- 1987 Consequences and Costs of Conservation Corridors. *Conservation Biology* 1: 63–71.
- Soil Survey Staff
- n.d. Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. Available at <http://soils.usda.gov/technical/classification/osd/index.html>. Accessed December, 2011. USDA-NRCS, Lincoln, Nebraska.

Soule, M.

1987 *Viable Populations for Conservation*. Cambridge Univ. Press, Cambridge.

Stebbins, R. C.

2003 *Peterson Field Guides: Western Reptiles and Amphibians*, 3rd Edition, New York, Houghton Mifflin Company.

Tooth, S.

2000 *Process, Form and Change in Dryland Rivers: A Review of Recent Research*. *Earth-Science Reviews* 51: 67–107.

Unitt, P. A.

1984 *Birds of San Diego County*. Memoir No. 13. San Diego Society of Natural History.

2004 *San Diego County Bird Atlas*. Ibis Publishing Company, San Diego Natural History Museum, San Diego. 645 pp.

U.S. Department of Agriculture (USDA)

1973 *Soil Survey, San Diego Area, California*. Soil Conservation Service and Forest Service. Roy H. Bowman, ed. San Diego. December.

1992 *Hydric Soil List*. Natural Resources Conservation Service. Escondido, California Field Office. Field Office Technical Guide. March.

U.S. Fish and Wildlife Service (USFWS)

2002 *Survey Protocol for the Endangered Quino Checkerspot Butterfly (*Euphydryas editha quino*) for the Year 2002 Field Season*. February. 6 pp. + appendices.

2005 *Year 2005 Quino Survey Areas*. Available at: <http://www.fws.gov/carlsbad/TEspecies/Documents/QuinoDocs/web-map20052.pdf>.

2010 *Region 8 Interim Guidelines for the Development of a Project-Specific Avian and Bat Protection Plan for Solar Energy Plants and Related Transmission Facilities*. Pacific Southwest Region. September 2010.

Western Regional Climate Center (WRCC)

2011 Campo Station Map. Available at <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca1424>. Accessed December 2011.

Whitford, W. G.

2002 *Ecology of Desert System*. Academic Press: Burlington, Massachusetts, pp. 32–33.

Wilson, D., and S. Ruff.

1999. *The Smithsonian Book of North American Mammals*. Washington: Smithsonian Institution Press.

Woodbridge, B.

1998 Swainson's Hawk (*Buteo swainsoni*). In *The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California*. California Partners in Flight. http://www.prbo.org/calpif/htmldocs/riparian_v-2.html.

Yosef, R.

1996 Loggerhead shrike (*Lanius ludovicianus*). In: Poole A. and F. Gill, eds. 1996. *The Birds of North America*, No. 231. The Academy of Natural Sciences, Philadelphia, and The American Ornithologists. Union, Washington, D.C.

CHAPTER 3

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APPENDIX A

SOITEC SOLAR LANWEST/EAST PREAPPLICATION SUMMARY LETTER



ERIC GIBSON
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County of San Diego

DEPARTMENT OF PLANNING AND LAND USE

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October 25, 2011

FINAL

LanWest Solar Farm LLC
Attention: James Whalen
1660 Hotel Circle North Suite 725
San Diego, CA 92108

SOITEC SOLAR LANWEST/EAST PREAPPLICATION SUMMARY LETTER; 3992-11-017 (MPA), KIVA#: 11-0155824, Old Highway 80 and McCain Valley Road Boulevard, CA within the Boulevard Community Planning Area of the Mountain Empire Subregional Planning Area. APN: 6120911300, 6120301800, 6130302800, 6130303500

On October 25, 2011, the Department of Planning and Land Use (DPLU) held a Pre-application Meeting on the above listed APN's. This letter provides a summary of the major issues discussed at the conference, key decisions or determination, and guidance for project processing.

OVERVIEW

A. Attendees: The following County staff and applicant representatives attended the Pre-application Meeting: See attached sign in sheet and meeting notes.

B. Project Description:

Applicants Request: The applicant's request is for two Major Use Permits to authorize a Major Impact Utility Pursuant to Sections 1350 and 2926 of the Zoning Ordinance. The project consists of two unmanned Concentrating Photovoltaic (CPV) Solar Energy System that utilize a 48' wide dual axis tracking and mounting system with a maximum envelope height of 35' feet. The projects are located adjacent to each other and would be permitted and constructed in two phases. The two projects may be analyzed in one environmental review process.

Phase one (LanWest) is a 5.04 Mega Watt (MW) project located on approximately 40 acres and includes the construction and operation of approximately 192 CPV trackers configured into 4 (1.26 MW) blocks that consist of 48 trackers with associated transformer and inverter equipment room (undisclosed size).

Phase two (LanEast) is a 20.16 Mega Watt (MW) project located on approximately 225 acres and includes the construction and operation of approximately 768 CPV trackers configured into 16 (1.26 MW) blocks that consist of 48 trackers with associated transformer and inverter equipment room (undisclosed size).

Point of Interconnection: The LanEast phase would step up voltages and interconnect onsite into the proposed Tule Wind project's 138kV transmission line that would either transect the project on the west side of McCain Valley Road. The LanWest phase would interconnect into the existing 12kV distribution line that feeds into the SDG&E Boulevard Substation across the street.

Facilities and Improvements: Frontage improvements are not required and access would be provided by an onsite private improved driveway located off Old highway 80 Rd. The private driveways for each project would be improved to a commercial driveway standard. The amount of water needed for the construction, operation, and decommissioning is undisclosed. The water use proposed for operation includes that needed for periodic cleaning of the solar panels and reapplication of the soil-binding agent when necessary. A potable water source and septic improvements are not required because the facility would be unmanned. The amount of grading and excavation is undetermined.

C. Land Use Designation and Zoning: The location of the projects are near the corner of Old Highway 80 and McCain Valley road, within the Boulevard Community Planning Area of the Mountain Empire Subregional Planning Area. Both sites are subject to the Rural Land (RL-80) General Plan Land Use Designation and the Zoning for the site is General Rural (S92).

D. DETERMINATIONS: The following decisions or determinations were made at the Pre-application Meeting:

- 1. Permit Path:** As described in the project description, both projects will require a separate Major Use Permit to authorize a Major Impact Utility Pursuant to Sections 1350 and 2926 of the Zoning Ordinance within the S92 zoned site.
- 2. Environmental Review:** The Department The Department of Planning and Land Use has completed its review of your major preapplication request and has determined that there may be substantial evidence that your project may have a significant adverse effect on the environment due to direct impacts to visual resources, biological resources, cultural resources. The project would also have potentially significant cumulative

impacts to the Boulevard Community only for the same impact areas. The project will be subject to prepare and submit a draft Environmental Impact Report (EIR) to comply with the requirements of the California Environmental Quality Act (CEQA).

The County of San Diego's environmental review guidelines require that EIRs be prepared by a consultant from the County's List of Environmental Consultants. Furthermore, the guidelines require that environmental technical studies be prepared by a California Licensed professional (i.e., engineer, geologist) qualified to complete the study or a consultant from the County's List of Environmental Consultants. Consultant lists are available at the Department of Planning and Land Use – Zoning Counter.

MAJOR PROJECT ISSUES

The following project issues were identified during the project pre-application scoping and are further discussed in the attachments to this letter. These issues may require substantial redesign of the proposed project or, if not resolved, would result in a recommendation for project denial by DPLU. These issues discussed below, were identified based upon information presently available to the County and are subject to change upon submittal of further information and studies:

- 1. General Plan Consistency:** The General Plan Update was approved by the Board of Supervisors August 4, 2011. The newly adopted plan has several policies that may conflict with your project. General Plan conformance is one of the required Major Use Permit findings pursuant to ZO Section 7358. A General Plan Consistency Analysis is required to determine if the project would comply with the General Plan and the Boulevard Community Plan (See Attachment A letter C for the scope for analysis). It is recommended that the plan consistency analysis be performed early on in the process. If there are General Plan policy conflicts, they can be addressed with mitigation and/or site design. For example, Policy COS-11.1 addresses the protection of Scenic Highways. Old Highway 80 is a General Plan Designated Scenic Highway (Not State Designated), this policy may affect how the project is designed, and or what mitigation is proposed to comply with the policy. The following is a summary of some of the other plan policies you may be in conflict with, or could use extra attention when designing the project:

General Plan Policies: LU.6.6, LU-6.9, LU-10.2, LU-12.4, COS-11.1-3, COS 12.2, and S.3.2.

The Boulevard Community Plan has at least six policies that would prohibit or hinder the proposed project. These policies may be amended by the Board of Supervisors when the Zoning Ordinance update to the Wind regulations is adopted. The Wind Ordinance is on schedule to be heard by the Board of Supervisors the 1st quarter of 2012. The following is a summary of some of the other plan policies you may be in conflict with, or could use extra attention when designing the project:

Boulevard Community Plan Policies: Policy LU: 1.1.1, 1.2.2, 1.3.2, 6.1.2, 6.1.3, and 6.1.4.

2. **Major Use Permit Findings:** When approving or denying a Major Use Permit (MUP), the County decision makers are required to make findings pursuant to ZO Section 7358. This project appears to have conflicts with the required findings that may lead to a recommendation of denial based upon the inability to meet these findings. DPLU requests that you prepare draft findings to determine the feasibility of a project approval. (See Attachment A section C, for a full scope of the Land Use and Community Character Analysis).
3. **Visual Impacts:** The initial review of your projects has revealed that the project may adversely affect visual resources. There may be potentially adverse impacts to Visual Resources from introduction of the project to the viewshed. Views from scenic vistas, scenic highways and County Scenic Routes will need to be analyzed further to determine the extent of any adverse impacts. Visual resources can include narrow or expansive views, views from one site or from a series of sites as along a scenic highway (Old Highway 80) Interstate 8, and views from above, at eye level, or from below. A particular aspect that defines a community or a region's character and can also identify a scenic resource. The evaluation of visual resources should be combined with the General Plan Consistency Analysis because of the policies that protect scenic resources. A full Visual Analysis will be required to evaluate the significance of the visual impacts.
4. **Fire Protection:** The project sites are located in a Very High Fire Severity Zone and the project design and mitigation measure should be evaluated as early on as possible, as well as consultation with the County Fire Authority (CFA). The projects will be required to annex into a Community Facilities District in order for the CFA to provide adequate fire service to the project. The costs and process for annexation into the CFD should be discussed with the CFA. Additionally, a full fire protection plan with technical report will be required.
5. **Cultural Resources:** All parcels identified with this project contain numerous previously recorded sites with cultural resources. This may hinder the design and ultimate full implementation of what was proposed in the project description. The project will be required to comply with the Resource Protection Ordinance (RPO) to avoid and or preserve these sites. The RPO significance of the sites are unknown, so further evaluation and consultation with the County should be made before proceeding with the project.
6. **Biological Resources:**
 1. **Offsite Mitigation:** While the project description indicates that mitigation will be proposed onsite in the southeastern corner of the project site, it does not appear that this area will be large enough to account for all required mitigation. If offsite mitigation is required to meet habitat mitigation requirements, the applicant must identify in the Biological

Resources Report where offsite mitigation is proposed. Staff is not aware of any mitigation banks in this area that could be used to fulfill the mitigation requirements of this project.

2. **RPO:** The project site appears to contain large areas that qualify as wetlands in accordance with the Resource Protection Ordinance (RPO). In accordance with the RPO, all wetlands and a wetland buffer of 50 to 200-feet must be preserved. The Biological Resources Map must clearly define all areas meeting the RPO definition of a wetland and must also show a wetland buffer of an appropriate width to preserve the wetlands. A limited building zone on 100-feet is also required from the edge of any open space easement to prevent future fire clearing from impacting the wetland.

ESTIMATE OF DISCRETIONARY PROCESSING COSTS AND SCHEDULE

An estimate of discretionary processing time and costs that includes several assumptions has been generated for your project and is included in Attachment B. It is estimated that \$229,077 of County fees and deposits will be required to get **each of the projects** through to a hearing. The estimated hearing date for this project is March 2014. Please note that the estimated cost and hearing date is based on certain assumptions detailed in the Attachment and could be more or less than the estimate provided. If the cost and schedule assumptions prove to be incorrect, the estimate will be revised. The estimate includes only the costs to get your present application to hearing and does not include additional post discretionary processing costs such as an appeal or final map fees or building permit fees.

Should your applications be approved, there will be additional processing costs in the future (e.g., Final Map processing costs, park fees, drainage fees, building permit fees). To obtain an estimate of future building permit and plan check fees, parks fees, and Traffic Impact Fees, see <http://www.sdcountry.ca.gov/dplu/bldgforms/index.html#fees>.

Please note that building permits are required to construct, enlarge, alter, repair, move, improve, remove, convert, or demolish a building or structure. Permits are also required for plumbing, electrical, and mechanical work. A permit must be obtained prior to construction and prior to occupancy. Failure to obtain a building permit is a violation of the County of San Diego Ordinances. The Department's goal is to help facilitate the efficient and timely processing of each application. If, however, a project becomes delayed due to excessive project inactivity or account deficit, Board Policy I-137 will apply; please refer to the Board Policy I-137 at [http://www.sdcountry.ca.gov/dplu/docs/Inactive Case Board Policy-11.3.09.pdf](http://www.sdcountry.ca.gov/dplu/docs/Inactive%20Case%20Board%20Policy-11.3.09.pdf) and the FAQ sheet at <http://www.sdcountry.ca.gov/dplu/docs/907.pdf> for the Processing of Inactive and Deficit Projects.

DEFENSE AND INDEMNIFICATION

Execution of a Defense and Indemnification Agreement will likely be required due to the risk to the County of potential litigation associated with this project. Securities may also be required. While the indemnification agreement is not executed until Board of Supervisors authorization, typically at the end of the discretionary review process, you should be aware of the obligations, costs and potential risks associated with the

agreement and potential future litigation filed against the County. For Frequently Asked Questions about Defense and Indemnification Agreements, see [Defense and Indemnification FAQs](#)

DEPARTMENT RECOMMENDATION

Comments and information in this letter, or lack thereof, should not be construed as the Department implying an overall recommendation or decision on your project. The Department of Planning and Land Use generally makes a final recommendation to approve or deny a project when the entire planning analysis and environmental documentation is complete and Sponsor Group input is received.

CONSULTANT LIST & MEMORANDUM OF UNDERSTANDING (MOU)

Certain technical studies must be prepared by a consultant from the County's CEQA Consultant List, which can be found on the County of San Diego's website at: <http://www.sdcplu.org/dplu/Resource/docs/3~pdf/consList.pdf>. No list is maintained for hydrology and stormwater management planning. With the exception of minor stormwater management plans, only registered engineers registered in the State of California shall be permitted to submit hydrology/drainage studies and only registered engineers or Certified Professionals in Storm Water Quality certified by CPESC, Inc., or an equivalent entity approved by the Director of Public Works, shall be permitted to submit stormwater management plans.

Applicants are responsible for selecting and direct contracting with specific consultants from the County's list to prepare CEQA documents for private projects. Prior to the first submittal of a CEQA document prepared by a listed consultant for a private project, the applicant, consultant, consultant's firm (if applicable) and County shall execute the attached Memorandum(s) of Understanding (MOU). The responsibilities of all parties involved in the preparation of environmental documents for the County (i.e. applicant, individual CEQA consultants/sub-consultants, consulting/sub-consultant firms, and County) are clearly established in the MOU for each requested applicable study. The clear identification of roles and responsibilities for all parties is intended to contribute to improved environmental document quality. The MOU can be found on the Department's website at: <http://www.sdcounty.ca.gov/luegdocs/Templates/Boilerplate%20Templates/MOU.doc>.

GUIDELINES FOR DETERMINING SIGNIFICANCE & REPORT FORMAT AND CONTENT REQUIREMENTS

Technical studies must be prepared using the Guidelines for Determining Significance and Report Format & Content Requirements. The Guidelines and Report Format & Content Requirements can be found on the Department's website at <http://www.co.san-diego.ca.us/dplu/procguid.html> (listed in alphabetical order).

COMMUNITY PLANNING GROUP COORDINATION

The Department of Planning and Land Use (DPLU) strongly recommends coordination with the *Boulevard Community Planning Group* prior to application submittal, as the Department will consider comments from applicable community groups in its decision making process. The following link is for the Planning Group chairperson and contact information: Group: <http://www.sdcounty.ca.gov/dplu/docs/plngchairs.pdf>.

RECORDATION OF PERMIT

Pursuant to the San Diego County Zoning Ordinance Section 7019, Permit Decisions for Administrative Permits, Density Bonus Permits, Site Plans, Use Permits, Variances, Reclamation Plans, or any modifications to these permits shall be recorded to provide constructive notice to all purchasers, transferees, or other successors to the interests of the owners named, of the rights and obligations created by this permit. The Recordation form, with Decision attached, will be provided immediately after the Decision determination for this project and must be signed, notarized and returned to DPLU at the initiation of the Condition Satisfaction Process, or as otherwise specified. Once received, DPLU staff shall have the document recorded at the County Recorder's Office.

PROJECT PROCESSING GUIDANCE

The Department of Planning and Land Use (DPLU) has reviewed your pre-application submittal for two Major Use Permits and is providing you with the attached package of information as a guide for further processing your application. A scope of project issues for all identified issues area, revisions or processing requirements has been prepared for your project and is included in this letter as **Attachment A**. This information shall be used by the County and the applicant as project issues that must be resolved and revisions that must be completed prior to public review under the California Environmental Quality Act (CEQA). In response to the Project Issues information, the applicant is expected to include a letter with every submittal made to the Department stating how each item number has been addressed.

SUBMITTAL REQUIREMENTS

To assure timely cost-effective processing of your project, all items must be submitted concurrently. The submittal must be made to the DPLU Zoning Counter at 5201 Ruffin Road, Suite B, San Diego, CA 92123-1666. For fastest service when submitting information requested in this letter, arrive at the DPLU Zoning Counter between 8:00 a.m. and 10:00 a.m. Please note that all Public Counters at the DPLU Ruffin Road Annex are closed daily from 11:45 a.m. through 12:30 p.m. Expect longer wait times before and after the lunchtime closure.

The submittal must include the following items:

1. Submit a copy of this letter.
2. **SUBMIT AN APPLICATION FOR A MAJOR USE PERMIT FOR EACH LANWEST AND LANEAST.** Please contact the zoning counter at 858-694-2262 to verify your submittal requirements and schedule an appointment for the submittal of your application. Please make the appointment as soon as possible, as the wait time for appointments fluctuates.
3. **SUBMIT A SEPARATE LETTER ADDRESSING EACH ITEM IN THE ATTACHED PROJECT SCOPING INFORMATION (Attachment A), BY REFERENCE NUMBER.** This letter is required to detail how every unresolved item has been addressed in the resubmittal package.

4. The following information and/or document(s) with the requested number of copies as specified shall be submitted for each use permit application. This amount is doubled.

Information/Document	# of Copies	CD or Flash Drive with Word and PDF Doc	Document Distribution (For Admin Purposes Only)
<u>Project Issue Response Letter</u> (see #3 above)	2	PDF	Patrick Brown PM (1), Ed Sinsay (1), DPW Business Rule: Project Issue Checklist Response Letter
Title Report with Schedule "B" Attachments (See Attachment A- Letter A)	2	PDF	Patrick Brown PM (1), Ed Sinsay (1), DPW Business Rule: Title Report
Application for a Major Use Permit. (see #2 above) *Please refer to the Major Use Permit submittal requirements.	2	PDF	PPS for Distribution
<u>Preliminary Grading Plan</u> (with Supporting Information) (See Attachment A-Letter-B)	6	PDF	Patrick Brown (1), DPW (2), DEH (1), Planning Group (1) Business Rule: Grading Plan
<u>Amended Project Description</u> (See Attachment A-Letter-A.1)	4	Word & PDF	Patrick Brown (3) Ed Sinsay (1) Business Rule: Project Description
<u>Land Use/Community Character Analysis</u> (See Attachment A-Letter-C)	2	Word & PDF	Patrick Brown (2), Business Rule: Land Use Analysis
<u>Resource Protection Study: Wetlands, Cultural, and Steep slopes</u> (See Attachment A-Letter-K)	2	Word & PDF	Patrick Brown (1), Ed Sinsay (1) Business Rule: Resource-Protection-Study
<u>Visual Impact Analysis</u> (See Attachment A-Letter-E)	2	Word & PDF	Patrick Brown (2) Business Rule: Visual-Impact-Report
<u>Air Quality Information/Study</u> (See Attachment A-Letter-F)	2	Word & PDF	Patrick Brown (1), Air Quality Specialist (1) Business Rule: Air Quality Report
<u>Biological Resources Report</u> (See Attachment A-Letter-G)	2	Word & PDF	Patrick Brown (1), Biologist (1) Business Rule: Biological-Resource-Report

Information/Document	# of Copies	CD or Flash Drive with Word and PDF Doc	Document Distribution (For Admin Purposes Only)
<u>Cultural Resource Report</u> (See Attachment A-Letter-H)	2	Word & PDF	Patrick Brown (1), Cultural Resources Specialist (1) Business Rule: Business Rule: Cultural-Resource-Report
<u>Cultural Resource Report Confidential Appendix</u> (See Attachment A-Letter-H)	1	1 PDF	Cultural Resources Specialist (1) Business Rule: Arch Survey Confidential
<u>Geologic Reconnaissance Report</u> (See Attachment A-Letter-O)	2	Word & PDF	Patrick Brown (1), Groundwater Geologist (1) Business Rule: Geology Report
<u>Fire Protection Plan</u> (See Attachment A-Letter-I)	4	Word & PDF	Patrick Brown (1), DPW (1), Local Fire Protection District (1), DPLU Fire Marshal (1) Business Rule: Fire Protection Plan
<u>Minor Stormwater Management Plan</u> (See Attachment A-Letter-J)	2	Word & PDF	Patrick Brown (1)(Ed Sinsay), DPW (1) Business Rule: Minor SWMP or Major -SWMP
<u>Drainage/Flooding</u> (See Attachment A-Letter-L)	3	Word & PDF	Patrick Brown (1), DPW (2) Business Rule: Hydrology
<u>Noise Analysis</u> (See Attachment A-Letter-M)	2	1 PDF	Patrick Brown (1), Noise Specialist (1) Business Rule: Acoustical/Noise Report
<u>Memorandum(s) of Understanding according to Attachment</u> (See Attachment A-Letter-D)	All Subject Areas (1 Copy each)	PDF	Patrick Brown PM (1) Business Rule: MOU
The staff goal for review of the requested information/document is 30 days.			

4. Deposits:

DESCRIPTION	APPLICATION REQUIRED ADDITIONAL DEPOSITS
Estimate of Application Fees/Deposits. Actual intake amount will be calculated at application submittal based on current DPLU Fee Schedule http://www.sdcounty.ca.gov/dplu/docs/369.pdf	SEE FEE SCHEDULE
Additional DPLU Deposit	\$20,000

Additional DPW Deposit	\$5,000
TOTAL ADDITIONAL DEPOSITS*	\$25,000

* Refer to the attached "Estimate of Discretionary Processing Time and Cost" for a complete estimate of project costs through hearing /decision.

If you choose not to proceed with the project and you would like to request a refund of any remaining funds in your account, you may contact the Developer Deposit Hotline at 858-694-2320 or via e-mail at DeveloperDeposits_CustomerService@sdcounty.ca.gov. Please note that deposit funds may have been fully expended and a refund may not be processed until all work on the project is complete and the project file is closed.

PRE-APP EXPIRATION DATE

In order to maintain adequate progress in processing of your project, the DPLU requires that all of the revisions/information requested in this letter be submitted in conformance with the above submittal requirements by **January 25, 2012**. Please note that an extension of this date may be granted at the discretion of the Director of the DPLU, however changes in circumstance may occur that render the direction in this letter outdated, incomplete or incorrect. To request an extension, submit a written request, signed and dated by the project applicant. The request must include the proposed new submittal date and a brief reasoning for the extension request. If the revised documents are not received, or an approved extension request is not granted by the Director by the above date, the information requested in this letter will not be accepted and a new pre-application may be needed to provide current submittal requirements.

If you have any questions or need additional information, please contact me at (858) 694-3011, Patrick Brown or at Patrick.Brown@sdcounty.ca.gov.

Sincerely,



Attachments:

- A. Major Preapplication Issue Scoping
- B. Estimated Discretionary Processing Time and Costs for EIR
- C. DPW Preliminary Requirements
- D. Estimated Water Demand Assumption Example
- E. Meeting Sign-In Sheet

cc:

Mike Armstrong, Business Development Manager, Soitec, 4250 Executive Square Ste 770, La Jolla, CA 92037

email cc:

David Sibbet, Planning Manager, Department of Planning and Land Use
Ed Sinsay, Team Leader, Department of Public Works

ATTACHMENT A
MUP APPLICATION SCOPING INFORMATION
3992-11-017 (MPA) SOITEC: SOLAR LANWEST/EAST

A. PLANNING ANALYSIS:

- 1. Project Description:** A detailed Project Description is required. The report shall detail the following information: general project description, location, consistency with CA Global Warming and AB 32 compliance information, grading information, purpose and need of project, description of activities, traffic and circulation, groundwater usage, security, electrical transmission and distribution onsite and offsite, lighting, signage, utilities, existing conditions, and site photographs. The following items should also be included in the project description:

 - A draft-decommissioning plan should be provided to the County that would describe how the project would be decommissioned. The project site should be left in a manner that is consistent with what could be permitted by right pursuant to the Zoning Ordinance Section 6952b.3.d. This plan should identify a potential financial mechanism for the plan, but does not need to actually provide the financial mechanism.
 - The project description shall include the Operation and Maintenance component for this project with the number of Average Daily Trips (ADT), in order to document if there are any direct impacts to the roadway network generated from the implementation of this project. Cumulative impacts will be mitigated by payment of the Transportation Impact Fee (TIF). In order to determine if a Traffic Analysis is required, please review the Transportation and Traffic Guidelines for Determining Significance and Report Format and Content Requirements. Additional information can be obtained in the following link: http://www.sdcounty.ca.gov/dplu/docs/Traffic_Guidelines.pdf
 - Water Usage for the project: Provide in the project description a water demand assumption as well as an identified water source for construction and ongoing cleaning and site maintenance. Any water that is not obtained from a private non-public agency will require review for a Groundwater Extraction Major Use permit. See Attachment D.
 - Discuss that the recycling during construction will be in compliance with the County of San Diego Construction Demolition and Debris Management Plan requirements in accordance with County Ordinance 68.508-68.518.
- 2. Plot Plan:** A detailed plot plan is required that complies with DPLU Form #90, and should include these additional items:

 - Details of proposed structures, square footages of all structures in a cumulative table, lot coverage calculations, building setbacks, substations, transformer rooms, utility and County rights of ways, generation tie lines, existing structures, and any additional elevations.

Show solar panel arrays and proposed internal 24' wide improved driveway widths (Per County Fire Code).

- Include all existing onsite wastewater disposal systems and groundwater wells on the plot plan. If there is none that are contained within the property boundaries, the plans need to state it.
- Include all existing wells on the plot plan. All wells must be labeled to reflect the proposed groundwater use. The destruction of any well requires a destruction permit and inspection of the completed work by the Department of Environmental Health.
- Show the ultimate right-of-way and the ultimate building setback limits. At the time of the construction/improvements, any proposed facilities shall be relocated at the sole cost of the applicant to the satisfaction of the Director of Public Works.
- Show lines of inundation to the limits of the 100-year flood along the watercourse, which flows through the property, labeled —~~Subject To~~ Inundation By The 100-Year Flood.”
- Show existing and proposed property lines (PL), call out Centerline of Old Highway 80; call out edge of pavements (EOP) and dimensions from centerlines to existing & proposed PL, EOP, also include all public road and driveway cross-sections.
- The project access points from a public road shall be shown on the Plot Plan and Preliminary Grading Plan. The County prefers that the project take access from McCain Valley Road for both phases of the project.
- On the plot plan and preliminary grading plan, indicate the point of interconnection until it reaches the public utility. Any offsite generation tie lines need to be covered by the plot plans and project description because they need to be covered by the MUP.
- Proof of legal access will be required for all parcels. A Preliminary Title Report with Schedule B Attachments should be provided.
- Indicate all Assessor Parcel Numbers and boundary lines for each phase.
- Plot all open space easements and indicate permanent fencing around these areas.
- The County Fire Authority (CFA) requirements should be implemented on the plot plan. Consult with the CFA as indicated below in Section I. Implement all circulation, gate, and other improvements as required by

the County Fire Authority and County Fire Code 96.1.503 through 605.11.4.4. as follows:

Sec. 503.2.1 Dimensions. (a) Fire apparatus access roads shall have an unobstructed improved width of not less than 24 feet... (b) All fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 feet 6 inches...

Sec. 503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus (not less than 50,000 lbs.) and shall be provided with an approved surface so as to provide all-weather driving capabilities.

Sec. 503.2.4 Turning radius. The turning radius of a fire apparatus access road shall comply with the County public and private road standards approved by the Board of Supervisors. The turning radius for a private driveway shall be a minimum of 28 feet, as measured on the inside edge of the improvement width or as approved by the fire code official.

Sec. 503.2.5 Dead ends. All dead-end fire access roads in excess of 150 feet in length shall be provided with approved provisions for turning around emergency apparatus...

Sec. 503.6 Security gates. No person shall install a security gate or security device across a fire access roadway without the fire code official's approval. An automatic gate across a fire access roadway or driveway shall be equipped with an approved emergency key-operated switch overriding all command functions and opening the gate...

Sec. 605.11.4 Ground-mounted photovoltaic arrays: Ground-mounted photovoltaic array installations shall meet the requirements of sections 605.11.4.1 through 605.11.4.4.

- The driveway access and should be designed per County of San Diego Design Standard DS-17, DS-18, or DS-19.

3. **Sight Distance:** The project access points from a public road will need to meet Sight Distance Requirements per the County Public Road Standards, Section 6.1 Table 5 prior to recommendation for approval. In order to provide an unobstructed view for safety while exiting the property and accessing a public road from the site, and to comply with the Design Standards of Section 6.1.(E) of the [County of San Diego Public Road Standards](http://www.sdcounty.ca.gov/dpw/docs/PublicRoadStandards.pdf), an unobstructed sight distance shall provided to the County to be verified as indicated below:

<http://www.sdcounty.ca.gov/dpw/docs/PublicRoadStandards.pdf>

- a. A registered civil engineer, a registered traffic engineer, or a licensed land surveyor provide a certified signed statement that:
—Physically, there is a minimum unobstructed sight distance based upon prevailing traffic speeds in both directions along Palm Canyon Drive from the project's access is achievable per Section 6.1.E of the County Public Road Standards (approved July 14, 1999)."
- b. If the lines of sight fall within the existing public road right-of-way, the engineer or surveyor shall further certify that: Said lines of sight fall within the existing right-of-way and a clear space easement is not required."

B. PRELIMINARY GRADING PLANS:

There is an undisclosed amount of grading for the site. A Preliminary Grading Plan must be completed in accordance with the Preliminary Grading Plan Guidelines, which can be found online <http://www.sdcounty.ca.gov/dplu/docs/ZC034.pdf>. Preliminary grading plans must be submitted at the beginning of the discretionary permit process in order to address concerns regarding the long-term protection and improvement of stormwater quality. Structural BMPs are difficult to add to the completed design of a private development project without causing significant changes to the project's character. As such, the earlier in the design process stormwater facilities are considered, the greater the chance a successful and efficient design can be accomplished.

C. SCOPE FOR COMMUNITY CHARACTER & LAND USE ANALYSIS:

Community Character Analysis:

A community character analysis shall be prepared for the proposal. This analysis shall include maps that indicate the surrounding land uses that exist in the area and the following additional information:

1. An evaluation of the compatibility of the scale and mass of the proposed project with the surrounding area:
 - This evaluation shall include information, which compares square footage, heights, lot sizes, required earthwork and occupancy rates of other uses near the proposed project.
 - The architectural style of the structures and their site utilization shall be related to the manner in which surrounding properties have developed.
 - Landscaping shall be discussed in light of the ability of the plantings to soften the exterior appearance and relative massiveness of the proposed structures.
 - A graphic showing all residences/land uses within proximity of the project site.

2. Other physical impacts resulting from the nature of the operations:
 - This evaluation shall include the type of activities to be conducted, the time of day during which the various operations will occur, the days of the week the facility will be used, and the number of peoples involved.
 - This information shall define any potential impacts associated with this intensification of use of the site as well as providing a baseline for the analysis of noise, traffic, lighting or other related impacts.
3. The potential for subsequent changes to the regional environmental setting resulting from similar additional requests encouraged by the now altered community character or what physical limitations would not permit other property owners from following suit.
4. The analysis shall include a Draft set of the Major Use Permit Findings pursuant to Section Section 7359.a of the Zoning Ordinance, for findings required for major use permits. Draft Major Use Permit findings to ensure the feasibility of proceeding with the project. Actual findings are made by decision makers, but the draft findings enable DPLU and the public an opportunity to see if the findings could be made by the decision maker. (SEE MAJOR ISSUE #3)

The following findings in support of the granting of the Major Use Permit shall be made:

- (a) *The location, size, design, and operating characteristics of the proposed use will be compatible with adjacent uses, residents, buildings, or structures with consideration given to*
 1. *Harmony in scale, bulk, coverage, and density*
 2. The availability of public facilities, services, and utilities
 3. The harmful effect, if any, upon desirable neighborhood character
 4. The generation of traffic and the capacity and physical character of surrounding streets
 5. The suitability of the site for the type and intensity of use or development which is proposed
 6. Any other relevant impact of the proposed use
- (b) *The impacts, as described in Findings (a) above, and the location of the proposed use will be consistent with the San Diego County General Plan.*
- (c) *That the requirements of the California Environmental Quality Act have been complied with.*

Land Use Consistency Analysis:

The purpose of the study is to examine and provide evidence that the proposed project is consistent with the following: (1) All applicable land use plans by showing consistency with their goals and policies not limited to but including General Plan, Community Plans, Specific Plans, Airport Land Use Compatibility Plans, and any other pertinent land use plan. (2) Compliance with the County Board of Supervisor Land Development I-Policies. (3) Compliance with all ordinances that pertain to land development such as Groundwater, RPO, Noise, Zoning. If separate reports have been drafted to cover those issues, the report may make reference to those separate technical studies. (4) The analysis should also cover compatibility with any future land use plans such as the East County MSCP when applicable. The analysis should cover each plan General Plan and Community Plan policy and implementation measure that is relevant to the project. All policies and implementation measures that are not relevant to the proposed project should be listed in a separate table as an appendix to the study. The table should indicate that they were reviewed, but were considered not applicable. The Land Use Analysis shall detail how the project complies with all of the following:

- Goals and Policies of the recently adopted General Plan Update.
- Goals and Policies of the Mountain Empire Subregional Community Plan, specifically the Boulevard Community Plan.
- All County Ordinances, including but not limited to the following: Resource Protection, Stormwater and Discharge, Noise, Lighting, and Zoning (See Above #4).

General Plan Consistency: As currently designed, the proposed project does not comply with several General Plan policies and the Department of Planning and Land use may recommend denial if the project is not redesigned. These policies are identified below. The applicant should review these policies and redesign the project so that it complies with the County's newly adopted General Plan:

LU-5.3 Rural Land Preservation: Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi Rural Land Use Designations.

Analysis: The site is designated as Rural Lands 80 (RL80), and the project appears to be impacting a large area that would qualify as wetland under the County's Resource Protection Ordinance. The project should be redesigned to ensure the preservation of this existing wetland and any other wildlife habitat corridors that may be found in the area.

LU-6.6 Integration of Natural Features into Project Design: Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

Analysis: The project would be a solar facility containing numerous individual concentrating photovoltaic (CPV) trackers that are up to 35 feet tall and 48 feet wide on approximately 300-acres of land. Based on the submitted plot plan, there is no evidence that the proposed development incorporated any natural features into its

project design or avoided sensitive environmental resources on-site. The project should be redesigned to comply with this policy.

LU-10.2 Development-Environmental Resource Relationship: Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental and hazard areas.

Analysis: Based on the submitted plot plan, there is no evidence that the proposed development is conserving the project sites unique natural features or avoiding sensitive or intact environmental and hazard areas. The project should be redesigned to comply with this policy.

COS-11.1 Protection of Scenic Resources: Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.

Analysis: The project site is located approximately 1.5 miles north of Interstate 8 (County Scenic Highway) and may impact the view-shed of this scenic highway. Additionally, the area can be characterized as having prominent ridgelines, dominant landforms and scenic landscapes. Locating over 3,000 individual concentrating photovoltaic (CPV) trackers that are up to 35 feet tall and 48 feet wide on approximately 600-acres of land in this area is likely to impact the scenic resources of the area. The project should be redesigned to ensure scenic landscapes, including views from Interstate 8, are not adversely impacted.

COS-11.3 Development Siting and Design: Require development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:

- Creative site planning
- Integration of natural features into the project
- Appropriate scale, materials, and design to complement the surrounding natural landscape
- Minimal disturbance of topography
- Clustering of development so as to preserve a balance of open space vistas, natural features, and community character.
- Creation of contiguous open space networks

Analysis: Given the visual sensitivity of the area, the project should be redesigned to utilize the techniques listed above. The applicant may want to consider utilizing smaller, less prominent CPV trackers to ensure the appropriate scale, materials and design complement the surroundings of the natural landscape.

COS-11.7 Underground Utilities: Require new development to place utilities underground and encourage “undergrounding” in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

Analysis: The project proposes an overhead 69kV distribution line from the project site for approximately 1.5 miles south, over Interstate 8 to the new Boulevard substation. If

this is a new utility line, it should be placed underground. If not, the applicant should clarify that it's an existing utility line and explain why it should not be placed underground.

In addition to redesigning the project to comply with the County's General Plan, please include a Community Character / General Plan Consistency Analysis to demonstrate how the project complies with the County's General Plan and Boulevard Community Plan policies.

Boulevard Community Plan Consistency: As currently designed, it appears that the project would not comply with several Boulevard Community Plan policies. At this time, County staff is working on revisions to the Boulevard Community Plan. However, until the Community Plan has been formally amended by the County Board of Supervisors, the project is responsible for demonstrating compliance all of the Boulevard policies. Staff has identified the following policies as being particularly difficult to comply with, given the projects current design. Boulevard Community Plan Policies: Policy LU: 1.1.1, 1.2.2, 1.3.2, 6.1.2, 6.1.3, and 6.1.4.

Report Format: The report should have the following Format: (1) Brief project Description, describe physical Setting. (2) Land Use analysis as discussed above, including land use maps. (3) Community Character analysis that includes figures that show the surrounding land uses and describes how this project would or would not be harmonious, or would diminish the character of its surroundings. Photographs of the surrounding community and land uses would be helpful to paint the picture. (4) Draft MUP Findings. Note: avoid redundant information that is already described in detail in the project description of the report, and the main project description report.

D. MEMORANDUMS OF UNDERSTANDING:

The County of San Diego's CEQA guidelines require that environmental technical studies be prepared by a consultant from the County's CEQA Consultant List, which can be found on the County of San Diego's website at: <http://www.co.san-diego.ca.us/dplu/procguid.html> (item number 4 under "General Guidance"). No list is maintained for hydrology and stormwater management planning. With the exception of minor stormwater management plans, only registered engineers registered in the State of California shall be permitted to submit hydrology/drainage studies and only registered engineers or Certified Professionals in Storm Water Quality certified by CPESC, Inc., or an equivalent entity approved by the Director of Public Works, shall be permitted to submit stormwater management plans.

Applicants are responsible for selecting and direct contracting with specific consultants from the County's list to prepare CEQA documents for private projects. Prior to the first submittal of a CEQA document prepared by a listed consultant for a private project, the applicant, consultant, consultant's firm (if applicable) and County shall execute the attached Memorandum(s) of Understanding (MOU). The responsibilities of all parties involved in the preparation of environmental documents for the County (i.e. applicant, individual CEQA consultants/sub-consultants, consulting/sub-consultant firms, and County) are clearly established in the MOU for each requested applicable study. The clear identification of roles and responsibilities for all parties is intended to contribute to

improved environmental document quality. The MOU can be found on the Department's website at: <http://www.co.san-diego.ca.us/dplu/procguid.html> (item number 12 under "General Guidance") and can be downloaded in word format at <http://www.sdcountry.ca.gov/dplu/docs/MOU.doc>

Copies must be made and signed by the applicant, consultant and firm (if applicable) for each of the following requested subject area technical studies:

<i>Air Quality</i>	<i>Fire Protection Planning</i>
<i>Archaeological Resources</i>	<i>Visual Analysis</i>
<i>Biological Resources</i>	<i>Noise</i>

E. SCOPE FOR VISUAL RESOURCES & AESTHETICS:

The Department of Planning and Land Use has completed review of your project application and has determined that the project may adversely affect visual resources (See also Major Issue #2). Visual resources can include narrow or expansive views, can be views from one site or from a series of sites (as along a scenic highway), and can be viewed from above, at eye level, or from below. A particular thing that defines a community or a region's character and identity is also a scenic resource.

The aesthetic value of visual resources is not limited to open space and rural lands, but can also be held in historic structures and districts, architectural design, streetscapes and manufactured landscapes. These valuable aesthetic elements of the human-made environment can be found throughout the unincorporated County, even though it is mostly undeveloped. It has been determined that a visual resource report and photo simulations of the project should be prepared as follows:

1. The report must follow the format given in the County's Report Format and Content Requirements for Visual Resources, which can be found at: http://www.sdcountry.ca.gov/dplu/docs/Visual_Report_Formats.pdf.

The report must evaluate potentially adverse impacts to the environment according to the County's Guidelines for Determining Significance for Visual Resources, which can be found at: shall http://www.sdcountry.ca.gov/dplu/docs/Visual_Guidelines.pdf The report must be prepared by a visual resources analyst who is on the County's approved consultant list for completing Visual Resource Reports.

2. The photo simulations shall be prepared following the Photo Simulation Guidelines that are attached to the Report Format and Content Requirements for Visual Resources available at the following web page: http://www.sdcountry.ca.gov/dplu/docs/Visual_Report_Formats.pdf.

The photo simulations shall show views that can be determined by the visual consultant **and DPLU staff**. Please do not prepare any visual simulations or determine any Key Observation Points (KOP) without approval from DPLU. Some of the views should be vantage points as indicated below:

- Old Highway 80 coming looking west

- Old Highway 80 coming looking east
- Interstate 8 Looking east
- Interstate 8 Looking west
- Directly adjacent to the project site from different positions.

Several Pictures shall be provided where a visual simulation would not be viable:

- From any place where the public could view the project from an elevated position
- Additional photos that would make sense to show vantage points of the project.
- From State Park, public lands, and any recreational areas that the project site can be seen.
- And any additional approved by the Department

Photo-simulations must be supplied by a visual resources analyst who is on the County's approved consultant list for completing Visual Resource Reports.

3. Provide a Glint and Glare Analysis.
4. General Plan Consistency Analysis (see Major Issue #1).

The [Memorandum of Understanding](#) must be executed by the applicant and consultant and subsequently submitted with the first iteration review.

F. SCOPE FOR AIR QUALITY ANALYSIS:

Project Information: The project has the potential to significantly contribute to the violation of an air quality standard or significantly contribute to an existing or projected air quality violation, primarily related to grading. Therefore, the project is required to discuss the project's potential impacts to air quality by preparing an air quality analysis report.

General Information: Based on the potential impacts the project may have on air quality an air quality analysis is required. The air quality analysis must be completed using the County's Air Quality Analysis Format Guidelines (attached) which can be found on the World Wide Web at <http://www.sdcountry.ca.gov/dplu/Resource/docs/3~pdf/AQ-Report-Format.pdf>.

Emissions of pollutants of concern from the proposed project may occur from construction activities and operations (traffic associated with the project). In general, emissions from construction activities include:

- Respirable particulate matter (PM₁₀ and PM_{2.5}) from grading; trenching associated with underground utilities; and combustion emissions from mobile and stationary sources (generators)
- Products of combustion, including hazardous air pollutants, from construction equipment and stationary sources (generators);
- Products of combustion, including hazardous air pollutants, from mobile sources

resulting from traffic delays during construction.

The principle emissions from operations, (e.g. build-out), result from traffic throughout the project site and beyond. Queuing of vehicles at lights can result in concentration of emissions called “hotspots.” Given the present status of the San Diego Air Basin, of principal concern are emissions of carbon monoxide and VOCs in these areas. In order to adequately assess emissions during build-out of the area, the analysis should assess level of service impacts along major roadways.

Additionally, the following issues should be addressed as a part of the air quality analysis:

1. Would the proposed project conflict or obstruct the implementation of the San Diego Regional Air Quality Strategy (RAQs) or applicable portions of the State Implementation Plan (SIP)?
2. Would the proposed project result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation?
3. Since San Diego County is presently in non-attainment for the Federal and/or State Ambient Air Quality Standards for Ozone (O₃) and Particulate Matter Less than 10 Microns (PM₁₀), would the proposed project result in a cumulatively considerable net increase of PM₁₀ or exceed quantitative thresholds for O₃ precursors, oxides of nitrogen (NO_x) and Volatile Organic Compounds (VOCs)? The analysis should also provide a detailed discussion on cumulative impacts, framed in light of Past, Present and Reasonable Anticipated Future Projects in the Project Area. This should include a discussion on other projects contribution of PM₁₀ and ozone precursors.
4. Would the proposed project expose sensitive receptors (schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations? This analysis should discuss the proximity of any surrounding or proposed sensitive receptors to any known point source pollutant emissions and if applicable, a health risk analysis for diesel fired PM₁₀ (Construction phase and Operational).
5. Would the proposed project create objectionable odors affecting a substantial number of people?
6. Any proposed dust control measures or project design elements that may be incorporated to minimize criteria pollutant emissions should be described in the project description.
7. Staff recommends the following measure be included in the Study for ongoing dust control during project operation: A non-toxic, biodegradable agent or permeable rock material shall be maintained on all disturbed or exposed surface areas as follows: A binding agent suitable for both traffic and non-traffic areas shall be used. These agent shall be are biodegradable, eco-safe, with liquid

copolymers that stabilize and solidify soils or aggregates, which and facilitate dust suppression. Alternatively, a permeable rock material consisting of either river stone decomposed granite or gravel could be placed in a thin cover over all exposed surface area in-lieu of the binding agent referenced above.

A [Memorandum of Understanding](#) must be executed by the applicant and consultant and subsequently submitted with the first iteration review.

G. SCOPE FOR BIOLOGICAL RESOURCES REPORT:

Project Specific Information: Based on a review of aerial photos and County vegetation mapping, it appears that the project site contains the following biological habitats: redshank chaparral, semi-desert chaparral, open coast live oak woodland, freshwater seep, cismontane alkali marsh, scrub oak chaparral, freshwater marsh and urban/developed lands. To evaluate the impacts of the proposed project on biological resources, a Biological Resources Report is required, and must include a Biological Resources Map, as detailed below.

General Information: A Full Biological Resource Report must be prepared in accordance with the County's Report Format and Content Requirements Biological Resources, which can be found at http://www.sdcountry.ca.gov/dplu/docs/Biological_Report_Format.pdf. The report will provide a qualitative and quantitative analysis of all on and off-site biological impacts (both direct and indirect) related to all phases of the project.

The report must include a Biological Resources Map showing the location of all vegetation types and sensitive habitats and species of the project site and off-site areas being altered as a result of project implementation. The mapping guidelines are included in the Report Format and Content Guidelines at the link above. In order to evaluate impacts to sensitive resources, the most current project plot plan or preliminary grading plan must be included on the map along with proposed open space and limited building zone easements.

Staff has prepared and attached a comprehensive list of sensitive species that may exist on the project site. Directed and/or protocol surveys are required for species shown in **boldface** type in the list. The biology report shall address the potential for each sensitive species to occur on the project site (table format). For further guidance please see the Report Format and Content Guidelines.

DPLU has also determined that the report shall include ***focused survey(s) -or- site assessment*** for the following rare and endangered species: Quino checkerspot butterfly, spring rare plants. The focused survey(s) must be done by biologist(s) with demonstrable knowledge in field detection of the subject species (focused surveys for Federally listed species shall be in compliance with USFWS protocol, when such protocol exists, and must be done by a USFWS permitted biologist -- contact the USFWS at (760) 431-9440). If no protocol has been established, the methods of the directed search shall be described in the report. At a minimum, focused surveys must consist of walking transects across all areas with potential habitat for the species. The point locations and inferred territories of these species shall be included on the

biological resources map. Focused surveys reports may be attached to the biological survey report in appendix form, but survey results must be evaluated in the biological survey report.

The report must also propose applicable and feasible mitigation measures. Examples are listed in Appendix A of the Report Format and Content Guidelines.

Proposed Off-site Mitigation: If off-site mitigation is proposed to mitigate for significant biological impacts, please provide a statement indicating where the off-site mitigation will be located. If the off-site mitigation will be obtained in a mitigation bank, please provide the name of the bank along with evidence that such credits can be allocated for this project. If the off-site mitigation will be through the purchase and preservation of other off-site land, please provide sufficient information for staff to evaluate the off-site resources and the means to preserve the resources in perpetuity.

Open Space Easements: If biological open space is proposed, please submit a project-scale Open Space Map. The Open Space Map must show what biological resources are being protected and include a table showing the area (in acres) of land preserved according to vegetation type. All Biological Open Space Easements shall be protected from future fire-clearing through the dedication of a Limited Building Zone Easement. This easement is 100 feet wide and extends outward from the Biological Open Space Easement boundary. The Limited Building Zone Easement prohibits the construction of houses, barns, or other habitable structures that would require fire clearing into the Biological Open Space.

All existing and proposed open space easements (biological resource & limited building zones) must be clearly shown on the plans/map and on the preliminary grading plan.

In association with any proposed open space easements, temporary and/or permanent fencing and permanent signs may be required to protect the easements. These conditions are meant to protect from inadvertent disturbance of all open space easement(s) that do not allow grading, brushing or clearing. The open space fencing/signage plan for the proposed biological open space easement must be clearly shown on the preliminary grading plan and on the Open Space Map.

RPO: The project site contains a natural drainage that may qualify as a wetland under the San Diego County Resource Protection Ordinance (RPO). The Resource Protection Ordinance prohibits impacts to wetlands and wetland buffers. These natural features are a significant constraint for land uses on the project site and may affect project design. The biological information requested below is required for staff to determine project compliance with the RPO.

Wetlands Survey: A wetlands survey must be completed using the wetlands definition in the County's Resource Protection Ordinance (RPO). The County's definition of wetlands varies from the federal U.S. Army Corps of Engineers' definition. All RPO wetlands shall be mapped on the Biological Resources Map using aerial photographs and a field site visit. Should there be a disagreement over the extent of wetlands, staff may require further surveys using the U.S. Army Corps of Engineers standards and guidance for conducting wetland delineations.

The RPO requires buffers on all RPO wetlands. The biological resources map shall designate an appropriate wetland buffer width of 50-200 feet, depending on the biological resources present. The RPO prohibits impacts to wetlands and wetland buffers. Any part of the site that is a wetland and/or a wetland buffer must be placed into a dedicated Biological Open Space Easement. All Biological Open Space Easements shall be protected from future fire-clearing through the dedication of a Limited Building Zone Easement. This easement is 100 feet wide and extends outward from the Biological Open Space Easement boundary. The Limited Building Zone Easement prohibits the construction of houses, barns, or other habitable structures that would require fire clearing into the Biological Open Space. Once the wetland(s), wetland buffer(s) and limited building zone easement(s) are mapped, redesign of the proposed project may be required.

Jurisdictional Resources: DPLU staff has determined that the project may disturb wetlands, lakes, streams, and/or waters of the U. S. that may require notification to the California Department of Fish and Game (CDFG) and/or the Army Corps of Engineers (ACOE). Although it is not required at this time, DPLU recommends that you contact the above agencies about the permitting requirements for potential disturbances to wetlands, lakes, streams, and/or waters of the U. S. within 30 days of this letter. If such permitting requirements are incorporated into the project at this time, it may prevent future delays or changes in the project design. CDFG general information and submittal information can be obtained through the CDFG website http://www.dfg.ca.gov/1600/notification_pkg.html or by contacting the CDFG South Coast Regional Office @ (858) 467-4251. Information for consultation and formal submittal of the 404 Permit application required by the ACOE can be obtained through their website at: <http://www.spl.usace.army.mil/regulatory/> or through the general information number at (858) 674-5387. When a formal wetland delineation is requested, the ACOE 1987 Wetland Delineation Manual and supplement —Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest” should be used (<http://www.spl.usace.army.mil/regulatory/technical.htm>).

Please be aware that the County will condition your project to provide written evidence that all required permits from these agencies have been obtained or that such permits are not required before issuing any authorization for land disturbance (e.g., grading permits).

Indirect Impacts: Indirect impacts may be the result of secondary effects from direct impacts or those impacts that over time cause the degradation of a resource by changing its function, health or quality. Unlike direct impacts that are typically one-time effects, indirect impacts often continue in the long term and may actually increase.

Indirect impacts commonly result from a project’s —edge effects.” Edge effects from development may extend several hundred feet into adjacent open space areas, causing significant changes in species composition, diversity and abundance in those nearby lands. Projects can have a wide variety of indirect impacts depending on the nature of the project, the type of resources present, and the type and degree of edge effects. Certain restrictions may be required when the project proposes significant noise within close proximity to existing or proposed open space.

The [Memorandum of Understanding](#) must be executed by the applicant and consultant, and subsequently submitted with the first iteration review.

Revised Comprehensive List of Sensitive Species

Plant	Animal	Latin Name	Common Name	Directed Survey Required
X		<i>Astragalus douglasii perstrictus</i>	Jacumba Milkvetch	X
X		<i>Berberis fremontii</i>	Fremont barberry	
X		<i>Caulanthus simulans</i>	Payson's jewelflower	
X		<i>Clarkia delicata</i>	Campo clarkia	X
X		<i>Delphinium parishii subglobosum</i>	Desert larkspur	
X		<i>Geraea viscida</i>	Sticky geraea	X
X		<i>Gilia caruifolia</i>	Caraway leaved gilia	
X		<i>Hemizonia floribunda</i>	Tecate tarplant	X
X		<i>Hulsea californica</i>	California hulsea	X
X		<i>Lathyrus splendens</i>	Pride of California	
X		<i>Linanthus bellus</i>	Desert beauty	X
X		<i>Mimulus aridus</i>	Desert monkey flower	
X		<i>Pentachaeta aurea</i>	Golden-rayed pentachaeta	
X		<i>Quercus engelmannii</i>	Engelmann oak	
X		<i>Ribes canthariforme</i>	Morena currant	X
X		<i>Streptanthus campestris</i>	Southern jewelflower	X
	X	<i>Accipiter cooperi</i>	Cooper's hawk	X
	X	<i>Accipiter striatus</i>	Sharp-shinned hawk	X
	X	<i>Antrozous pallidus</i>	Pallid bat	
	X	<i>Aquila chrysaetos</i>	Golden eagle	X
	X	<i>Bassariscus astutus</i>	Ringtail	
	X	<i>Buteo lineatus</i>	Red-shouldered hawk	X
	X	<i>Cathartes aura</i>	Turkey vulture	X
	X	<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	
	X	<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	
	X	<i>Danaus plexippus</i>	Monarch butterfly	
	X	<i>Diadophis punctatus similis</i>	San Diego ringneck snake	
	X	<i>Eumops perotis californicus</i>	Greater western mastiff bat	
	X	<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	X
	X	<i>Felis concolor</i>	Mountain lion	
	X	<i>Larus californicus</i>	California gull (Non-breeding)	
	X	<i>Lasiurus blossevillii</i>	Western red bat	
	X	<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	
	X	<i>Melanerpes lewis</i>	Lewis' woodpecker (Winter)	X
	X	<i>Myotis ciliolabrum</i>	Small-footed myotis	
	X	<i>Myotis evotis</i>	Long eared myotis	
	X	<i>Myotis thysanodes</i>	Fringed myotis	
	X	<i>Myotis volans</i>	Long legged myotis	

	X	<i>Myotis yumanensis</i>	Yuma myotis	
	X	<i>Odocoileus hemionus</i>	Southern mule deer	
	X	<i>Oreortyx pictus eremophila</i>	Mountain quail	
	X	<i>Phrynosoma coronatum blainvillei</i>	San Diego horned lizard	
	X	<i>Progne subis</i>	Purple Martin	X
	X	<i>Sceloporus graciosus vandenburgianus</i>	Southern sagebrush lizard	
	X	<i>Sialia mexicana</i>	Western bluebird	
	X	<i>Taxidea taxus</i>	American badger	

H. SCOPE FOR ARCHAEOLOGICAL RESOURCES:

ARCHAEOLOGICAL/HISTORICAL SURVEY

Project Specific Information: Staff has reviewed County records, as well as the archaeological database from the South Coastal Information Center (SCIC) at San Diego State University. This review indicates that much of the project area was surveyed previously throughout the years (Chace 1979, Clifford 03, Smith 05, and portions Hector 07). There are more than nineteen archaeological sites located on the subject parcels (three of which appear to be located in dedicated open space easements, CA-SDI-6893, CA-SDI-5933 and CA-SDI-6892). In addition there are structures that are older than 50 years within the proposed project area; however, it is unknown whether these structures are significant. The general area in which the project is located is very rich in archaeological resources. Due to recently amended CEQA guidelines (Section 15064.5) and County Significance Guidelines, effective December 2007, addressing archaeological and historic resources, and the time that has passed since the previous archaeological surveys, a County-approved archaeological consultant shall: 1) review previous documentation for adequacy; 2) resurvey the entire project area to relocate all known sites on the property; 3) determine if previously undiscovered sites can be identified; 3) prepare a new archaeological report that includes the details of the latest record search and field resurvey and 4) addresses the significance of all previously recorded sites (if relocated) and direct/indirect impacts to all archaeological sites and mitigation of those impacts as a result of the currently proposed project according to County guidelines.

General Information: A field survey for archaeological artifacts and features and/or an evaluation of the site as a historic resource must be conducted in accordance with the County of San Diego Guidelines for Determining Significance – 2007 (GDS) and Report Format and Content Guidelines – 2007 (RFCG), the Resource Protection Ordinance (RPO), Section 21083.2 of the Public Resources Code (CEQA), and the San Diego County CEQA Guidelines. The survey must provide evidence in the form of a letter from the South Coastal Information Center and the Museum of Man that an institutional record searches has been conducted. In addition, a field survey and/or evaluation by a County approved archaeologist/historian must be conducted. The study shall include a copy of the blue-line map/plot plan with the location of the resources plotted. The report shall follow the RFCG. Please complete all appropriate DPR Series 123 forms and submit them to the South Coastal Information Center and the DPLU. Pursuant to the RFCG, a Native American monitor shall be present during the survey phase for archaeological resources. If no cultural resources are discovered, a brief letter report will be satisfactory documentation of the survey. Guidelines for Determining Significance and Report Format and Content Guidelines can be obtained from the

County website at:

<http://www.sdcountry.ca.gov/dplu/Resource/3~procguid/3~procguid.html#arch>

Scientific evidence must be provided to substantiate (a) the scientific and/or historical significance, and (b) the boundaries of the resource(s). If the significant resources extend off-site, these must be shown on the map and discussed. The report must address both CEQA and County RPO significance criteria for each resource as outlined in Section 3.2.2 of the GDS.

The report must address the direct construction impacts to resources (both on- and off-site) as shown on the blue line map/plot plan and make a determination as to impact severity as outlined in Section 4.2 of the GDS. The RPO provides guidance for impact avoidance. Any resource(s) that will be exposed to indirect impacts from the project should be addressed as well.

All project specific archaeological/cultural site location maps and figures must be submitted under a separate cover that clearly states that the contents are not for public review.

Sacred Lands Check: County staff will conduct a Sacred Lands Check with the Native American Heritage Commission (NAHC). In addition, staff will communicate with any Native American individual or organization that may possess knowledge about Sacred Sites or be affected by your project. Staff will keep you informed as to future communications with local tribes.

ARCHAEOLOGICAL SIGNIFICANCE TESTING

Project Specific Information: Depending on the results of the archaeological survey, significance testing may be necessary. This determination will be made once the survey report has been reviewed by the Department of Planning and Land Use.

General Information: If the project design will impact cultural resources, a County approved archaeologist shall conduct scientific testing to demonstrate the significance, boundaries, and area (square meters/yards) of the resources. Pursuant to the RFCG, a Native American monitor shall be present during the significance testing phase. All testing shall use a 1/8 inch mesh or finer screens unless the use of larger mesh has been approved by the Department of Planning and Land Use. Any testing shall be approved by the Department of Planning and Land Use prior to commencing fieldwork.

If the project is **exempt from the RPO**, significant archaeological resources mitigation should include alternatives for either (1) avoidance (preservation), or (2) data recovery. Data recovery must be conducted by a County approved archaeologist with a Department of Planning and Land Use approved research design **prior to** conducting fieldwork. The analysis and report shall conform to the RFCG. Pursuant to the RFCG, a Native American monitor shall be present during data recovery activities.

If the project is **subject to the RPO**, and the cultural resources do not meet the definition of a significant prehistoric/historic site as defined in the RPO but do meet CEQA significance criteria, significant archaeological resources mitigation should consider avoidance (preservation) as the first alternative, however if infeasible, data

recovery may be considered a mitigation measure. If the cultural resources do meet the definition of a significant prehistoric/historic site as defined in the RPO, avoidance is required. An open space easement and preservation plan will be required. All activities associated with cultural resources must be conducted by a County approved archaeologist. The analysis and report shall conform to the RFCG.

PRESERVATION PLAN

Archaeological Resources

If significance testing produced evidence that indicates resources are to be protected pursuant to the RPO, or if preservation is the form of mitigation selected for CEQA significant sites, the project should be redesigned, if necessary, to avoid impacts and preserve the resource(s). The report should address the need to cap the resource(s) with soil, gravel, jute landscape matting, and/or leaf compost to protect the site from indirect impacts. Open space easements or other measures should also be considered to prevent future impacts to resources.

HISTORIC RESOURCES

If the historic resource evaluation determines that a site is significant pursuant to Section 3.2.2 of the Guidelines for Determining Significance (2007), the survey report must include a preservation plan. Adaptive reuse, open space easements, facade easements, and other conservation easements should be considered in the report. Specific performance criteria and/or easements should be proposed to guide future landowners.

The **Memorandum of Understanding** must be executed by the applicant and consultant and subsequently submitted with the first iteration review.

I. SCOPE FOR FIRE PROTECTION PLAN:

The Department of Planning and Land Use has completed review of the project design and has determined that the project may expose people or structures to a significant risk of loss, injury or death-involving wildland fires because the project is adjacent to and/or within wildlands that have the potential to support wildland fires. A Fire Protection Plan (FPP) shall therefore be prepared for the project. The Fire Protection Plan shall follow the Guidelines for Determining Significance for Wildland Fire and Fire Protection, available online at <http://www.sdcountry.ca.gov/dplu/docs/Fire-Guidelines.pdf>, and the County's Report Format and Content Requirements for Wildland Fire and Fire Protection, available online at: <http://www.sdcountry.ca.gov/dplu/docs/Fire-Report-Format.pdf>

The FPP shall be prepared by a wildland fire code expert included on the County's list of approved consultants. The plan will include mitigation measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation and climate of the proposed site. The FPP shall also address in terms of fire code requirements: water supply, access (including secondary access where required by code), building ignition and fire resistance, fire protection systems and equipment,

defensible space and vegetation management (based on site fire behavior modeling). It is recommended that you contact the ***County of San Diego Fire Authority (CFA)*** for specific requirements, codes, and regulations to be incorporated into the Fire Protection Plan prior to initiation of the Fire Protection Plan.

The Fire Protection Plan shall meet all requirements of Section 4703 of the County Fire Code. The Plan shall also identify where any increases or decreases to the standard 100-foot fire-clearing zone are warranted. The Plan shall identify any special design elements or requirements associated with any increases in the fire-clearing zone. In addition, the Plan shall propose a mechanism whereby the (CFA) can track those lots where increases or decreases from the standard fire clearing distance of 100 feet has been approved, so that future fire clearing requirements will be consistent with approved fire clearing increases.

Technical Information Report: The County Fire Authority (CFA) has requested that a technical report be included with the Fire Protection Plan Letter report. Because of the unique application of the Fire Code, the Fire Authority needs to review the electrical connection information to determine where and how the components would be isolated. As an appendix to the fire protection plan, a detailed technical report prepared by a qualified engineer, specialist, or fire safety specialty organization needs to be submitted for the proposed project. The technical report needs to address—but is not limited to—the following items:

- Hazards of the proposed facilities to emergency responders.
- Discussion on how to properly de-energize equipment.
- Signage recommendations (provide figures for each):
 - o At each disconnecting means depicting what equipment it de-energizes.
 - o Each inverter structure is to be numbered and signed (To be visible from at least 1,000 feet)
 - o Lighted directories at each entrance depicting the overall site plan and the locations of each numbered inverter structure (show locations on plot plan).
- Recommended training for emergency personnel. Training will be provided prior to commissioning and on an as requested basis.

You may contact County Fire Marshal James Pine at (858) 495-5434 to discuss the Fire Protection Plan requirements.

An evaluation of the completed Fire Protection Plan by the local fire protection district must be obtained prior to submittal of the Fire Protection Plan. The local fire protection district evaluation must be submitted to the Department of Planning and Land Use along with the Fire Protection Plan. Failure to obtain this evaluation may cause delay in the review of the FPP.

The [Memorandum of Understanding](#) must be executed by the applicant and consultant and subsequently submitted with the first iteration review.

The following are design features that need to be implemented on the plans. See comments in **section A** above related to the plot plans. An official consultation with the County CFA is required to discuss these potential requirements. Please contact James

Pine at 858-495-5434:

1. **Access:** The driveway (fire apparatus access road) leading from Old Highway 80 to the project site entrance shall have an unobstructed improved driveway entrance width of not less than 24 feet of decomposed granite (DG). Fire apparatus access roads shall be designed and maintained to support the imposed load of fire apparatus not less than 50,000 lbs and shall provided with an approved surface so as to provide all weather driving capabilities. It should be designed per County of San Diego Design Standard DS-17, DS-18, or DS-19.
2. **Gates:** Any gates, new or existing, must meet County Fire Code Section 96.1.503.6 for automatic operation with battery backup. The gates must open immediately upon emergency vehicle strobe light activation from either direction of approach. Gates must open for vehicles moving in the direction of egress (leaving the property) when the vehicle approaches it. Gates must open on AC power failure. Gate installation must include Knox key-operated switch.
3. **Sec. 96.1.605.11.4 Ground-mounted photovoltaic arrays:** Ground-mounted photovoltaic array installations shall meet the requirements of sections 605.11.4.1 through 605.11.4.4.
4. Defensible space should be determined by CFA.
5. The standard hose pull length is approximately 150 feet. All project equipment and structures must have access within at least 150 feet.
6. A 24-foot access driveway road is required around the entire facility. The access driveway should be designed as stated in comments #1 and #4 above.
7. Water supply for Fire Suppression should be provided in the form of multiple water tanks or fire hydrants.

J. SCOPE FOR STORMWATER MANAGEMENT PLAN:

Based on a review of the Stormwater Intake Form for Development Projects, your project is required to complete a Minor Stormwater Management Plan because you are **not considered** a priority development project (PDP). Please fill out the following form and provide with your submittal:

Intake Form: <http://www.sdcounty.ca.gov/dplu/docs/LUEG-SW.pdf>

The project lies east of the Pacific/Salton (Tecate) divide and is not considered a Priority Development Project (PDP); therefore a Major Storm Water Management Plan (SWMP) is not necessary. However the project is required to submit a Minor Stormwater Management Plan. Additional information can be obtained in the following link: <http://www.sdcounty.ca.gov/dpw/watersheds/susmp/susmp.html>

General Information: The County's Watershed Protection, Stormwater Management and Discharge Control Ordinance (WPO) implements the San Diego Municipal Stormwater Permit (Order R9-2007-0001) issued by the Regional Water Quality Control

Board (RWQCB) on January 24, 2007, effective on March 24, 2008. The Municipal Permit regulates the stormwater and urban runoff management policies of jurisdictions in the San Diego region and details specific requirements for development projects.

WPO Link: <http://www.sdcountry.ca.gov/cob/ordinances/ord9926.doc>)

Stormwater runoff that flows over impervious surfaces (i.e., roofs and pavement) picks up and carries sediments and pollutants such as pesticides, fertilizers, oils, metals, bacteria, and animal waste into our stormwater drainage systems and to our streams, rivers, lakes, estuaries and beaches. The water that enters public storm drains in San Diego (west of the Tecate Divide) drains directly to the beaches and ocean without any wastewater treatment. The requirements of the Municipal Stormwater Permit and the updated WPO were developed to manage these pollutants by promoting filtration of each project's stormwater on site for natural cleansing by plants, soils, and microorganisms.

The WPO requires that all development projects use Low Impact Development (LID) planning and stormwater management techniques to maximize infiltration, provide retention, slow runoff, minimize the impervious footprint and constructed widths of the project, and direct runoff from impervious areas into landscaping (see Section 67.806(c)(2) of the WPO). The minimal LID requirements that you need to include in the design of your project are:

- 1) Disconnect impervious surfaces (from each other and from storm drains)
- 2) Design impervious surfaces to drain into properly designed pervious areas
- 3) Use pervious surfaces wherever appropriate
- 4) Implement site design Best Management Practices (BMPs)

K. SCOPE FOR RESOURCE PROTECTION STUDY

Project Specific Information: The project has steep slopes located onsite as well as a potential for cultural resources that could be RPO significant. A full resource protection study is required to determine that the project complies with RPO.

NOTE: The Resource Protection Ordinance was just modified August 4, 2011. Please use new version.

- Provide two copies of the three-color slope analysis map (0-25% one color, 25-50% another color, and 50% and above a third color).
- Provide written text that demonstrates compliance with the other RPO subject areas: Wetlands, Floodways and Floodplain Fringe, Steep Slopes, Sensitive Habitat Lands, and Significant Prehistoric and Historic sites.

General Information: This study shall consist of the materials required by Form #374 available from the Zoning Counter. Form #394, Preliminary Floodplain Evaluation, is also attached. These forms can also be found on the World Wide Web at <http://www.sdcountry.ca.gov/dplu/appforms/index.html>.

L. DRAINAGE/FLOODING ANALYSIS:

General Information: A drainage report is required to be prepared to determine the project's impact on the quantity and pattern of runoff to the surrounding area. The report shall also address siltation and erosion associated with the runoff. The report should describe the drainage amounts falling on the site and show how the drainage is directed on individual lots and on-site roads.

A CEQA Preliminary Hydrology/Drainage Study is required for this project. Additional information can be obtained in the following links.

Hydrology Manual:

<http://www.sdcountry.ca.gov/dpw/floodcontrol/hydrologymanual.html>

Drainage Design Manual:

<http://www.sdcountry.ca.gov/dpw/floodcontrol/drainage.html>

A report should describe drainage structures and locate them on a project map. No development should be planned that would disrupt drainage or cause off-site flooding. Discuss potential impacts of the project and proposed mitigation measures.

M. SCOPE FOR NOISE ANALYSIS:

Noise Level Limits Information:

A full noise technical study is required. There is insufficient information to determine whether permanent equipment and operations on-site will exceed sound level limits of the San Diego County Noise Ordinance (Section 36-404). The County Noise Ordinance does not permit noise levels that impact adjoining properties or exceed County Noise Standards, namely, San Diego County Noise Ordinance (Section 36-404). The analysis of the noise generated from the on-site substation and inverter and transformer buildings. The County Noise Ordinance does not permit noise levels that impact adjoining properties or exceed County Noise Standards. The project site as well as adjacent land uses are zoned **S-92** General Rural, that allows a one-hour average sound level of **70** (dBA) for the parcels adjacent to the industrial zone and **50** decibels (dBA). In order for the Department to make a determination on the project's conformance with County noise standards, the applicant must demonstrate that the hourly average sound levels do not exceed the 70 and 50-decibel threshold at the property line, as the most stringent condition for the project. This demonstration can be included as a section to the supplemental project description document that will elaborate on the project description. As part of this section, please provide the following information:

- a. Manufacturers Spec Sheet for all noise producing equipment on-site that identifies the ARI standard and/or decibel (dBA) per range. It is important to note that all noise producing sources must be included.
- b. Additional plot plan that identifies the site location of all noise sources in relation to property lines. It is essential to address all potential noise sources on-site and to include a discussion related to openings within all surrounding walls or fences, such as driveways, fencing and gates.

c. Hours of operation and level activity at each hour.

There is insufficient information to determine whether temporary construction equipment and operations on-site will exceed sound level limits of the San Diego County Noise Ordinance (Section 36-410). It shall be unlawful for any person, including the County of San Diego, to operate construction equipment at any construction site on Sundays, and days appointed by the President, Governor, or the Board of Supervisors for a public fast, Thanksgiving, or holiday. Except for the property owner condition noted in Section 36.410(a), it shall be unlawful for any person to operate construction equipment at any construction site on Monday through Saturdays except between the hours of 7 a.m. and 7 p.m. No such equipment, or combination of equipment regardless of age or date of acquisition, shall be operated so as to cause noise at a level in excess of seventy-five (75) decibels for more than 8 hours during any twenty-four (24) period when measured at or within the property lines of any property which is developed and used either in part or in whole for residential purposes.

To determine conformance to the County Noise Ordinance, a noise study is required and it is essential that this component of this analysis include the following information:

- (1). Manufacturers Spec Sheet for all noise producing equipment on-site that identifies the ARI standard and/or decibel (dBA) per range. It is important to note that all noise producing sources must be included.
- (2). Additional plot plans that identifies the site location of all noise sources in relation to property lines. It is essential to address all potential noise sources on-site and to include a discussion related to openings within all surrounding walls or fences, such as driveways, fencing and gates.
- (3). Hours of operation and activity level at each hour.

The analysis shall follow the County's Guidelines for Determining Significance for Noise available online at <http://www.sdcounty.ca.gov/dplu/docs/Noise-Guidelines.pdf> and the Report Format and Content Requirements for noise available online at <http://www.sdcounty.ca.gov/dplu/docs/Noise-Report-Format.pdf>.

Corona Affect:

Corona is a phenomenon associated with all energized transmission lines. Under certain conditions, the localized electric field near an energized conductor can be sufficiently concentrated to produce a tiny electric discharge that can ionize air close to the conductors. This partial discharge of electrical energy is called corona discharge, or corona. Several factors, including conductor voltage, diameter, and surface irregularities such as scratches, nicks, dust, or water drops can affect a conductor's electrical surface gradient and its corona performance. Corona is the physical manifestation of energy loss, and can transform discharge energy into very small amounts of sound, radio noise, heat, and chemical reactions. The projects proposed generation transmission lines (Gen-Tie Lines), which can generate a small amount of sound energy during corona activity. This audible noise from the line can barely be heard in fair weather conditions on higher voltage lines, and is typically immediately near the structure. During wet weather conditions, water drops collect on the conductor and increase corona activity so

that a crackling or humming sound may be heard near the line. This noise is caused by small electrical discharges from the water drops.

The [Memorandum of Understanding](#) must be executed by the applicant and consultant and subsequently submitted with the first iteration review.

N. DEPARTMENT OF PARKS AND RECREATION REQUIREMENTS:

There are no trail requirements for the project.

O. SCOPE FOR GEOLOGIC RECONNAISSANCE REPORT

Landslides (including Rockfalls)

The project is located on or within 500 feet of a “Landslide Susceptibility Area.” Therefore, a Geologic Reconnaissance Report shall be prepared to evaluate any potential to expose people or structures to potential geologic hazards concerning risks of landslides (including rockfall). The report shall be prepared using the County’s approved Guidelines for Determining Significance for Geologic Hazards and conform to report guidelines in the California Board of Geologists and Geophysicists Guidelines for Engineering Geologic Reports. The guidelines can be downloaded at the following web address: <http://www.geology.ca.gov/forms-pubs/engineering.pdf>. **The report shall be prepared by a California Certified Engineering Geologist.**

At a minimum, the Geologic Reconnaissance Report should include a review of topographic maps, geologic and soil engineering maps and reports (if available), stereoscopic aerial photograph review, and other published and non-published references. Aerial photographs can be useful in identifying potential landslide features. Several sets of stereoscopic aerial photographs that pre-date project site area development taken at different times of the year are particularly useful in identifying subtle geomorphic features. A field visit will likely be necessary to fill in information in questionable areas, to address the potential risk of rockfall to the project site, and to observe surface features and details that could not be determined from other data sources.

Although engineering design recommendations are generally not a required component of a Geologic Reconnaissance Report, feasible measures to mitigate potential impacts from landslides (including rockfall) to levels below significance and environmental design considerations (where appropriate), should be discussed. Suspected geologic problems that cannot be evaluated except through in-depth investigation should be clearly described in the report. If the Geologic Reconnaissance Report recommends further investigation, a Geologic Investigation must be prepared. The specific requirements to be included in a Geologic Investigation will be determined by the County on a project-by-project basis.

Fault Rupture

The project is located within zones of faults mapped as Quaternary or pre-Quaternary by the DMG. Therefore, a Geologic Reconnaissance Report shall be prepared to evaluate any potential to expose people or structures to potential geologic hazards concerning risks of fault rupture. The report shall be prepared using the County’s

approved Guidelines for Determining Significance for Geologic Hazards and conform to the California Board of Geologists and Geophysicists *Geologic Guidelines for Earthquake and/or Fault Hazard Reports*. The guidelines can be downloaded at the following web address: <http://www.geology.ca.gov/forms-pubs/earthquake.pdf> **The report shall be prepared by a California Certified Engineering Geologist.**

The Geologic Reconnaissance Report shall include a review of topographic maps, geologic and soil engineering maps and reports (if available), stereoscopic aerial photographs, and other published and non-published references. A field visit may be necessary to fill in information regarding questionable areas, and to observe surface features and details that could not be determined from other data sources.

Although engineering design recommendations are generally not a required component of a Geologic Reconnaissance Report, feasible measures to mitigate potential impacts from fault rupture to levels below significance and environmental design considerations (where appropriate), should be discussed. Suspected geologic problems that cannot be evaluated except through in-depth investigation should be clearly described in the report. If the Geologic Reconnaissance Report recommends further investigation, a Geologic Investigation must be prepared. The specific requirements to be included in a Geologic Investigation will be determined by the County on a project-by-project basis.

Liquefaction

The project site is located within a —~~P~~otential Liquefaction Area.” As a first screening, the depth to groundwater should be determined for the project site. If the highest historical groundwater level for the project site is determined to be deeper than 50 feet below the existing ground surface or proposed finished grade (whichever is deeper), no further assessment of potential liquefaction is required.

For projects where the highest groundwater level for the project site is determined to be less than 50 feet, further screening of potential liquefaction is required and a Geologic Reconnaissance Report shall be prepared using the County’s approved Guidelines for Determining Significance for Geologic Hazards and follow guidelines in the California Geologic Survey’s *Guidelines for Evaluation and Mitigating Seismic Hazards in California, Special Publication 117, Chapter 6 – Analysis and Mitigation of Liquefaction Hazards*. These guidelines can be downloaded from the California Department of Conservation’s Geologic Survey website: <http://gmw.consrv.ca.gov/shmp/webdocs/sp117.pdf>. **The report shall be prepared by a California Certified Engineering Geologist.**

Although engineering design recommendations are generally not a required component of a Geologic Reconnaissance Report, feasible measures to mitigate potential impacts from liquefaction to levels below significance and environmental design considerations (where appropriate), should be discussed. Suspected geologic problems that cannot be evaluated except through in-depth investigation should be clearly described in the report. If the Geologic Reconnaissance Report recommends further investigation, a Geologic Investigation must be prepared. The specific requirements to be included in a Geologic Investigation will be determined by the County on a project-by-project basis.

P. SCOPE FOR HYDROMODIFICATION:

The project lies east of the Pacific/Salton (Tecate) divide and is not considered a Priority Development Project (PDP); therefore, it is exempt from Hydromodification requirements.

Q. AGRICULTURAL RESOURCES:

Pursuant to our discussion and my initial preliminary review, the two referenced Solar Projects (Soitec and Rugged Solar) will both be analyzed as EIRs. Therefore, the EIRs should discuss Agriculture (using the County's Guidelines for Determining Significance and Report Format and Content Requirements for Agricultural Resources) and analyze only the three Required Factors, within the County LARA Model. As we discussed, the Water Resources Required Factor will receive a Low Rating, for each project, due to their location outside the CWA and within a fractured crystalline aquifer (regardless of the existence of wells). Therefore, according to the County Guidelines, neither project will be identified as an Important Agricultural Resource and no mitigation is necessary.

R. ENVIRONMENTAL SITE ASSESMENT (ESA PHASE I)

A visit to the project site indicates that the site may have been subject to a release of hazardous substances that could represent a hazard to the public or the environment. Specifically, a the applicant has indicated that the project site indicates *Historic agricultural use associated with debris and waste located on the site.*

Based on these observations, a Phase I Environmental Site Assessment (ESA) must be completed for the subject parcel. If a Phase I ESA or other site assessment was completed when the property was sold, this study may satisfy the requirement (an older Phase I may be used if it continues reflects current site conditions). If the submitted Phase I ESA indicates that a potentially hazardous condition may exist onsite, further soil testing associated with a Limited Phase II ESA may be required to identify whether site conditions represent a human health or environmental hazard.

To expedite processing for projects located on land that has been historically used for agriculture, it is recommended that soil testing associated with a Limited Phase II ESA be completed concurrent with the Phase I ESA. Soil testing should be completed in the locations with the highest likelihood of contamination (such as around pesticide mixing areas, petroleum filling areas, in areas where crops were grown) and in the areas with the greatest potential for human exposure to soils, such as in the location of proposed residential uses.

Should soil testing identify contamination in excess of regulatory screening levels, the project will be required to remediate the site under the oversight of San Diego County Department of Environmental Health (DEH) Voluntary Assistance Program (VAP). See <http://www.sdcountry.ca.gov/cob/volunteer/top.html> for more information regarding participation in the Voluntary Assistance Program.

Attachment B: ESTIMATE OF DISCRETIONARY PROCESSING TIME AND COSTS

Project Name: Soitec: LanWest/LanEast
 Project Number: 3992-11-017 (MPA)
 Staff Completing Schedule: Patrick Brown
 Decision-Making Body: Planning Commission and Board of Supervisors
 Date Schedule Produced/Revised: 10/18/2011

TASK/ACTIVITY	Estimated Duration (Days)	Estimated Completion Date	Actual Completion Date
APPLICATION SUBMITTAL			1/25/2012
DETERMINATION THAT AN EIR IS REQUIRED			1/25/2012
DPLU reviews project application "completeness", attends DRT and completes planning and scoping of EIR	30	2/24/2012	
DPLU meets with applicant to discuss need for EIR, scope and schedule	14	3/9/2012	
<i>Applicant submits documents for Public Review of Notice of Preparation (NOP)</i>	7	3/16/2012	
<i>DPLU completes advertises and distributes NOP</i>	<i>10</i>	<i>3/26/2012</i>	
<i>Public review of NOP</i>	<i>30</i>	<i>4/25/2012</i>	
<i>DPLU receives and distributes public comments on NOP to Applicant (180 period for resubmittal of DEIR begins here)</i>	<i>3</i>	<i>4/30/2012</i>	
<i>DPLU meets with County Counsel, holds Kick-off Meeting with applicant/consultant. Discuss project schedule</i>	<i>10</i>	<i>5/10/2012</i>	
Applicant submits 1st Draft EIR and Planning Documentation	120	8/28/2012	
DPLU reviews 1st Draft EIR, holds county counsel briefing, attends DRT	60	10/29/2012	
<i>Meeting with applicant</i>	<i>7</i>	<i>11/5/2012</i>	
Applicant submits 2nd Draft EIR and Planning Documentation*	45	12/13/2012	
DPLU reviews 2nd Draft EIR, holds county counsel briefing*	45	1/28/2013	
<i>Meeting with applicant</i>	<i>7</i>	<i>2/4/2013</i>	
Applicant submits 3rd Draft EIR and Planning Documentation*	30	2/27/2013	
DPLU reviews 3rd Draft EIR, holds county counsel briefing*	30	3/29/2013	
<i>Meeting with applicant</i>	<i>7</i>	<i>4/5/2013</i>	
<i>Applicant produces copies of documents, submits DEIR and copies of documents</i>	10	4/8/2013	
DPLU completes distribution paperwork, advertises and distributes Draft EIR	14	4/22/2013	
Public Review of Draft EIR	45	6/6/2013	
DPLU transmits Public Comments to Applicant	3	6/10/2013	
DPLU holds meeting with applicant to discuss approach to address public comments, discuss project schedule	10	6/17/2013	
Applicant submits 1st Draft Responses to Public Comment (RTC) and EIR Errata	30	7/17/2013	
DPLU reviews 1st Draft Responses to Public Comments and EIR Errata	25	8/12/2013	
Applicant submits 2nd Draft RTC and EIR Errata*	21	9/2/2013	
DPLU reviews 2nd draft RTC & EIR Errata, meets with applicant / consultant to finalize responses for I-119 review*	14	9/16/2013	
DPLU attends DRT prior to initiating I-119 review	5	9/23/2013	
Applicant submits Draft RTC & EIR Errata for I-119 review & 1st draft EIR Findings for staff review	5	9/30/2013	
<i>Board Policy I-119 Review of Responses to Comments and DEIR</i>	<i>40</i>	<i>11/4/2013</i>	
DPLU reviews I-119 comments, meets with Counsel, transmit comments to applicant, set meeting with applicant	7	11/11/2013	
Applicant submits revised RTC, EIR Errata, and EIR Findings, meets with DPLU to review changes	14	11/25/2013	
DPLU reviews RTC, EIR Errata & Findings and sends to Counsel for review OR meet with Counsel if 2 nd I-119 review not necessary	14	12/9/2013	
Second Board Policy I-119 Review of RTC, EIR Errata and Findings*	30	12/25/2013	
DPLU meets with County Counsel to finalize RTC, EIR Errata, and Findings. Holds meeting with applicant / consultant*	10	1/6/2014	
Applicant makes final revisions, produces copies of FEIR, CEQA Findings and RTCs and pays Fish and Game Fees	7	1/13/2014	
<i>DPLU attends Director briefing to make project recommendation</i>	<i>7</i>	<i>1/20/2014</i>	
<i>DPLU finalizes project resolution/decision, completes findings, conditions, draft staff report and begins preparation of Board Letter</i>	<i>30</i>	<i>2/5/2014</i>	
DPLU management and County Counsel review staff report, obtain concurrences from other Departments	10	2/17/2014	
DPLU finalizes legal advertisement for hearing, newspaper advertises Planning Commission Hearing	7	2/24/2014	
Planning Commission Hearing	14	3/10/2014	
DPLU Finalizes draft Board Letter, include Planning Commission Recommendation	7	3/17/2014	
DPLU management and County Counsel review Board Letter, obtain concurrences from other Departments	10	3/27/2014	
DPLU finalizes legal advertisement for hearing, Board Hearing advertised in newspaper	7	4/3/2014	
Board of Supervisors Hearing	18	4/21/2014	

PROJECT SCHEDULE ASSUMPTIONS

Project description remains consistent throughout process
 Applicant will submit information in accordance with schedule
 The project will not be continued by decision maker or appealed

DPW, DEH and DPR issues will be resolved concurrently.

Bolded tasks are under the control of applicant/consultant.

Italicized tasks are completed concurrently with other tasks.

* Task can be eliminated if earlier draft documents are adequate.

Hearing date is subject to decision making body availability and schedule

Dates which fall on a holiday have an actual completion date the first business day : The State of CA adjusts Fish and Game Fees annually for inflation

COST ESTIMATE ASSUMPTIONS

Cost estimate includes DPLU costs & applicable DPW, DPR, & DEH costs

Estimate is based on relative cost of projects of similar complexity

Cost estimate does not include applicant's consultant/engineering costs

Cost estimate does not include additional deposits to DPR and DEH accounts made after the project application intake

Does not include County costs for post discretionary review (e.g. final map)

Costs assume project schedule assumptions are maintained

Costs will be paid at installments throughout the process

If project is over budget, cost estimate will be revised

COST ESTIMATE SUMMARY

Total Discretionary Cost Estimate	\$229,077
Deposits/Fees Paid to Date	\$13,345
Account Balance	\$8,187

Estimated County Costs Remaining	\$215,732
Fish and Game Fees	\$2,889
% Expended of Total Cost Estimate	2.25%

ATTACHMENT C: DPW CONCEPTUAL PRELIMINARY DRAFT REQUIREMENTS

DATE:	October 20, 2011	APPLICANT:	LanWest Solar Farm
PLANNING MANAGER:	David Sibbet	DPLU PLANNER:	Patrick Brown
PROJECT:	MPA 11-017	ENV REV:	Patrick Brown
STAFF PERSON COMPLETING THIS REVIEW:	René Vidales		

THE FOLLOWING PRELIMINARY COMMENTS ARE BASED ON AN OFFICE REVIEW AND/OR A FIELD REVIEW BY DPW FOR PROJECT DESCRIPTION RECEIVED 09/29/11, AND MAY BE REVISED UPON FURTHER REVIEW AND INPUT FROM OTHER AGENCIES.

SPECIFIC CONDITIONS: Compliance with the following Specific Conditions (Mitigation Measures when applicable) shall be established before the property can be used in reliance upon this Major Use Permit. Where specifically indicated, actions are required prior to approval of any grading, improvement, building plan and issuance of grading, construction, building, or other permits as specified:

ANY PERMIT: *(Prior to the approval of any plan, issuance of any permit, and prior to occupancy or use of the premises in reliance of this permit).*

- 1. RELINQUISH ACCESS: [DPW, LDR], [DGS, RP], [GP, CP, BP, UO]**
Intent: In order to promote orderly development and to comply with the [Mobility Element of the General Plan](#), access shall be relinquished. **Description of requirement:** Relinquish access rights into **Old Highway 80** (SC 1883) along the project frontage of APNs 612-091-13 and 613-030-35 except for one (1) approved opening for each parcel. The access relinquishment shall be free of any burdens or encumbrances, which would interfere with the purpose for which it is required. **Documentation:** The applicant shall prepare the legal descriptions and documents and present them for review and to [DGS, RP]. Upon execution of the relinquishment documents, the applicant shall provide copies of the documents to [DPW, LDR] for review. **Timing:** Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance of this permit the access shall be relinquished. **Monitoring:** The [DGS, RP] shall prepare and execute the relinquishment documents and forward a copy of the recorded documents to [DPW, LDR] for review and approval. The [DPW, LDR] shall review the easement documents for compliance with this condition.
- 2. PAVEMENT CUT POLICY: [DPW, LDR] [GP, CP, BP, UO]**
Intent: In order to prohibit trench cuts for undergrounding of utilities in all new, reconstructed, or resurfaced paved County-maintained roads for a period of three years following project surfacing, and to comply with County Policy RO-7 adjacent property owners shall be notified and solicited for their participation in the extension of utilities. **Description of requirement:** All adjacent property

owners shall be notified who may be affected by this policy and are considering development of applicable properties, this includes requesting their participation in the extension of utilities to comply with this policy. No trench cuts for undergrounding of utilities in all new, reconstructed, or resurfaced paved County-maintained roads for a period of three years following project surface. **Documentation:** The applicant shall sign a statement that they are aware of the County of San Diego, Department of Public Works, Pavement Cut Policy to the satisfaction of the Department of Public Works (DPW), and submit it to the [DPW LDR] for review. **Timing:** Prior to approval of any grading or improvement plan and prior to issuance of any grading or construction permit, and prior to use of the property in reliance of this permit, the letters must be submitted for approval. **Monitoring:** [DPW, LDR] shall review the signed letters.

3. DRAINAGE IMPROVEMENTS: [DPW, LDR] [GP, CP, BP, UO]

Intent: In order to provide the required drainage improvements for the project and to comply with the [County Flood Damage Prevention Ordinance \(Title 8, Division 11\)](#), [County Watershed Protection Ordinance \(WPO\) No.10096](#), [County Code Section 67.801 et. seq.](#), the [County Resource Protection Ordinance \(RPO\) No. 9842](#), the drainage improvements shall be completed. **Description of requirement:** Improve or agree to improve and provide security for storm drains and crossings throughout the internal access roads. All drainage plan improvements shall be prepared and completed pursuant to the following ordinances and standards: [San Diego County Drainage Design Manual](#), [San Diego County Hydrology Manual](#), [County of San Diego Grading Ordinance, Zoning Ordinance Sections 5300 through 5500](#), [County Resource Protection Ordinance \(RPO\) No. 9842](#), and [County Flood Damage Protection Ordinance \(Title 8, Division 11\)](#), Low Impact Development (LID) and Hydromodification requirements and the [Land Development Improvement Plan Checking Manual](#). The improvements shall be completed within 24 months from the approval of the improvement plans, execution of the agreements, and acceptance of the securities. No Building permit can receive final approval or occupancy until these improvements are completed. **Documentation:** The applicant shall complete the following:

- a. Process and obtain approval of Improvement Plans to improve the storm drains and crossings throughout the internal access roads.
- b. Provide Secured agreements require posting security in accordance with [Section 7613 of the Zoning Ordinance](#).
- c. Pay all applicable inspection fees with [DPW, PDC].
- d. If the applicant is a representative, then a one of the following is required: a corporate certificate indicating those corporation officers authorized to sign for the corporation, or a partnership agreement recorded in this County indicating who is authorized to sign for the partnership.

Timing: Prior to issuance of any permit, and prior to use of the premises in reliance of this permit the plans, agreements, and securities shall be approved.

Monitoring: The [DPW, LDR] [DPR, TC, PP] shall review the plans for consistency with this condition and County Standards. Upon approval of the plans [DPW, LDR] shall request the required securities and improvement agreements. The securities and improvement agreements shall be approved by the Director of DPW before any work can commence.

4. DRAINAGE SWALES: [DPW, LDR] [GP, CP, BP, UO]

Intent: In order to indicate the drainage swales on the Plot Plan and to comply with the [Flood Damage Prevention Ordinance, Section 811.506\(a\)](#), the drainage swales shall be shown on the Plot Plan. **Description of requirement:** The drainage swale which flows through the property shall be shown and labeled "Drainage Swale" on the Plot Plan. The applicant's Civil Engineer will provide this information by annotating the copy of the Plot Plan. **Documentation:** The applicant shall indicate the drainage swales on the Plot Plan as indicated above.

Timing: Prior to approval of any plan or issuance of any permit, and prior to use of the premises in reliance of this permit, the drainage swales shall be indicated and labeled on the Plot Plan. **Monitoring:** The [DPW, LDR] shall verify that the drainage swales have been indicated pursuant to this condition.

GRADING PERMIT: *(Prior to approval of any grading and or improvement plans and issuance of any Grading or Construction Permits).*

5. TRAFFIC CONTROL PLAN: [DPW, LDR] [GP, IP, UO]

Intent: In order to mitigate below levels of significance for temporary traffic impacts, a traffic control plan shall be prepared and implemented. **Description of Requirement:** A Traffic Control Plan (TCP) shall be prepared that addresses the following, but is not only limited to: haul routes, number of trips per day, and destination.

- a. The implementation of the TCP shall be a condition of any grading, construction, or excavation permit issued by the County. The applicant is responsible for the maintenance and repair of any damage caused by them to the on-site and off-site private roads that serve the property either during construction or subsequent operations."
- b. The applicant will repair those portions of the route that would be damaged by the heavy loads that loaded trucks place on the route identified. If required by the [DPW, ESU], an agreement shall be executed, which will also include (1) a cash deposit for emergency traffic safety repairs; (2) long-term security for expected increased maintenance on the route identified; and (3) possible future asphaltic overlay requirements on the route identified. The specific road is identified as follows: **Old Highway 80 (SC 1883).**

Documentation: The applicant shall have the TCP prepared by a licensed Traffic Engineer and submit it to [DPW, LDR] for review. If required by the [DPW,

ESU], the applicant shall also execute a secured agreement for any potential damages caused by heavy trucks on road mentioned above. The agreement and securities shall be approved to the satisfaction of the [DPW, LDR]. The applicant is responsible for obtaining any additional permits as identified in the TCP. **Timing:** Prior to approval of any grading and or improvement plans and issuance of any Grading, Construction, or Excavation Permits, a TCP shall be prepared and approved. **Monitoring:** The [DPW, LDR] shall review the TCP for compliance with this condition, and require any additional traffic or encroachment permits before any approval of the TCP. The TCP shall be implemented and made a condition of any associated County Construction, Grading or Encroachment Permit.

BUILDING PERMIT: *(Prior to approval of any building plan and the issuance of any building permit).*

6. TRANSPORTATION IMPACT FEE: [DPW, LDR] [DPLU, BD] [BP, UO]

Intent: In order to mitigate potential cumulative traffic impacts to less than significant, and to comply with the [Transportation Impact Fee \(TIF\) Ordinance Number 77.201-77.219](#), the TIF shall be paid. **Description of requirement:** The Transportation Impact Fee (TIF) shall be paid pursuant to the to [County TIF Ordinance number 77.201-77.219](#). The fee is calculated pursuant to the ordinance, and will be based on the Average Daily Trips (ADT) generated by this project per the Select Industrial Uses Category for a Power Generation Plant in the Mountain Empire TIF Region. **Documentation:** The applicant shall pay the TIF at the [DPLU, ZONING] and provide a copy of the receipt to the [DPLU, Building Division Technician] at time of permit issuance. The cost of the fee shall be calculated at time of payment. **Timing:** Prior to approval of any building plan and the issuance of any building permit, or use of the premises in reliance of this permit, the TIF shall be paid. **Monitoring:** The [DPLU, ZONING] shall calculate the fee pursuant to the ordinance and provide a receipt of payment for the applicant. [DPLU, Building Division] shall verify that the TIF has been paid before the first building permit can be issued. The TIF shall be verified for each subsequent building permit issuance.

7. PRIVATE ROAD IMPROVEMENTS: [DPW, LDR], [BP, UO]

Intent: In order to promote orderly development and to comply with the San Diego [County Standards for Private Roads](#) section 3.1(C) the private road from Old Highway 80 (SC 1883) at APN 612-091-13 to APN 612-030-18 shall be improved. **Description of requirement:** The private road from Old Highway 80 at APN 612-091-13 to APN 612-030-18 shall be improved to the satisfaction of the San Diego County Fire Authority and [DPW, LDR].

All plans and improvements shall be completed pursuant to the [County of San Diego County Standards for Private Roads](#) and the DPW [Land Development Improvement Plan Checking Manual](#). The design and construction of all driveways, turnarounds, and private easement road improvements to the satisfaction of the San Diego County Fire Authority and the [DPW, LDR].

Documentation: The applicant shall complete the following:

- a. Process and obtain approval of Improvement Plans to improve the private road from Old Highway 80 (SC1883) at APN 612-091-13 to APN 612-030-18.
- b. Pay all applicable inspection fees with [DPW, PDC].
- c. Obtain approval for the design and construction of all driveways, turnarounds, and private easement road improvements to the satisfaction of the County Fire Authority and/or CAL-FIRE and the [DPW, LDR].

Timing: Prior to approval of any building plan and the issuance of any building permit, the private road and drive improvements shall be completed.

Monitoring: The [DPW, LDR] shall review the plans for consistency with the condition and County Standards.

OCCUPANCY: *(Prior to any occupancy, final grading release, or use of the premises in reliance of this permit).*

8. ACCESS IMPROVEMENTS: [DPW, LDR], [GP, CP, BP, UO]

Intent: In order to promote orderly development and to comply with the [Centerline Ordinance Sec. 51.500 et. al.](#), a project driveway shall be improved.

Description of requirement: Improve or agree to improve and provide security for the following:

- a. The project driveway, which shall be designed and constructed to the satisfaction of [DPW, LDR].
- b. The Pavement taper from the ultimate right-of-way line to the existing edge of pavement, with asphalt concrete to the satisfaction of [DPW, LDR].
- c. The project entry gate, which shall be designed and constructed to the satisfaction of the San Diego County Fire Authority and [DPW, LDR].

All plans and improvements shall be completed pursuant to the [County of San Diego Public Road Standards](#), the DPW [Land Development Improvement Plan Checking Manual](#) and the Community Trails Master Plan. The improvements shall be completed within 24 months from the approval of the improvement plans, execution of the agreements, and acceptance of the securities. **Documentation:** The applicant shall complete the following:

- d. Process and obtain approval of Improvement Plans to improve the project driveway and the pavement taper on Old Highway 80 (SC1883)

- e. Provide Secured agreements. The required security shall be in accordance with [Section 7613 of the Zoning Ordinance](#).
- f. Pay all applicable inspection fees with [DPW, PDCI].
- g. If the applicant is a representative, then a one of the following is required: a corporate certificate indicating those corporation officers authorized to sign for the corporation, or a partnership agreement recorded in this County indicating who is authorized to sign for the partnership.
- h. Obtain approval for the design and construction of all driveways, turnarounds, pathways and private easement road improvements to the satisfaction of the San Diego County Fire Authority and the [DPW, LDR].
- i. Obtain a Construction Permit for any work within the County road right-of-way. DPW Construction/Road right-of-way Permits Services Section should be contacted at (858) 694-3275 to coordinate departmental requirements. Also, before trimming, removing or planting trees or shrubs in the County Road right-of-way, the applicant must first obtain a permit to remove, plant or trim shrubs or trees from the Permit Services Section.

Timing: Prior to occupancy or use of the premises in reliance of this permit, the plans shall be approved and securities must be provided. **Monitoring:** The [DPW, LDR] and [DPR, TC] shall review the plans for consistency with the condition and County Standards and Community Trails Master Plan. Upon approval of the plans [DPW, LDR] shall request the required securities and improvement agreements. The securities and improvement agreements shall be approved by the Director of DPW before any work can commence.

9. SIGHT DISTANCE: [DPW, LDR] [UO]

Intent: In order to provide an unobstructed view for safety while exiting the property and accessing a public road from the site, and to comply with the Design Standards of Section 6.1. Table 5 of the [County of San Diego Public Road Standards](#), an unobstructed sight distance shall be verified. **Description of requirement:** A registered civil engineer, a registered traffic engineer, or a licensed land surveyor shall provide a certified signed statement that: "Physically, there is a minimum unobstructed sight distance based upon prevailing traffic speed in both directions along Old Highway 80 (SC 1883) from the project driveway openings."

- a. If the lines of sight fall within the existing public road right-of-way, the engineer or surveyor shall further certify that: "Said lines of sight fall within the existing right-of-way, and a clear space easement is not required."
- b. The engineer or surveyor shall further certify that: "Sight distance of adjacent driveways and street openings will not be adversely affected by this project."

Documentation: The applicant shall complete the certifications and submit them to the [DPW, LDR] for review. **Timing:** Prior to occupancy of the first structure built in association with this permit, and prior to final grading release, or use of the premises in reliance of this permit, and annually after that until the project is completely built, the sight distance shall be verified. **Monitoring:** The [DPW, LDR] shall verify the sight distance certifications.

ONGOING: *(The following conditions shall apply during the term of this permit)*

10. SIGHT DISTANCE: [DPLU, CODES] [OG].

Intent: In order to provide an unobstructed view for safety while exiting the property and accessing a public road from the site, and to comply with the Design Standards of Section 6.1. Table 5 of the [County of San Diego Public Road Standards](#), an unobstructed sight distance shall be maintained for the life of this permit. **Description of Requirement:** There shall be a minimum unobstructed sight distance in both directions along Old Highway 80 (SC 1883) from the project driveway openings for the life of this permit. **Documentation:** A minimum unobstructed sight shall be maintained. The sight distance of adjacent driveways and street openings shall not be adversely affected by this project at any time. **Timing:** Upon establishment of the use, this condition shall apply for the duration of the term of this permit. **Monitoring:** The [DPLU, Code Enforcement Division] is responsible for enforcement of this permit.

ORDINANCE COMPLIANCE NOTIFICATIONS: The project is subject to, but not limited to the following County of San Diego, State of California, and US Federal Government, Ordinances, Permits, and Requirements:

STORMWATER ORDINANCE COMPLIANCE: In order to Comply with all applicable stormwater regulations the activities proposed under this application are subject to enforcement under permits from the [San Diego Regional Water Quality Control Board \(RWQCB\)](#) and [County Watershed Protection Ordinance \(WPO\) No.10096, County Code Section 67.801 et. seq.](#) and all other applicable ordinances and standards for the life of this permit. The project site shall be in compliance with all applicable stormwater regulations referenced above and all other applicable ordinances and standards. This includes compliance with the approved Stormwater Management Plan, all requirements for Low Impact Development (LID), materials and wastes control, erosion control, and sediment control on the project site. Projects that involve areas 1 acre or greater require that the property owner keep additional and updated information onsite concerning stormwater runoff. The property owner and permittee shall comply with the requirements of the stormwater regulations referenced above.

LOW IMPACT DEVELOPMENT NOTICE: On January 24, 2007, the San Diego Regional Water Quality Control Board (SDRWQCB) issued a new Municipal Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES). The requirements of the Municipal Permit were implemented beginning January 25, 2008. *Project design shall be in compliance with the new Municipal Permit regulations.* The Low Impact Development (LID) Best Management Practices (BMP) Requirements of the

Municipal Permit can be found at the following link on Page 19, Section D.1.d (4), subsections (a) and (b):

http://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/sd_permit/r9_2007_0001/2007_0001final.pdf.

<http://www.sdcounty.ca.gov/dplu/docs/LID-Handbook.pdf>.

The County has provided a LID Handbook as a source for LID information and is to be utilized by County staff and outside consultants for implementing LID in our region. See link above.

GRADING PERMIT REQUIRED: A grading permit is required prior to commencement of grading when quantities exceed 200 cubic yards of excavation or eight feet (8') of cut/fill per criteria of [Section 87.202 \(a\) of the County Code](#).

CONSTRUCTION PERMIT REQUIRED: A Construction Permit and/or Encroachment Permit for any and all work within the County road right-of-way. Contact DPW Construction/Road right-of-way Permits Services Section, (858) 694-3275, to coordinate departmental requirements. In addition, before trimming, removing or planting trees or shrubs in the County Road right-of-way, the applicant must first obtain a permit to remove plant or trim shrubs or trees from the Permit Services Section.

ENCROACHMENT PERMIT REQUIRED: An Encroachment Permit from the Department of Public Works for any and all proposed/existing facilities within the County right-of-way. Old Highway 80 (SC 1883) is shown as a Light Collector with Passing Lane (2.2D) Road on the Circulation Element of the County General Plan. At the time of construction of future road improvements, the proposed facilities shall be relocated at no cost to the County, to the satisfaction of the Director of Public Works.

EXCAVATION PERMIT REQUIRED: Obtain an excavation permit from the County Department of Public Works for undergrounding and/or relocation of utilities within the County right-of-way.

If you have any questions regarding these conditions, please contact René Vidales at (858) 694-3246.

EDWIN M. SINSAY, Team Leader
Department of Public Works

EMS: rav

cc: David Sibbet, DPLU Planning Manager (O650)

Attachment D: Example Project Water Demand Assumptions

The following is the anticipated water consumption for both the operational and construction phases of the project, including expansion of the substation.

- I. **ONGOING WATER CONSUMPTION:** The following is the anticipated water usage for the ongoing operations of the proposed solar farm, which includes panel washing and dust suppression for anticipated maintenance for the soil binding agent.

Ongoing After Completion of Construction Phase	
Activity	
Dust Suppression	
Number of gallons/acre (every 2 years)	1,650
Water use/year (in gallons)	288,750
Water use/year (in acre feet)	0.9
Panel Washing	
Washes/year	4.0
Panels/minute	5.0
Gallons per minute	2.5
# of panels	350,000
Total water use/year (in gallons)	700,000
Total water use/year (in acre feet)	2.1
Total water use/year	988,750 gal (3.03 AF)¹

¹ One acre-foot (AF) = 325,851 gallons.

- II. **TEMPORARY CONSTRUCTION USAGE:** A 10-month period is estimated for project construction. Initial construction occurring within the first nine weeks (54 working days) will include brushing/clearing and grading/onsite access road construction. The remainder of the 10-month construction period (an estimated 304 days) will include foundation construction and panel installation, which will involve concrete hydration and application of the non-toxic pervious soil-binding agent. A soil-binding agent will be applied during construction to stabilize the disturbed soils to reduce fugitive dust. Water estimates have been calculated for each of these activities to determine overall water demand for the construction phase. In addition, a detailed estimate for long-term operational activities is also provided below.

Total Estimated Water for Temporary Project Construction		
Activity	Time Frame	Total Estimated Water Demand (gallons and acre-feet)
Brushing and Clearing	Day 1- 54 (Weeks 1-9)	1,360,000 gallons / (4.17 AF)
Grading and Access Road Construction	Day 1- 54 (Weeks 1-9)	3,210,000 gallons / (9.85 AF)

Application of Soil Binding Agent	Day 1- 54 (Weeks 1-9)	577,500 gal / (1.8 AF)
Concrete Hydration	Day 54 through day 304 (Weeks 10-44)	18,916 gal / (0.06 AF)
Total Construction Water		5,166,416 gal (15.88 AF)

- III. **CONSTRUCTION WATER USAGE DETAILS:** The following provides a detailed explanation as to how water demand for each construction activity was determined.

Brushing and Clearing Day 1- 54 (Weeks 1-9)				
Activity	Estimated Duration of Activity	Gallons of Water Required	Project Acreage to be Brushed/Cleared	Estimated Water Use
Brushing and Clearing	54 days ¹	4,000 gal/acre brushed	340	1,360,000 gal² (4.17 AF)

¹ Assumes an estimated 54 working days for initial improvements (6 working days per week for 9 weeks), with approximately 6.5 acres brushed/cleared per day. Estimate of 6.5 acres brushed/cleared per day is consistent with assumptions made in the *Focused Air Quality Assessment* and *Noise Assessment* prepared by Ldn Consulting, Inc.

Grading and Access Road Construction Day 1- 54 (Weeks 1-9)			
Activity	Gallons of Water Required	Approx. Grading Quantities	Estimated Water Use
Grading and Onsite Access Road Construction	30 gal/cubic yard	107,000 cubic yards	3,210,000 gal (9.85 AF)

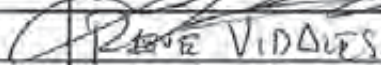
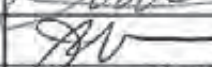
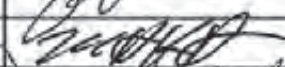
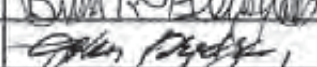
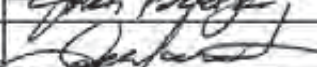
Application of Soil Binding Agent Day 1- 54 (Weeks 1-9)		
Activity	Gallons/Acre	Total Water Use/Year (in gallons and AF)
Application of Soil Binding Agent	3,300	577,500 (1.8 AF)

Concrete Hydration Day 54 through day 304 (Weeks 10-44)

Activity	Inverter Stations	Substations	Fence Posts	Miscellaneous	Total
Quantity	40	10	5,000		
Number of Pilers per Station	10	4			
Total Number of Pilers	400	40	250		
Diameter (feet)	1.0	1.0			
Length (feet)	10.0	12.0			
Volume of Concrete (cubic yards)	465.42	55.85	9.26	100.0	630.5
Volume of Water (gallons)	13,962.63	1,675.52	277.78	3,000.0	18,916 gallons (0.06 AF)

SOITEC Solar 3992-11-017 and 11-018 (MPA) Preapplication Scoping Meeting

10/25/2011

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